

# CITY OF LATHROP Sewer System Management Plan

**March 2018** 

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# List of Abbreviations and Acronyms

ADWF Average Dry Weather Flow ARV Air/Vacuum Release Valves

Cal OES California Office of Emergency Services

CCTV closed circuit television CIP capital improvement project

CIWQS California Integrated Water Quality System

CLSP Central Lathrop Specific Plan CTF Consolidated Treatment Facility

d/D depth to diameter
FOG Fats, Oils and Grease
ESE Food Service Establis

FSE Food Service Establishment
GIS geographical information system
gpd/du gallons per day per dwelling unit

gpd/ac gallons per day per acre

GWDR General Waste Discharge Requirements

I&I infiltration and inflow

I-205 Interstate 205 I-5 Interstate 5

IPP Industrial Pretreatment Program

IWRMP Integrated Water Resources Master Plan

LMC Lathrop Municipal Code LRO legally responsible official

LS lift station

MRP Monitoring and Reporting Program
MWQCF Manteca Water Quality Control Facility

NPDES National Pollutant Discharge Elimination System

O&M Operations & Maintenance

OERP Overflow Emergency Response Plan

OPC Opinion of Probable Cost

POTW publicly owned wastewater treatment plant

PS pump station

PWD Public Works Department PWWF Peak Wet Weather Flow

RWQCB Regional Water Quality Control Board SCADA Supervisory Control and Data Acquisition

SLSP South Lathrop Specific Plan

SR-120 State Route 120

SSMP Sewer System Management Plan

SSOs sewer system overflow

SSS WDR Sanitary Sewer Systems Waste Discharge Requirements

SWRCB State Water Resources Control Board

VWNA Veolia Water, North America WWSMP Wastewater System Master Plan

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## INTRODUCTION

This introductory section provides background information on the purpose and organization of this City of Lathrop (City) Sewer System Management Plan (SSMP) and provides a brief overview of the City's service area and sewer system.

# SSMP Requirement Background

This SSMP has been prepared in compliance with the requirements contained in State Water Resources Control Board (SWRCB) General Order No. 2006-0003-DWQ. This order was adopted at its meeting on May 2, 2006 to require all public wastewater collection system agencies in California with greater than one mile of sewers to be regulated under General Waste Discharge Requirements (GWDR). The SWRCB action also mandates the development of an SSMP and the reporting of sewer system overflows (SSOs) using an electronic reporting system. On July 30, 2013, Attachment A to the Order which became effective on September 9, 2013, amended the Monitoring and Reporting Program (MRP) to the GWDR. Together these documents constitute the "SSS WDR".

This SSMP was originally adopted in July 2009 and was updated in 2013, 2016, and 2018. A history of changes and amendments to the SSMP since the City's first adoption in 2009 is included in the SSMP Change Log in Appendix G.

# **Document Organization**

This SSMP includes eleven elements, as listed below and required in the SSS WDR. Each of these elements forms a section of this document.

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

Each element section is organized into sub-sections, as follows:

- Description of the regulatory requirements for that element, included italicized font in grey text boxes at the beginning to each element;
- Identification of associated appendix and list of supporting information included in the appendix; and
- Discussion of the element. The discussion may be split into multiple sub-sections depending on length and complexity.

Supporting information for each element is included in an appendix associated with that section, as applicable. In general, information expected to require relatively frequent updates (such as names and phone numbers of staff) are included in appendices, as well as other supporting information, such as forms or schedules.

# City Service Area and Sewer System

The City of Lathrop (City) is located 70 miles east of San Francisco in San Joaquin County. It is located at the interchange of three major freeways: Interstate 5 (I-5), Interstate 205 (I-205), and State Route 120 (SR-120). The City of Lathrop is located nearby or adjacent to unincorporated areas of San Joaquin County and the City of Stockton towards the north, the City of Manteca towards the east, the City of Tracy towards the south, and the San Joaquin –Sacramento River Delta towards the west. The City has an area of 21 square miles of level terrain, and a population of 22,112 in 2016<sup>1</sup>.

The City's wastewater is conveyed by two separate collection systems to two publicly owned wastewater treatment plants (POTWs) that are operated under two separate permits administered by the RWQCB:

- 1. Collection system "WRP-1 MBR" (Place ID 631511), which conveys wastewater from the Crossroads industrial area and the areas west of I-5, including the Mossdale, River Islands, and Central Lathrop areas to the Lathrop Consolidated Treatment Facility (CTF, formerly known as WRP-1);
- 2. Collection system "Lathrop CS to MWQCF CS" (Place ID 630812), which conveys wastewater from areas east of I-5 that are not part of the Crossroads industrial area to the Manteca Water Quality Control Facility (MWQCF).

Several large industrial facilities (e.g., Simplot, a future Kraft-Heinz facility, Sharpe Army Depot, and former Carpenter Company facility) as well as the Next Generation STEAM Academy in River Islands manage their wastewater onsite. California Natural Products manages the majority of their wastewater and sends the remaining flows to either the J Street Lift Station (LS) or the McKinley Avenue Pump Station (PS).

<sup>&</sup>lt;sup>1</sup> California DOF 2016. E-4 Population Estimates for Cities, Counties, and the State, 2011-2016 with 2010 Census Benchmark. May 2016.

Wastewater generated in the Crossroads industrial area used to be treated at the Crossroads wastewater treatment facility, which was decommissioned in 2015 and is now combined with the CTF. The CTF produces tertiary treated recycled water that is stored in recycled water storage ponds and distributed to designated land application areas.

The City's wastewater collection systems consist of approximately 72 miles of gravity mains, 21 miles of force mains, as well as 12 lift and pump stations. The City has a supervisory control and data acquisition (SCADA) system for control and monitoring of facilities.

## **ELEMENT 1: GOALS**

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

# 1.1 Regulatory Requirements for Goals Element

D.13.(i) **Goals**: 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 do occur.

## 1.2 Element 1 Appendix

None

### 1.3 Goals Discussion

In support of this SSMP, the City has developed the following goals to properly manage, operate and maintain its sewer system:

- 1. To properly manage, operate, and maintain all portions of the City's sewer system.
- 2. To prevent public health hazards.
- 3. To meet all applicable regulatory notification, monitoring, and reporting requirements.
- 4. Use funds available for sewer operations in the most efficient manner by performing preventative maintenance and extending the useful life of the sewer system.
- 5. Convey wastewater to treatment facilities with a minimum of infiltration, inflow, and exfiltration.
- 6. Provide adequate capacity to convey peak wastewater flows.

This SSMP will contribute to the proper management of the collection system and assist the City in preventing public health hazards due to SSOs by providing guidance for appropriate maintenance, capacity management, and emergency response.

## **ELEMENT 2: ORGANIZATION**

This section of the SSMP identifies City staff who are responsible for implementing this SSMP, responding to SSO events, and meeting the SSO reporting requirements. This section also includes the designation of the Authorized Representative to meet SWRCB requirements for completing and certifying spill reports.

# 2.1 Regulatory Requirements for Organization Element

## D.13.(ii) Organization: The SSMP must identify:

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

# 2.2 Element 2 Appendix A

Supporting information for Element 2 is included in Appendix A. This appendix includes the following documents:

- 1. Figure A-1. Organization Chart of Wastewater Utility Staff
- 2. Description of General Responsibilities for Wastewater Utility Staff
- 3. Table A-1. Names and Telephone Numbers of Staff Responsible for SSMP
- 4. Table A-2. List of Staff Responsible for SSMP Elements

# 2.3 Organization Discussion

This section discusses the organization and roles of wastewater utility staff, the authorized representative to the SWRCB, and key staff responsible for implementing and maintaining the SSMP.

#### **Department Organization**

The organization chart for the management, operation, and maintenance of the City's wastewater collection system is shown on Appendix A, Figure A-1. The names and phone numbers of staff filling these positions are included in Appendix A, Table A-1.

### Description of General Responsibilities

Descriptions of Public Works Department (PWD) staff responsibilities are included in Appendix A.

The PWD Operations and Maintenance (O&M) Division have the lead responsibility for the operation and maintenance of the collection system. PWD O&M staff have the primary responsibility to respond to, clean up, and document SSOs from the collection system, including from lift and pump stations. PWD Administrative staff have primary responsibility to log all documentation of any SSOs and assist the City's authorized representatives in providing any necessary agency notifications. Contract operators (i.e., Veolia Water, North America [VWNA]) at CTF are responsible for monitoring quality and quantity of water generated and received at the plant.

The PWD Engineering Division have the primary responsibility in planning, design, and construction of the collection system's Capital Improvement Projects (CIPs). The Senior Construction Inspector is responsible for ensuring the new and rehabilitated assets meets the City's standards.

### Authorized Representative

The City's authorized representative in all wastewater collection system matters is the Public Works Director or his designee. The Public Works Director or his designee is authorized to certify electronic spill reports submitted to the RWQCB via the California Integrated Water Quality System (CIWQS) and is a legally responsible official (LRO).

The City Manager and Senior Civil Engineers have been designated as "Onsite Managers" and are LROs who can certify electronic SSO reports in CIWQS. Multiple LROs ensure the City has continuous LRO coverage.

The O&M Superintendent is authorized to submit SSO reports to the appropriate government agencies and is designated as a Data Submitter in the CIWQS system.

## Responsibility for SSMP Implementation

Description of general responsibilities for City staff for implementing specific measures in the SSMP program are provided in Appendix A, Table A-2.

# 2.4 SSO Reporting Chain of Communication

The chain of communication for reporting SSOs is included in the City's Overflow Emergency Response Plan (OERP) in Appendix D. The O&M Superintendent has the lead responsibility for reporting SSOs to the appropriate regulatory agencies, with the assistance from PWD O&M staff and Administrative staff.

Officials receiving immediate notification of the SSO vary depending on the size of the spill and whether or not the spill contains hazardous materials, affects surface waters, or has the potential to impact human health. Table 2-1 lists these officials and the circumstances under which they are notified immediately. Detailed notification procedures are described in Section VII of the OERP.

TABLE 2-1
OFFICIALS RECEIVING IMMEDIATE NOTIFICATION OF SSO

Contact	Circumstance for Immediate Notification	
PWD O&M Superintendent	All SSOs.	
PWD Maintenance Supervisor	All SSOs.	
Public Works Director	Major SSOs (greater than 1,000 gallons), or those affecting surface water or human health.	
City Manager	Major SSOs (greater than 50,000 gallons), or those affecting surface water or human health.	
California Office of Emergency Services (within 2 hours)	Major SSOs (greater than 1,000 gallons) affecting or could potentially affect surface water or human health.	
Regional Water Quality Control Board (within 72 hours)	Major SSOs (greater than 1,000 gallons), or those affecting surface water or human health. (SSO Categories 1 and 2)	
Lathrop Manteca Fire Department	SSOs involving hazardous materials.	
San Joaquin County Department of Environmental Health	SSOs that may impact human health.	
State Water Resources Control Board, Division of Drinking Water	SSOs affecting the City's Drinking Water System or water supplies.	
California Department of Fish and Wildlife	SSOs causing a fish kill.	
South San Joaquin Irrigation District	SSOs resulting in a discharge into the South San Joaquin Irrigation District Canal.	

## **ELEMENT 3: LEGAL AUTHORITY**

This element of the SSMP discusses the City's Legal Authority, including its Municipal Code and agreements with other agencies. This section fulfills the Legal Authority requirement of the SWRCB (Element 3)

# 3.1 Regulatory Requirements for Legal Authority Element

The requirements for the Legal Authority element of the SSMP (Element 3) are summarized below:

D.13.(iii) **Legal Authority:** 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:

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

# 3.2 Element 3 Appendix B

Supporting information for Element 3 is included in Appendix B. This appendix includes the following documents:

- 1. Enforcement Response Plan Enforcement of Sewer Use Ordinance
- 2. Enforcement Response Plan Fats, Oils & Grease Source Control Program
- 3. Interjurisdictional Agreement Between the City of Manteca and The City of Lathrop.

# 3.3 Municipal Code

The legal authority required for the SSMP by the SWRCB is contained within the City's municipal code. Two chapters of the municipal code are dedicated to the sewer system, all included in Lathrop Municipal Code (LMC) Title 13, Public Services:

- 1. LMC Chapter 13.16 Sewer Service System
- 2. LMC Chapter 13.26 Sewer Use and Industrial Wastewater Regulations

Chapters 13.16 and 13.26, as listed above, pertain to the legal authority required for fulfillment of SSMP requirements. These chapters are available on the City's website at <a href="http://www.ci.lathrop.ca.us/lathrop/cco/municodes.aspx">http://www.ci.lathrop.ca.us/lathrop/cco/municodes.aspx</a>. Portions of these chapters are

discussed in the following sub-sections as they pertain to prevention of illicit discharges, proper design and construction of sewer and connections, maintenance access, and enforcement measures. Additional code sections providing legal authority that is referenced but not required by the SWRCB are listed in Table B-1 of Appendix B.

## Prevention of Illicit Discharges

Measures prohibiting illicit discharges to the sewer system are included in the following sections of LMC Chapter 13.16:

- Section 13.16.050 describes the prohibition of discharging storm water to the sewer system;
- Section 13.16.060 describes the prohibitions of excessive use of sewers; and
- Section 13.16.070 specifically demonstrates the City's legal authority for preventing illicit discharges of substances containing chemicals and unauthorized debris which may interfere with the operation of the sewer system.

## Proper Design and Construction of Sewers and Connections

LMC Sections 13.16.100 and 13.16.110 requires approval of plans and specifications for sewerage construction prior to construction. If a facility will generate and discharge industrial wastewater, a permit for industrial wastewater discharge must be obtained. In accordance with Section 13.16.110, the City requires that all new design and construction of sewers and connections meet the City of Lathrop PWD Design and Construction Standards, as discussed in Element 5.

The City has adopted the 2016 California Plumbing Code by reference in LMC Section 15.12.010. The plumbing code requires the proper construction of privately owned sewer lines.

#### Lateral Maintenance Access

LMC Section 13.16.150 states the property owner is responsible for maintenance, inspection, and repairs of the lateral on private property (from the building to the cleanout located at the public right of way or easement line). Laterals maintained by the City exist within the public right of way or are located within a public utility easement. LMC Section 13.16.280 requires access to all facilities directly or indirectly connected to the City sewer system to be given to authorized personnel of the City at all reasonable times, including during emergencies.

## Limit Discharge of FOG and Other Debris

LMC Section 13.16.070 prohibits the discharge of any water or waste containing floatable or dispersed grease (defined as an oil, fat, and grease, or other ether soluble matter) in excess of 50 milligrams per liter (mg/L). The section also restricts the discharge of other types of debris.

#### **Enforcement Measures**

LMC 13.16 and 13.26 provide penalties for violation of any of the provisions of its chapter. Per LMC 13.26.100, the City has adopted Enforcement Response Plans for the City's

Industrial Pretreatment Program and FOG Control Program. The Enforcement Response Plans are included in Appendix B.

## 3.4 Agreements with Other Agencies

### City of Manteca Interjurisdictional Sewer Agreement

The City of Lathrop has an agreement with the City of Manteca that allows Lathrop to utilize up to 14.7% of the wastewater treatment capacity of the MWQCF. In accordance with a request from the RWQCB, the City of Lathrop has adopted an interjurisdictional agreement and adopted an industrial pretreatment program, sewer ordinance, and local limits that are at least as stringent as the City of Manteca's. The interjurisdictional agreement is included in Appendix B and designates Manteca as the agent of Lathrop for implementation and enforcement of Lathrop's sewer ordinance against industrial dischargers to the MWQCF system located in Lathrop. Manteca issues permits to all industrial dischargers to the MWQCF system, and conducts inspections, sampling and analysis, and other duties required by Federal and State law or National Pollutant Discharge Elimination System (NPDES) permit.

# ELEMENT 4: OPERATIONS AND MAINTENANCE PROGRAM

This section of the SSMP discusses the City's operations, maintenance and other related measures and activities. This section fulfills the Operation and Maintenance Program SSMP requirement for the SWRCB (Element 4).

# 4.1 Regulatory Requirements for Operations and Maintenance Program

D.13.(iv) **Operation and Maintenance Program:** The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:

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

# 4.2 Element 4 Appendix C

Supporting information for Element 4 is included in Appendix C. This appendix includes the following documents:

- 1. Figure C-1. City of Lathrop Wastewater Infrastructure
- 2. Figure C-2. City of Lathrop Sewer Collection Systems and Pump Station Drainage Areas
- 3. Sewer Flushing Report Form

- 4. Daily Lift Station Inspections Report Form
- 5. Pump Inspection Report Form
- 6. Force Main Inspection Report
- 7. Air/Vacuum Release Valve Report
- 8. Table C-1. Wastewater Pump Station Pump and Motor Information

# 4.3 Collection System Map Discussion

The City has developed and maintains a geographical information system (GIS) database and maps of its wastewater collection system. The majority of the existing wastewater collection system has been mapped and data collection for asset management is ongoing. Maps of the wastewater infrastructure and service areas and collection systems are shown in Appendix C. These figures illustrate locations of lift stations, pump stations, sewer manholes, and sewer lines.

The City's GIS database of the wastewater collection system contains data including pipe upstream and downstream manholes and invert elevations, diameter, material, length, slope, install date, as-built or plan source, and comments. The City regularly updates the GIS database to fix errors and add new infrastructure from as-built records.

The information maintained in GIS are printed onto a map book of 11"x17" maps for use by O&M and Engineering staff. The City also maintains copies of the original improvement plans or as-built drawings for reference.

#### 4.4 O&M Activities

To ensure proper operation of the collection system, PWD O&M staff and contract treatment operators perform routine preventative operation and maintenance activities. This includes checking the SCADA system panel daily to monitor system performance, perform routine searches, record meter readings, and create performance charts. It also includes system inspections performed at the frequency described in Table 4-1.

TABLE 4-1
ROUTINE INSPECTION OF KEY COLLECTION SYSTEM COMPONENTS

System Components	<b>Inspection Routine</b>	Lead Responsibility
Monitor lift stations for general operation	Daily	O&M staff
Detailed inspection of lift stations	Twice per year	O&M staff
Monitor Crossroads lift station for general operation	Daily	CTF operators
Detailed inspection of Crossroads lift station	Once per year	CTF operators
Inspect and flush sewer and manholes	Complete cycle every five years	O&M staff
Inspect ARVs condition	Once per week	O&M staff
Inspect force mains to CTF	Once per week	O&M staff
Inspect force mains to MWQCF	Once per week	O&M staff

The PWD uses an asset management software (SEMS system) to manage its asset inventory, schedule maintenance, and manage work orders. The SEMS system stores a library of asset characteristics including name, location, manuals, images, depreciation, maintenance schedule, and work order history. Maintenance work orders are automatically created for each asset based on the routine inspection schedule shown above. The software can also manage system repairs and customer service orders created by staff members.

## Sewer Cleaning and Manhole Inspection

Sewer lines are cleaned and flushed on a five-year cycle goal (20 percent of the collection system per year). In addition, the City identifies problem areas that need to be cleaned more frequently, and cleans these areas every two to three months.

With the flushing of each sewer line, each upstream and downstream manhole is inspected. For each upstream and downstream manhole inspected and flushed, the following information is recorded: date, operator names, location of the originating and receiving manholes, line size, line material, line length, number of runs to clear line, condition of line, depth to invert(s), number of drops in manhole, number of influent and effluent mains in manhole, number of laterals in manhole, and direction of flushing. All observations are recorded on the "Wastewater Hydroflushing Log" contained in Appendix C.

## Lift Station Inspection

On a daily basis, crews monitor the SCADA system electronically for lift stations alarms and general troubleshooting. Pump run times are recorded to determine if pumps are operating properly. Data are noted on the "Lift Station Inspections Report" form contained in Appendix C.

Twice per year, all lift station pumps are lifted from the wet well and inspected. The condition of each of the following components is noted: oil level, oil condition, wear rings, case, volute, pull cable, cord seal, noise, vibration, level sensor, floats, panel, warning

lights, and amperage draw. All observations are recorded on the "Pump Inspection Report" form contained in Appendix C.

### Air/Vacuum Release Valves (ARVs) Condition

Once per week, ARVs on force mains are inspected. The following items are inspected on the ARVs:

- 1. Two inch ball valve is exercised and checked
- 2. ARV manhole is checked for evidence of SSOs
- 3. Air release is inspected
- 4. Vacuum break is inspected

All observations are recorded on the "Air/Vacuum Release Valve Report" form contained in Appendix C.

#### Force Mains to CTF and MWQCF

Once per week, the force mains to the MWQCF and the CTF are driven and inspected. The manholes are opened and the force main is inspected. All observations are noted on the "Force Main Inspection Report" form contained in Appendix C.

### Pipeline Inspection

The PWD owns equipment and routinely performs closed circuit television (CCTV) inspections of the City's sewer pipelines. The PWD goal is to incorporate a procedure for conducting CCTV inspections on 10 percent of the collection system each year, resulting in a complete inspection over a ten-year period. Priority will be given to those lines that have had historical problems or have recently backed up. Results of the CCTV inspections would be used to determine low, medium, and high areas of concern within the collection system, increase cleaning efforts and develop a capital improvement program to correct the areas of concern where practical.

#### Investigation of Customer Complaints

The City responds to customer complaints about sewer service, which are generally related to sewer stoppages, SSOs, or odors. Response is performed by the PWD staff during work hours<sup>2</sup> and the on-call operator during afterhours. After receiving a customer compliant, the responder records the complaint on the SEMS system, assess the complaint, and resolve the issue. The City's initial response time goal is 30 minutes.

The majority of the complaints are related to stoppages and most of the stoppages occur in laterals. Although the City responds to all stoppage complaints, it is not responsible for clearing stoppages in laterals located on private property or outside of the public right-of-way.

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<sup>&</sup>lt;sup>2</sup> 8:00AM - 6:00PM Monday - Thursday; 8:00AM - 5:00 PM Friday.

## 4.5 Rehabilitation and Replacement Plan

The City has three methods of scheduling and funding rehabilitation and replacement of existing capital and equipment within the collection system:

- 1. Routine maintenance is budgeted annually and is planned by O&M staff as scheduled and/or needed;
- 2. Scheduling and funding for capital and equipment replacement is also through the departmental budget scheduled and emergency repairs are funded under this item when the costs of the equipment can be deemed an investment in the system, usually over \$1,000; and
- 3. The capital improvement program can be used for replacement and new construction this method of scheduling and budgeting is used for very large replacement projects or when expansion or oversizing of the facility is needed. The City's five-year Capital Improvement Program identifies the implementation schedule and funding sources for collection system CIPs and is available on the City's website at <a href="http://www.ci.lathrop.ca.us/pwd/cip.aspx">http://www.ci.lathrop.ca.us/pwd/cip.aspx</a>.

Capital and equipment replacement reflects inspection reports recorded during routine maintenance, input from PWD staff, and results of consultant/contractor evaluations of the collection system as described in Section 4.4. Records of equipment inventory and inspection are maintained in the PWD and the SEMS asset management software that helps manage utility information and improve wastewater planning and services.

The PWD has several goals to improve the current rehabilitation and replacement plan. These goals include:

- 1. Develop a list which projects the timeframe for equipment and parts replacement needs. The list will be vital for developing a schedule for implementing short and long-term needs and coordinating funding for those needs. Check time frame estimates annually with equipment operation logs for run time and inspection reports.
- 2. Develop a formal method for using available operation and maintenance data such as inspection reports, historical SSOs, and field observations to rank the condition of parts of the collection system. Use the results of the ranking for scheduling rehabilitation activities.
- 3. Upgrade the City's Asset Management program and Computerized Maintenance Management System (CMMS) technologies to tie to the City's GIS database.

# 4.6 Training

PWD O&M staff are trained on a regular basis on use of the sewer cleaning equipment, methods for flushing the sewer system, work safety, permitting requirements and emergency response procedures. General tailgate safety meetings are held each Tuesday for operators. Updates regarding the sewer system are generally announced at these meetings.

PWD O&M staff also attend pump inspection classes and sewer-jetting truck (Vac-Con) equipment training. All PWD O&M staff are required obtain the Collection System Maintenance certificate from the California Water Environment Association and complete the operator training program at Sacramento State University.

## 4.7 Equipment and Replacement Parts

Operation and maintenance manuals for most of the pump stations and equipment are available. The operation and maintenance manuals contain manufacturer information pertaining to recommended maintenance procedures and parts lists. A small inventory of spare parts such as washers, packing, and lanyards are maintained by the PWD. Larger parts such as impellers and motors for pumps are ordered as needed. Because the pump stations are designed with one redundant pumping unit, sufficient time is typically available for ordering replacement parts and repairing the units. Information on the pumps at the existing City pump and lift stations is provided in Appendix C. The City also maintains a contract with an outside company for providing back-up sewer cleaner trucks when needed.

## **ELEMENT 5: DESIGN & PERFORMANCE PROVISIONS**

This section of the SSMP discusses the City's design and construction standards. This section fulfills the Design and Performance Provisions SSMP requirement for the SWRCB (Element 5).

# 5.1 Regulatory Requirements for Design & Performance Provisions

### D.13.(v) Design and Performance Provisions:

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

# 5.2 Element 5 Appendix

None.

# 5.3 Design & Performance Provisions Discussion

The PWD Design and Construction Standards ("Standards") are available at the City's website (<a href="http://www.ci.lathrop.ca.us/pwd/standards/Default.aspx">http://www.ci.lathrop.ca.us/pwd/standards/Default.aspx</a>) and includes standards and specifications for the sewer collection system, pump stations, and other appurtenances and for the rehabilitation and repair of existing sanitary sewer systems.

The City typically updates its Standards every five years, or as needed. The most recent update of the Design and Construction Standards was in January 2014. The City's wastewater generation factors and capacity design criteria were updated as part of its 2018 Master Plan update and will be incorporated in the Standards.

The City Standards also include testing and inspection procedures for sewer projects. The PWD has a full-time construction inspector for public works projects, who is responsible for inspection and testing of the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

# ELEMENT 6: OVERFLOW EMERGENCY RESPONSE PLAN

The section of the SSMP provides an overview and summary of the City's emergency response documents and procedures for SSOs. This section fulfills the Overflow Emergency Response Plan requirement of the SWRCB (Element 6) SSMP requirements. Complete documentation of SSO response procedures are attached in Appendix D.

# 6.1 Regulatory Requirements for Overflow Emergency Response Plan Element

D.13.(vi) **Overflow Emergency Response Plan** - 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 appropriate response to all overflows;
- c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water suppliers, etc...) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDR or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;
- d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
- e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
- f) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters 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.

# 6.2 Element 6 Appendix D

Supporting information for Element 6 is included in Appendix D. This appendix includes the following documents:

- 1. Overflow Emergency Response Plan
- 2. Overflow Emergency Response Plan SSO Reporting Chain of Communication
- 3. Overflow Emergency Response Plan List of Contacts

- 4. Procedures for Estimating the Volume of Sewer Overflows
- 5. Sanitary Sewer Overflow Report Form

# 6.3 Overflow Emergency Response Plan

The City's Overflow Emergency Response Plan (OERP) is organized into nine sections, as follows:

- I. Overflow Detection
- II. Initial Response
- III. Recovery and Clean-up (Mitigation)
- IV. Public Access and Warning
- V. Water Quality Sampling and Analysis
- VI. Investigation and Documentation
- VII. Regulatory Notification and Reporting
- VIII. Equipment
  - IX. Training

Objectives of the City's OERP are to protect public health and the environment, satisfy regulatory agency requirements, and minimize risk of enforcement actions against the City. Additional objectives include providing appropriate customer service and protecting City personnel, the collection system and facilities, and private and public property.

The City's OERP, included as part of this SSMP, is also maintained in a separate binder and kept at the PWD for use by O&M staff. This allows staff to easily reference the OERP without having to carry complete copy of the SSMP.

#### Overflow Detection

This section of the plan details procedures for SSO detection, either by the public, City employees, or through the City's SCADA system. This section includes procedures for the PWD receptionist or on-call employee to receive and record relevant information regarding a possible SSO from a caller.

### Initial Response

This section details procedures when the maintenance crew first arrives at the site of a SSO. It is the responsibility of the first personnel to arrive at the site of a SSO to protect the health and safety of the public by mitigating the impact of the SSO to the maximum extent possible. Upon arrival, the crew is responsible for determining the cause of the SSO, assessing the need for additional equipment or assistance, notifying the dispatcher to contact appropriate agencies if immediate notification is needed, and taking immediate steps to stop the SSO. Guidelines for completing and documenting a preliminary damage assessment are provided, and coordination with any hazardous material response is explained.

## Recovery and Clean-up (Mitigation)

This section describes recovery and clean-up procedures to be performed by the sewer maintenance crew to restore the site to normal. Specific clean-up procedures are provided for paved areas, areas with bare soil or vegetation, and environmentally sensitive areas.

## **Public Access and Warning**

This section describes procedures to set up barricades and post warning signs where public health may be at risk by contract with sewage or sewage contamination.

### Water Quality Sampling and Analysis

This section describes how water quality samples shall be taken in any body of water receiving sewage to determine the extent of the contamination. Water quality sampling should be performed to:

- 1. Determine the extent of the area that has been impacted by sewage contamination; and
- 2. Determine when the area is safe for public contact.

Water quality samples may be taken by trained staff or an independent water quality testing laboratory under contract with the City.

### Investigation and Documentation

Procedures for investigation and documentation of SSOs are provided in this section of the OERP. Information obtained for the SSO shall be recorded on the Internal Sanitary Sewer Overflow Report Form provided in Appendix D. All information and documentation shall be kept in a file created for each SSO event. A checklist of the information that should be included to document the SSO event is provided in Appendix D.

## Regulatory Notification and Reporting

Procedures for notification and reporting are provided in this section of the OERP for each of the three SSO categories established by the SWRCB:

- 1. **Category 1:** Discharges of untreated or partially treated wastewater <u>of any volume</u> resulting from an enrollee's sanitary sewer system failure or flow conditions that:
  - a. Reach surface water and/or reach a drainage channel tributary to a surface water; or
  - b. 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).
- 2. 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.

- 3. **Category 3:** All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
- 4. **Private Lateral Sewage Discharges:** Discharges of untreated or partially treated wastewater resulting from blockages or other problems <u>within a privately-owned</u> sewer lateral connected to the City's sanitary sewer system or other private sewer assets.

The OERP lists the information that needs to be reported to the California Office of Emergency Services (Cal OES), the Central Valley RWQCB, and the CIWQS online database. Procedures for notification of San Joaquin Department of Environmental Health, California Department of Fish and Wildlife, South San Joaquin Irrigation District, and local agencies and officials are also provided in the plan. A summary of regulatory agencies to be notified immediately of an SSO is provide in Table 2-1.

## **Equipment**

This section of the OERP provides a list and description of equipment required to respond to a SSO such as:

- Vac-Con Truck
- Portable Pumps and Hoses
- Street Sweeper
- CCTV Inspection Unit
- Emergency Response Truck(s)/Trailer
- Photographic Equipment
- GPS Unit

## **Training**

This section of the OERP provides training procedures for personnel that may have a role in responding to a SSO. Initial and annual refresher training in SSO response will be provided to all employees to ensure they are appropriately trained. SSO response exercises will be held to ensure that employees are up to date on the procedures, to verify the equipment is in working order, and the required materials are readily available. The training exercises should cover scenarios typically observed during sewer-related emergencies (e.g. mainline blockage, mainline failure, force main failure, pump station failure, and lateral blockage). Records shall be kept of all training that is provided in support of this plan.

# ELEMENT 7: FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM

This section of the SSMP discusses the City's FOG control measures, including identification of problem areas, focused cleaning, and source control. This section fulfills the FOG Control requirement for the SWRCB (Element 7) SSMP requirements.

# 7.1 Regulatory Requirements for FOG Control Element

D.13.(vii) Fats, Oils, and Grease (FOG) Control Program: 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 for why it is not needed. If 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 the following as appropriate:

- a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
- b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
- c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- d) Requirements to install grease removal devices (such as traps or interceptors) design standards for the 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 ordinance;
- f) An identification of sanitary sewer system sections subject to FOG blockages and establish a cleaning maintenance schedule for each section; and
- 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.

# 7.2 Element 7 Appendix E

Supporting information for Element 7 is included in Appendix E. This appendix includes the following documents:

- 1. Table E-1. List of Food Service Facilities in Lathrop
- 2. Figure E-1. Location of Food Service Facilities in Lathrop
- 3. City of Lathrop Industrial Pretreatment Program, Implementation Procedures.
- 4. "Preventing Sewer Backups" public outreach brochure.

## 7.3 FOG Control Discussion

The City has determined that a FOG control program is necessary per SSMP requirements. Approximately 47 Food Service Facilities (FSEs) are located within City limits by January 2018 and discharge to City sewers. A list of FSEs in Lathrop identified as potential grease dischargers is provided in Appendix E; locations of these FSEs are shown on Figure E-1. O&M staff have also noted the tendency for grease buildup in specific sewer lines and developed targeted cleaning of these areas. This section discusses measures the City takes to control FOG.

The City's FOG control program consists of routine sewer cleaning and maintenance as well as source control. The City has a contract with VWNA to develop and administer the City's Industrial Pretreatment Program (IPP) which includes source control for FOG. Implementation procedures for the FOG program are provided under IMP 16 – Fats, Oils, and Grease Control, included in Appendix E. The City does not have a FOG disposal plan. However, FSEs within the City are required to use acceptable disposal facilities (per LMC Section 13.26.160.F) and maintain grease trap pumping manifests for City inspection.

The following subsections discuss identification and cleaning of grease-prone areas, legal authority to prohibit grease discharge or require a grease removal device, facility inspection, and public outreach.

## Identification and Sewer Cleaning

The core means of FOG control utilized by the City is (a) identification of trouble spots or sewer lines that are likely prone to grease accumulation, (b) targeted cleaning of these areas on a quarterly basis, and (c) inspection of sewers following blockages. Each of these FOG control measures are discussed in more detail below:

- a. <u>Identification of Grease Problem Areas.</u> The City identifies potential grease problem areas by tracking locations and causes of dry weather blockages and SSOs. Additionally, debris type and severity are noted by maintenance crews during routine cleaning. Areas with several restaurants or grease-producing facilities are also considered likely potential grease problem areas.
- b. <u>Sewer Cleaning.</u> City sewer maintenance crews clean the entire wastewater collection system at least once every five years. Additional cleaning is provided on an as-needed basis for areas with a history of stoppages or overflows on a line, as well as areas expected to be prone to grease buildup
- c. <u>Blockage Investigation</u>. The City inspects each sewer following a blockage. If the source of the grease in a lateral can be identified, the City contacts that restaurant or source of grease.

Additional information about cleaning and maintenance is included in Element 4 - Operations and Maintenance Program.

## Legal Authority

The LMC establishes legal authority to prohibit discharge of water or waste to the system containing floatable grease in excess of 50 mg/l or dispersed in excess of fifty (50) mg/l). The LMC requires grease, oil, or sand interceptors to be provided when, in the opinion of the Public Works Director, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts. The interceptors are to be of a type and capacity approved by the Public Works Director, and shall be located as to be readily and easily accessible by PWD staff for inspection and cleaning. The grease, oil and sand interceptors are to be maintained in continuously efficient operation. (LMC Section 13.16.070).

The sewer ordinance and other documents related to the City's FOG control program are contained in Appendix B: Enforcement Response Plan – Fat Oil & Grease Source Control Program (FOG ERP), which is currently administered by VWNA as part of an overall Industrial Pretreatment Program for the City's sewer system.

## Facility Inspection

Facilities are routinely inspected as part of Lathrop's FOG control program, typically on a semi-annual schedule. The City's Pretreatment Program Coordinator (VWNA) conducts FOG inspections of the FSEs within the City service area. Facilities are inspected as follow-up to user surveys to identify new and/or existing sources, for permit termination and closure, for industrial user monitoring, and for installation and routine inspections of FOG interceptors and traps. Information on facility inspection procedures is included in the City's IPP (Appendix E) and the FOG ERP (Appendix B). A sample Facility Inspection Form and inspection checklist used during facility inspections is provided in the FOG ERP.

During FOG inspections and enforcement, information regarding the FOG control program ordinance and kitchen best management practices are provided to FSEs. Sample brochures are included in the FOG ERP in Appendix B.

#### **Public Outreach**

Information on the City's FOG Control Program is available on the City's website (<a href="http://www.ci.lathrop.org">http://www.ci.lathrop.org</a>).

The City produces a brochure entitled "Preventing Sewer Backups and Overflows", which targets residential users and discusses how FOG can cause sewer blockages. The brochure also directs residents to on how to properly dispose of FOG. This brochure is displayed at City Hall and provided by O&M staff to residents who are affected by a blockage or backup. A copy of the brochure is included in Appendix E.

# ELEMENT 8: SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

This section of the SSMP discusses City capacity management measures, including the most recent Master Plan and recommended capacity improvement projects. This section fulfills the System Evaluation and Capacity Assurance Plan SSMP requirement for the SWRCB (Element 8).

## 8.1 Regulatory Requirements for Capacity Management

D.13.(viii) System Evaluation and Capacity Assurance Plan: The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

- a) Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from 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;
- b) Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in "a" above to establish appropriate design criteria; and
- c) Capacity Enhancement Measures: The steps needed to establish a short- and long-term capital improvement plan (CIP) to address identified hydraulic deficiencies including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
- d) Schedule: The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a-c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14.

## 8.2 Element 8 Appendix F

- 1. Table F-1. Existing Wastewater Flow by Development Area
- 2. Table F-2. Projected Wastewater Flow by Development Area
- 3. Table F-3. Peak Wet Weather Flow at Pump Stations.
- 4. Table F-4. Recommended Collection System Improvement Projects
- 5. Table F-5. Summary of Capital Improvement Projects
- 6. Figure F-1. Overview of Capital Improvement Projects

## 8.3 Capacity Evaluation

The City evaluates collection system capacity and identifies improvement projects during its master planning process. The City is currently in the process of updating its Wastewater System Master Plan (WWSMP) as part of the City's Integrated Water Resources Master Plan (IWRMP) Update.

The draft WWSMP's capacity evaluation assessed the collection system's ability to carry existing and projected Peak Wet Weather Flows (PWWFs), which is the highest hourly flow experienced during the year due to rainfall-induced infiltration and inflow (I&I) and peak diurnal sanitary flows. A hydraulic model was constructed to assess the ability of the City's existing and key planned infrastructure to meet capacity design criteria under projected PWWF conditions.

The following sections summarize development of wastewater flow unit factors and wastewater generation projections, the hydraulic assessment of the City's existing and key planned infrastructure, and development of recommended wastewater CIPs included in the 2018 Draft WWSMP.

## Existing and Future Wastewater Generation

PWWF is calculated by multiplying the Average Dry Weather Flow (ADWF) by a peaking factor. The established ADWF and the PWWF peaking factor are discussed below.

As part of IWRMP development, land use-specific wastewater generation factors were established using historic wastewater flow and parcel-level water use data. The wastewater generation factors serve as the basis to estimate ADWF for future developments. The IWRMP updated wastewater generation factors (in units of gallons per day per dwelling unit or gallons per day per acre; gpd/du or gpd/ac) are presented in Table 8-1, below.

TABLE 8-1. WASTEWATER FLOW FACTORS

Land Use	Wastewater ADWF Factor	
Low Density Residential	245 gpd/du	
Medium Density Residential	170 gpd/du	
High Density Residential	170 gpd/du	
Commercial	590 gpd/ac	
Industrial	355 gpd/ac	
Parks	55 gpd/ac	
Schools / Institutional	245 gpd/ac	

Wastewater ADWF projections were calculated as the sum of two major components of future wastewater flow: (1) the volume of wastewater that best represents existing wastewater generation in the City, and (2) the anticipated wastewater generation associated with future development projects and planning areas.

The City's existing wastewater generation is representative of development within the City as of the end of 2016 and was calculated as the sum of (1) the City's 2013 daily wastewater flow, selected as the representative baseline year, with a ten percent safety factor, and (2) estimated wastewater generation for existing development built between 2013 and the end of 2016. As shown on Table F-1, the total existing ADWF is estimated to be 1.7 million gallons per day (MGD).

Wastewater generation associated with anticipated future development is estimated using the updated wastewater flow factors and the anticipated acreages and number of dwelling units associated with each proposed development. Table F-2 summarizes the City's projected wastewater generation by sector and by development area in five-year increments between 2020 and 2040 and at buildout, based on development projections. Based on these projections, it is anticipated that total ADWF in 2040 will be 5.69 MGD, whereas the ADWF at Buildout is estimated to be 7.07 MGD. Of these totals, ADWFs of 1.39 MGD and 1.47 MGD are anticipated to flow to MWQCF in 2040 and at buildout, respectively. ADWFs of 4.29 MGD in 2040 and 5.61 MGD at buildout are projected to flow to the CTF.

A peaking factor was developed based on the City's historical wastewater flow data to best estimate PWWF, as shown on Figure 8-1. The PWWF peaking factors are typically higher in smaller drainage areas, in which there is little flow attenuation. Larger drainage areas provide a greater capacity to attenuate flows, as peak flows generated in the upstream reaches of the system take a longer amount of time to travel downstream. The methodologies used to develop this curve are described in the draft WWSMP.

Modeled PWWF at each pump station are summarized in Table F-3.

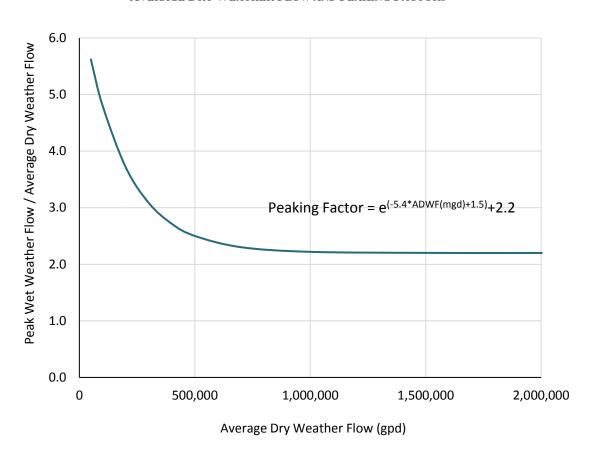


FIGURE 8-1 AVERAGE DRY WEATHER FLOW AND PEAKING FACTORS

## Design Criteria

The capacity design criteria used to evaluate the City's existing collection system are summarized below:

- Gravity mains 15 inches in diameter and smaller are designed for peak flows with a maximum depth to diameter (d/D) ratio of 0.50. Gravity mains 18 inches in diameter and larger are designed for peak flows at a maximum d/D ratio of 0.75.
- Maximum velocity in force mains is designed to be less than 10 fps during peak flows.
- Pump stations should be designed to convey PWWF within its firm capacity<sup>3</sup>.

## Hydraulic Model

The hydraulic capacity evaluation was conducted using a hydraulic model. The hydraulic model was developed using the Innovyze InfoSWMM modeling platform, a GIS-based hydraulic modeling software. To optimize the model building and maintenance process, a key objective of the modeling effort was to construct hydraulic models that are integrated with the City's infrastructure GIS (as described in Element 4) and allow for automatic

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<sup>&</sup>lt;sup>3</sup> Defined as pumping capacity with the largest pumping unit out of service.

synchronization between the model and infrastructure GIS to limit future maintenance efforts.

The hydraulic modeling approach for capacity evaluation included (1) conducting steady-state model simulations of PWWF conditions, and (2) evaluation of capacity and head requirements at PWWF for each lift station or pump station for existing, and future development scenarios. These scenarios include: Existing (2016), Near-Term Future (2025), Long-Term Future (2040), and Selected Buildout (beyond 2040). The Selected Buildout scenario includes buildout of the Central Lathrop Specific Plan (CLSP) and the South Lathrop Specific Plan (SLSP) that are anticipated to occur after 2040 to evaluate regional infrastructure needs for full buildout of CLSP and SLSP, respectively.

## Capacity Evaluation Results

Model results have shown that approximately 7% of City's existing gravity mains will not meet the capacity criteria by 2040. Areas with capacity deficiencies are mostly consistent in all scenarios, indicating that most capacity deficiencies identified in the future scenarios already exist given the estimated existing PWWF, although the degree of deficiency may increase with projected development. In addition, capacity deficiencies are identified in the Stonebridge LS and Woodfield LS in all scenarios.

The City's existing and planned force mains are able to convey projected wastewater flow beyond 2040.

## 8.4 Recommended Capacity Projects

The City's five-year Capital Improvement Program identifies scheduled wastewater CIPs on the City's website at <a href="http://www.ci.lathrop.ca.us/pwd/cip.aspx">http://www.ci.lathrop.ca.us/pwd/cip.aspx</a>.

The draft WWSMP recommended additional CIPs to address the potential deficiencies identified in the hydraulic assessment discussed in Section 8.3. Table F-4 summarizes all the WWSMP-recommended collection system CIPs, including location, priority, proposed improvements, estimated planning level costs, and alternatives. As shown in Table F-4 and seen on Figure F-1, total Opinion of Probable Cost (OPC) for the recommended collection system CIPs over the 20-year planning horizon is approximately \$12 million.

The City is in the process of conducting a temporary flow monitoring study to evaluate actual wastewater flow compared to the draft WWSMP estimates, assess I&I across the City, and assess the WWSMP-recommended CIPs. Findings of this study will be incorporated into the Final WWSMP.

#### 8.5 CIP Schedule

The City's five-year Capital Improvement Program identifies the implementation schedule and funding sources for collection system CIPs.

The five-year Capital Improvement Program will be updated to incorporate WWSMP recommendations. The draft WWSMP prioritized recommended CIPs based on the timing and the level of deficiency the CIPs are designed to address. Given that the majority of the

identified CIPs address deficiencies in the existing collection system, the CIPs have been prioritized in the following order: (1) projects addressing existing deficiencies with modeled surcharging, (2) projects addressing other existing deficiencies, and (3) projects addressing deficiencies associated with future flows.

## 8.6 Financial and Economic Analysis

The City maintains a five-year CIP which is regularly updated based on the system's capacity evaluation and is the basis for establishing new sewer rates. Funding for the City's capacity CIPs are sourced from developers if they are due to planned new development, or from the City's Sewer Capital Replacement Fund if it is related to an existing deficiency.

# ELEMENT 9: MONITORING, MEASUREMENT, & PROGRAM MODIFICATIONS

This section of the SSMP discusses parameters the City tracks to monitor the success of the SSMP and how the City plans to keep the SSMP current. This section fulfills the Monitoring, Measurement, and Program Modifications requirement for the SWRCB (Element 9) SSMP requirements.

# 9.1 Regulatory Requirements for Monitoring, Measurement, & Program Modifications

### D.13.(ix) Monitoring, Measurement, and Program Modifications: 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 preventative maintenance program;
- d) Update program elements, as appropriate, based on monitoring or performance evaluations; and
- e) Identify and illustrate SSO trends, including: frequency, location, and volume.

MRP Section E.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.

# 9.2 Element 9 Appendix G

Supporting information for Element 9 is included in Appendix G. This appendix includes the following documents:

- 1. SSMP Monitoring Tracking Sheet
- 2. SSMP Change Log

# 9.3 Monitoring and Measurement Discussion

The City tracks several performance measures through tracking logs and annual reports, including but not limited to number, cause, location, and volume of SSOs; SSO response time; length of pipe cleaned, inspected, and type of debris found; number of FSEs inspected; and the type and attendance of staff training. The City plans to continue tracking all performance measures that are currently tracked.

In order to monitor the effectiveness of the SSMP, however, the City has selected certain, specific parameters that can be documented and compared on an annual basis in a simple format. These parameters were selected because they are straightforward, quantitative, and focused on results. Although the parameters may not track everything associated with SSMP

implementation, changes in these parameters over time will indicate the overall success of the SSMP or, conversely, underlying problems that can then be investigated further.

Table 9-1 lists each SSMP element, the overall purpose of the SSMP element, and the specific parameters that the City plans to track that will help in evaluating the effectiveness of the SSMP. Appendix H includes a tracking sheet listing each of these parameters, which the City will fill out annually in conjunction with completing the SSMP audit (Element 10).

**Table 9-1. SSMP Monitoring Parameters, by SSMP Element** 

SSMP Element	Summary of Element Purpose	Parameters for Tracking Effectiveness (Annual)
4 - Operations and Maintenance Program	Minimize blockages and SSOs by properly operating and maintaining the system.	<ul> <li>Total number and volume of SSOs</li> <li>Total amount recovered</li> <li>Total amount estimated to reach surface waters</li> <li>Percent reaching surface water</li> <li>Total length of pipe CCTV'd</li> <li>Total length of pipe hydrocleaned</li> <li>Total length of pipe repaired or replaced</li> </ul>
6 - Overflow Emergency Response Plan	Provide timely and effective response to SSO emergencies and comply with regulatory reporting requirements	Percent of total SSO volume contained or returned to sewer
7 - Fats, Oils, & Grease Control Program	Minimize blockages and SSOs due to FOG	<ul> <li>Number of SSOs due to FOG</li> <li>Number of blockages due to FOG</li> <li>Number of FSEs inspected</li> </ul>

The City will use the specific tracked parameters listed in Table 9-1 and documented on the tracking sheet included in Appendix G to assist in completion of the annual SSMP Audit described in Element 10. As noted above, the City will also continue to collect data for all performance measures currently tracked. This additional information that the City collects, such as customer complaints and length of pipe cleaned, will be used to support or further evaluate the successes and limitations of the SSMP as needed.

# 9.4 SSMP Modifications

The SSMP needs to be updated periodically to maintain current information, and programs need to be enhanced or modified if they are determined to be less effective than needed. The City will review the successes and needed improvements of the SSMP as part of the SSMP annual audit, described in Element 10.

City staff will update critical information, such as contact numbers and the SSO response chain of communication, as needed. A comprehensive SSMP update will occur every 5 years, as required by the SWRCB. The City will schedule this SSMP update to occur in conjunction with the WWSMP update. All changes made to the SSMP shall be listed in the SSMP Change Log in Appendix G.

# **ELEMENT 10: SSMP PROGRAM AUDITS**

This section of the SSMP discusses the City's SSMP auditing program. This section fulfills the SWRCB (Element 10) SSMP Audit requirements.

# 10.1 Regulatory Requirements for SSMP Audits

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

# 10.2 Element 10 Appendix H

Completed SSMP audits are stored in Appendix H.

## 10.3 SSMP Audits Discussion

The City will complete audits of its SSMP every two years, and will prepare a report to be kept on file. The audit will include the following:

- Review of progress made on development of SSMP elements;
- Review of monitoring and measurement tracked under Element 9;
- Identification of successes of implementing SSMP elements and needed improvements;
- Description of system improvements during the audit period; and
- Description of system improvements planned for the upcoming two years, with an estimated schedule for implementation.

Upon completion of the audit, the City will keep a report of the audit on file to fulfill the SWRCB audit requirement. A copy of the last 3 audits will be stored in Appendix H of the SSMP. Modifications and changes to the SSMP will be identified and tracked by the SSMP Change Log and included in Appendix H. This log will be used to track SSMP changes in the periods between audits as well as changes made as a result of audits or SSMP updates. A copy each audit will be stored in Appendix H of the SSMP.

# **ELEMENT 11: COMMUNICATION PROGRAM**

This section of the SSMP discusses the City's communications with the public and satellite agencies. This section fulfills the Communication Program requirement for SWRCB (Element 11).

# 11.1 Regulatory Requirements for Communication Program

D.13.(xi) Communication Program. The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the 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 Enrollee's sanitary sewer system.

# 11.2 Element 11 Appendix I

Supporting information for Element 11 is included in Appendix I. This appendix includes the following documents:

1. Copy of Public Notification Posted on City's Website.

# 11.3 Communication Program Discussion

The City will communicate with the public on the development, implementation, and performance of its SSMP by placing notices on the City's website. Additionally, flyers will be posted at City Hall announcing the availability of the SSMP to the public, upon request. Public comments are welcomed during the development, implementation, and performance of the SSMP. Public comments will be directed to the PWD's phone number at (209) 941-7430. Comments will be forwarded to the administrative staff responsible for oversight of the SSMP.

The City maintains an open line of communication with City of Manteca per the City's Interjurisdictional Agreement with Manteca, because a portion of the sewer flows from the City are directed to the MWQCF.

# APPENDIX A – Element 2 (Organization) Supporting Documents

- 1. Figure A-1. Organization Chart of Wastewater Utility Staff
- 2. Description of General Responsibilities for Wastewater Utility Staff
- 3. Table A-1. Names and Telephone Numbers of Staff Responsible for SSMP
- 4. Table A-2. List of City Staff Responsible for SSMP Elements

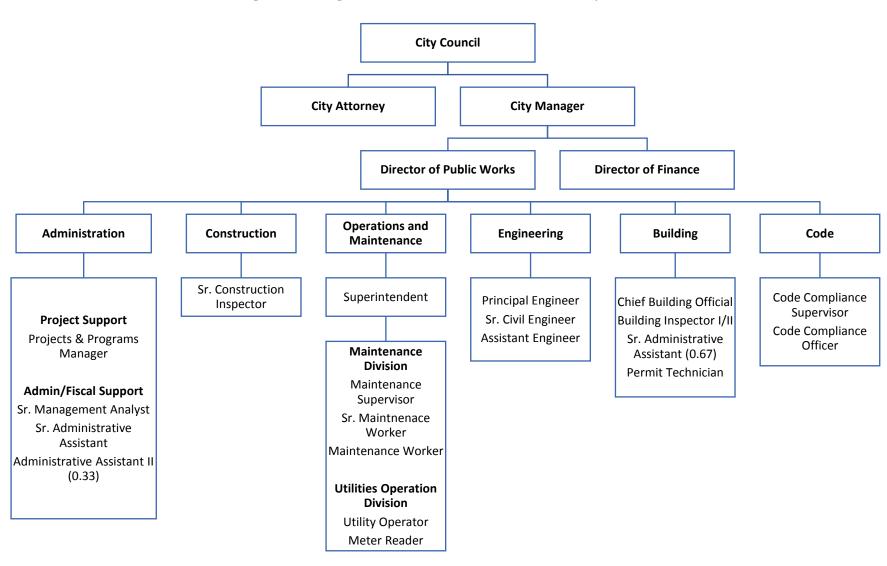


Figure A-1 Organization Chart of Wastewater Utility Staff

## **Description of General Responsibilities**

<u>City Manager</u>: Under policy direction, serves as the Chief Administrative Officer of the City and directs the activities and operation of all departments; advises and assists the City Council in the conduct of City business; provides administrative oversight to the operational and policy functions of City government; coordinates City business with various programs, officials and outside agencies; provides a variety of other responsible and complex administrative support to the City Council; performs other related duties as required.

<u>Public Works Director</u>: Plans, organizes, directs, and supervises the public works activities of the City; advises the City Council and Planning Commission on engineering and public works matters, including those related to the collection system. Prepares and controls department budget; reviews project plans and specifications for public works projects and performs technical engineering planning studies; confers with engineering consultants and officials of other public works departments.

Operations & Maintenance Superintendent: Plans, organizes, and supervises the maintenance and repair of City public works infrastructure, including sewers; manages the Municipal Service Center. Reviews plans and specifications for sewer and other projects, and makes recommendations regarding maintenance, construction, and operations aspects. Controls budget expenditures within the Maintenance Division; confers with contractors, engineers, and members of the general public on construction and maintenance problems and procedures.

<u>Maintenance Supervisor:</u> Under general direction of the Public Works Superintendent, supervises, coordinates, directs and evaluates the work of staff involved in the operation, maintenance and repair of the City's water distribution, wastewater collection and storm drain systems; assists in the research and implementation of new programs; ensures safe work practices, work quality and accuracy; maintains appropriate work records which may include time cards and work orders; serves as a technical resource for assigned staff; performs other related duties as required.

<u>Senior Maintenance Worker</u>: To lead, oversee, and participate in the work of maintenance crews responsible for Public Works Services including street maintenance, street painting, traffic signs, gutter and sidewalk repair; to assist with sewer and storm drain maintenance; and to perform a variety of technical tasks relative to assigned areas of responsibility.

<u>Maintenance Worker:</u> Works as a member of a field maintenance crew; cleans, unplugs, and repairs sewer lines; locates and raises manholes; operates power equipment including hydraulic cleaning truck and sewer rodder.

<u>Utility Operator</u>: Under general supervision, learns to perform and performs the full array of duties assigned to classes in the Utility Operator series, including skilled and semi-skilled work in the operation, maintenance and repair of the City's water distribution, sewer collection and storm drain systems; assists other units of Public Works in the maintenance of streets, facilities and buildings as needed; demonstrates a full understanding of all applicable policies, procedures and work methods associated with assigned duties; performs other related duties as required.

<u>Principal Engineer</u>: Under direction of the Public Works Director or City Engineer, supervises, evaluates and participates in professional and technical civil engineering work in the planning, design, construction and maintenance of the City's Capital Improvement Projects, streets, storm drain facilities, landscape, lighting, sanitary sewer facilities, parks, water production and distribution facilities, buildings and other projects; ensures safe work practices, work quality and accuracy; maintains appropriate work records; serves as a technical resource for assigned work staff; performs other related duties as required.

<u>Senior Civil Engineer:</u> To plan, direct, manage and oversee Public Works utilities activities, including water and wastewater systems/plants; to coordinate water and wastewater projects, development review, and/or master plans, and assigned activities with other divisions, departments, consultants, contractors, engineers, and outside agencies; and to provide highly responsible and complex administrative support to the Public Works Director.

Associate Engineer: To perform professional engineering work in connection with design, inspection, and development review projects; to perform advanced sub-professional engineering work including contract administration, traffic engineering duties, and public works inspection; to assist the coordination of capital improvement projects, development review, and/or master plans, and assigned activities with other departments, divisions, consultants, contractors, engineers, and outside agencies; and to provide responsible and professional engineering support to the Public Works Department.

<u>Senior Construction Inspector:</u> Performs all Construction Inspector duties, including the most complex paraprofessional engineering, office and field work involving inspection, field testing and surveying; provides lead direction and work instruction to assigned construction inspection staff; acts as a technical expert and serves as lead in providing in-office customer service to the public and other departments; provides responsible staff assistance to the Principal Engineer or the Director of Public Works/City Engineer.

<u>Project and Programs Manager:</u> Under direction of the Public Works Director or the Assistant City Manager, plans, supervises, evaluates and participates in professional work in the planning, design, construction, maintenance and programming of services of Public Works Capital Improvement Projects, public facilities, utilities, and other projects; performs complex analysis of project costs and monitoring project progress; assists in the preparation and administration of department budgets, ensures safe work practices, work quality and accuracy; and maintains appropriate work records.

<u>Senior Administrative Assistant:</u> To perform a variety of supervisory responsibilities overseeing clerical support staff of the department; perform confidential and complex administrative duties where knowledge of the organization, personnel policies and procedures are essential.

<u>Administrative Assistant:</u> Under general supervision, learns to perform and performs routine and complex tasks and duties assigned to classes within the Administrative Assistant series by providing office, clerical and administrative support to management staff, and other staff, in one or more departments as needed; interprets and applies policies, procedures and work methods associated with assigned duties; performs other related duties as required.

<u>Budget Analyst I/II</u>: Under direction, performs a wide variety of professional, administrative, human resources, analytical and management support within assigned program areas; develops, implements and administers assigned program responsibilities, including budget preparation, financial management and grant coordination; conducts research; performs other related duties as required.

Table A-1. Names and Phone Numbers of Staff Responsible for SSMP

Contact	Phone Number	Email Address
Public Works Director	(209) 941-7499	-
Milton Daley, O&M Superintendent	(209) 941-7475	mdaley@ci.lathrop.ca.us
Phil Humphrey, Utility Operator	(209) 992-0022	phumphrey@ci.lathrop.ca.us
Chris Hart, Utility Operator	(209) 992-0019	chart@ci.lathrop.ca.us
Michael Dunn, Utility Operator	(209) 992-0021	mdunn@ci.lathrop.ca.us
Ian Zeiher, Utility Operator	(209) 993-9615	izeiher@ci.lathrop.ca.us
Henry Hernandez, Utility Operator	(209) 992-1187	hhernandez@ci.lathrop.ca.us
Aurelio Rodriguez, Senior Maintenance Worker	(209) 346-1076	arodriguez@ci.lathrop.ca.us
Robert McGinnis, Senior Construction Inspector	(209) 992-0701	rmcginnis@ci.lathrop.ca.us
Jay Davidson, Principal Engineer	(209) 941-7498	jdavidson@ci.lathrop.ca.us
Greg Gibson, Senior Civil Engineer	(209) 941-7442	ggibson@ci.lathrop.ca.us
Michael King, Senior Civil Engineer	(209) 941-7454	mking@ci.lathrop.ca.us
Ken Reed, Projects Manager	(209) 992-0733	kreed@ci.lathrop.ca.us
Emilia Knox, Senior Admin Assistant	(209) 941-7435	eknox@ci.lathrop.ca.us
Veronica Hedges, Admin Asst.	(209) 941-7432	vhedges@ci.lathrop.ca.us
Paul Zolfarelli, VWNA (Plant Manager)	(209) 858-1645	Paul.Zolfarelli@veolia.com

**Table A-2. List of City Staff Responsible for SSMP Elements** 

SSMP	Element	Responsible Position(s)
I.	Goals	Public Works Director
II.	Organization	Public Works Director
III.	Legal Authority	Public Works Director; City Attorney
IV.	Operations & Maintenance	O&M Superintendent
V.	Design and Construction Standards	Senior Civil Engineer; Senior Construction Inspector
VI.	Overflow Emergency Response Plan	O&M Superintendent
VII.	FOG Control Program	O&M Superintendent, VWNA
VIII.	System Evaluation and Capacity Assurance	Senior Civil Engineer
IX.	Monitoring, Measurement, and Program Modifications	Senior Civil Engineer Administrative Assistant
X.	SSMP Program Audits	Senior Civil Engineer
XI.	Communication	Administrative Assistant

# APPENDIX B - Element 3 (Legal Authority) Supporting Documents

- 1. Enforcement Response Plan Enforcement of Sewer Use Ordinance
- 2. Enforcement Response Plan Fats, Oils & Grease Source Control Program
- 3. Interjurisdictional Agreement Between the City of Manteca and The City of Lathrop.

# City of Lathrop, California

# ENFORCEMENT RESPONSE PLAN

Enforcement of Sewer Use Ordinance #05-254 Chapter 13, Section 26 of the Lathrop Municipal Code

[Industrial Pretreatment Regulations]

# City of Lathrop ENFORCEMENT RESPONSE PLAN

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# City of Lathrop ENFORCEMENT RESPONSE PLAN

#### I. INTRODUCTION

#### A. Introduction

In an effort to uniformly and consistently implement the provisions of the Lathrop Sewer Use Ordinance, Chapter 13.26 of the Lathrop Municipal Code (LMC), the Enforcement Response Plan (ERP or Plan) provides the guidelines for investigating and responding to industrial user noncompliance. This ERP has been developed for guidance and is not intended to create legal rights or obligation or to limit the enforcement discretion of any of the administering agencies.

The centerpiece of this Plan is the Enforcement Response Matrix included in Part III, which lists potential violations and corresponding ranges of appropriate enforcement options. The purpose of the guide is to promote consistent and timely enforcement responses, as well as to eliminate uncertainty and confusion concerning enforcement. Detailed descriptions of the enforcement responses available to the City and guidelines for their implementation are provided Part IV.

## B. Personnel Assignments:

The following are the titles of those persons involved in the implementation and enforcement of the Lathrop Sewer Use Ordinance:

Director of Public Works - 209-941-7430
City Attorney - 209-941-7235
Veolia Water NA Project Manager - 209-858-1645
City Pretreatment Coordinator - 209-858-1645

## C. Reference

U.S. Environmental Protection Agency's (EPA's) Pretreatment Compliance Monitoring and Enforcement Guidance, July 1986 was used in the development of this Plan. For additional information and general discussions about other enforcement actions not discussed in this Plan, refer to the EPA Guidance for Developing Control Authority Enforcement Response Plans, U.S. EPA, 1989; and EPA Introduction to the National Pretreatment Program, March 2011.

## II. ENFORCEMENT PROVISIONS OF THE SEWER USE ORDINANCE

All pretreatment program regulations as required by 40 CFR 403.8 are contained in LMC Chapter 13, Section 26 (City Sewer Use Ordinance #05-254). The following table summarizes the ordinance provisions that satisfy the requirements of the Industrial Pretreatment Program.

(4	eral C	3	Pretreatment Topic	City Sewer Use Ordinance Provision
(1)	03.8(f) i	<i>)</i>	Deny or Condition	§ 13.26.010.B. Authority to Require Pretreatment
(1)	ii		Comply with Standards	§ 13.26.010.A. Objectives
	11		Comply with Standards	§ 13.26.030.A. Objectives § 13.26.030.A. Pretreatment Facilities
				§ 13.26.030.A. Fredeathent Facilities § 13.26.030.B. Additional Pretreatment Measures
				§ 13.26.050 Permit Conditions
	iii		Comply with Standards	§ 13.26.010.A Purpose & Policy
	111		Comply with Standards	§ 13.26.020.A General Sewer Use Requirements
				§ 13.26.050 Wastewater Discharge Permits
		a	Duration	§ 13.26.050 Wastewater Discharge Fernits
		a	Duration	§ 13.26.050.H. Permit Contents
		b	Transferability	§ 13.26.050.K. Permit Transfer
		c	Effluent Limits	§ 13.26.050.H Permit Contents
		d	Self-Monitoring	§ 13.26.050.H Permit Contents
		e	Civil & Criminal Penalties	§ 13.26.110 Administrative Enforcement
			Civii & Cilillillai i cilaities	Remedies
				§ 113.26.120 Judicial Enforcement Remedies
				§ 13.26.130 Supplemental Enforcement Actions
				§ 13.26.140 Affirmative Defenses to Discharge
				Violations
				§ 13.26.150 Pretreatment Charges & Fees
				§ 13.26.160 Fat, Oil & Grease Control Program
	iv	a	Compliance Schedules	§ 13.26.050.H. Permit Contents
	- '			§ 13.26.060 Reporting Requirements
		b	Monitoring Reports	§ 13.26.050.H Permit Contents
			8 1	§ 13.26.060.e. Reporting Requirements
	V		Inspections	§ 13.26.050.H. Permit Contents
	·		T	§ 13.26.070 Monitoring Requirements
				§ 13.26.070.A. Right of Entry
				§ 13.26.160. Fat, Oil & Grease Control Program
	vi	a	Injunctive Relief	§ 13.26.120.A. Injunctive Relief
			Civil or Criminal	§ 13.26.120.B. Civil Penalties
			Penalties	§ 13.26.120.C. Criminal Penalties

(4	<b>eral C</b> 40 CFI 03.8(f)	R ))	Pretreatment Topic	City Sewer Use Ordinance Provision
		b	Halt Discharges	§ 13.26.110.E. Cease & Desist Order
				§ 13.26.110.G. Emergency Suspension
				§ 13.26.110.H. Termination of Discharge
				§ 13.26.130.C. Water Supply Severance
	vii		Confidentiality	§ 13.26.080 Confidential Information
(2)	i		Identify & Locate	§ 13.26.040 User Survey
				§ 13.26.050.D. Discharge Permit Application
	ii		Characterize	§ 13.26.050.D. Discharge Permit Application
				§ 13.26.050.H. Discharge Permit Contents
				§ 13.26.060.B. Categorical Baseline Monitoring
				Report
				§ 13.26.060.E. Periodic Compliance Report
				§ 13.26.060.J. Notification of the Discharge of
				Hazardous Waste
	iii		Notify User	§ 13.26.020 General Sewer Use Requirements
				§ 13.26.050.H Permit Contents
				§ 13.26.060.J. Notification of the Discharge of
				Hazardous Waste
	iv		Receive Reports	§ 13.26.050.H Permit Contents
				§ 13.26.060 Reporting Requirements
	V		Random Sampling	§ 13.26.030.C. Accidental Discharge/Slug
			Slug Discharges	Control Plan
				§ 13.26.050.H Permit Contents
				§ 13.26.070 Compliance Monitoring
	vi		Investigate	§ 13.26.070 Compliance Monitoring
	vii		Public Participation	§ 13.26.090 Publication of Users in Significant
				Noncompliance
(3)			Funding	§ 13.26.150 Pretreatment Charges and Fees
(4)			Local Limits	§ 13.26.020.D. Local Limits
(5)			Enforcement Response	§ 13.26.100 Enforcement Response Plan
			Plan	
(6)			Industrial User List	§ 13.26.040 User Survey

#### III. ENFORCEMENT RESPONSE MATRIX

A. Description of Terms

**CA** - City Attorney

**Civil Litigation -** Civil action against the industrial user seeking equitable relief, monetary penalties, and actual damages.

**Criminal Penalties** - Pursuing punitive measures against an individual and/or organization through a court of law.

**Consent Orders -** An order issued against an IU to assure voluntary compliance, or similar documents establishing an agreement for compliance.

**DPW** - Director of Public Works

**Fine -** Monetary penalty assessed by Control Authority officials.

**IU** -Industrial User as defined in the City of Lathrop Pretreatment Ordinance

**Meeting -** Informal compliance meeting with the IU to resolve recurring noncompliance

**NOV** - Notice of Violation

PC -Pretreatment Coordinator

**POTW** – Publicly owned treatment works

S - Veolia Water NA Project Manager

**Show Cause Hearing -** Formal meeting requiring the IU to appear and demonstrate why the Control Authority should not take a proposed enforcement action against it. The meeting may also serve as a forum to discuss corrective actions and compliance schedules.

**Significant Noncompliance -** An industrial user is in significant noncompliance if its violation meets one or more of the following criteria:

- 1. Chronic violations of wastewater discharge limits, defined here as those in which sixty-six percent (66%) or more of wastewater measurements taken during a six (6) month period exceed the daily maximum limit or the average limit for the same pollutant parameter by any amount;
- 2. Technical Review Criteria (TRC) violations, defined here as those in

which thirty-three percent (33%) or more of wastewater measurements taken for each pollutant parameter during a six (6) month period equals or exceeds the product of the daily maximum limit or the average limit multiplied by the applicable criteria (1.4 for BOD, TSS, fats, oils and grease, and 1.2 for all other pollutants except pH);

- 3. Any other discharge violation that the City believes has caused, alone or in combination with other discharges, interference or pass through, including endangering the health of POTW personnel or the general public;
- 4. Any discharge of pollutants that have caused imminent endangerment to the public or to the environment, or have resulted in the City's exercise of its emergency authority to halt or prevent such a discharge;
- 5. Failure to meet, within ninety (90) days of the scheduled date, a compliance schedule milestone contained in a wastewater discharge permit or enforcement order for starting construction, completing construction, or attaining final compliance;
- 6. Failure to provide within forty-five (45) days after the due date, any required reports, including baseline monitoring reports, reports on compliance with categorical pretreatment standard deadlines, periodic self-monitoring reports, and reports on compliance with compliance schedules;
- 7. Failure to accurately report noncompliance; or
- 8. Any other violations(s) which the City determines will adversely affect the operation or implementation of the local pretreatment program.

**Terminate Service -** Disconnection of industrial user from sanitary sewer service.

## B. Using the Enforcement Response Matrix

This matrix of response actions addresses a broad range of pretreatment violations. It is not intended to cover every possible violation. The responses in this plan are suggested responses; the City may have alternative enforcement responses that are equally effective. When the City elects to pursue an enforcement course that is significantly different from the suggested course in the enforcement matrix, the City should prepare a statement explaining the intent and the basis for the actions taken. The enforcement response matrix is used as follows:

- (1) Locate the type of noncompliance in the first column and identify the most accurate description of the violation in column 2.
- (2) Assess the appropriateness of the recommended response(s) in columns three and four using the criteria of magnitude, duration, effects, compliance history, and good faith.
- (3) Apply the enforcement response to the industrial user, specifying corrective action(s) or other responses required of the industrial user. Column five indicates responsible personnel.
- (4) Track industrial user's response and follow-up with escalated enforcement action if a response is not received or violation continues.

# LATHROP ENFORCEMENT RESPONSE MATRIX

Noncompliance	Nature of Violation	Violation Category	<b>Enforcement Response</b>	Authority
Unauthorized Discharge	IU unaware of requirements; NO harm to POTW or environment.	0	Phone call. NOV with application form attached to be submitted within 45 calendar days. Application deadline to be specified in the NOV.	PC
	IU unaware of requirements; HARM to POTW or environment is evident. (SIGNIFICANT	3	a. Cease & Desist Order. Compliance Order requiring submittal of a permit application within 45 calendar days and assessing any penalties or recovery of damages and costs.	DPW S
	NONCOMPLIANCE)	4	b. Termination of Service and Civil Litigation or Criminal Investigation.	DPW CA
	IU has not submitted permit application by deadline.	0	NOV for missed deadline requiring submittal within 15 calendar days or further enforcement action will be pursued.	PC
	IU has not submitted application within 15 calendars days of date specified in NOV. (SIGNIFICANT NONCOMPLIANCE)	1	Show Cause Order assessing a penalty per day of violation and requiring the IU to appear before the DPW to show cause as to why further enforcement should not be pursued. Penalty to be assessed from the 16th day forward.	DPW
	Failure to submit permit application continues more than 60 days after receipt of NOV by the IU. (SIGNIFICANT NONCOMPLIANCE)	4	Civil Litigation and Termination of Service.	DPW CA

Noncompliance	Nature of Violation	Violation Category	Enforcement Response	Authority
Discharge Limit Violation	Type A- exceed one or more daily or average parameter limits by less than a factor of 3.0.	0	NOV detailing violation and requiring repeat sampling and analysis within 45 days of becoming aware of the violation and submit results to PC.	PC
(Local and/or Federal)	Type B- exceed one or more daily or average parameter limits by a factor of 3.0 or greater. (SIGNIFICANT NONCOMPLIANCE)	1	NOV detailing violation and requiring correction within 30 business days. IU must repeat sampling and analysis within 45 days of becoming aware of the violation and submit results to PC. Penalties to be assessed by Compliance Order for each day of violation.	DPW PC
	Type C- Chronic and/or TRC violation as defined by EPA. (SIGNIFICANT NONCOMPLIANCE)	2	Show Cause Order assessing a penalty per violation per day and requiring the IU to appear before the DPW to show cause why further enforcement should not be pursued. Further actions (if warranted) will be addressed in a Compliance Order.	DPW
	Type D- violation of any daily or average parameter limit which adversely affects the POTW. Interference, inhibition, or pass-through. (SIGNIFICANT NONCOMPLIANCE)	3	Cease and Desist Order requiring the IU to halt the violation immediately or terminate the discharge altogether. Compliance Order assessing any penalties and/or cost recovery.	DPW S
Reporting	Report is improperly signed or certified.	0	Phone Call.	PC
Violations	Report is improperly signed or certified after phone call by POTW.	0	NOV requiring correction on the next report.	PC
	Report is improperly signed or certified after issuance of NOV by POTW. (SIGNIFICANT NONCOMPLIANCE)	1	Compliance Order assessing a penalty and requiring the IU to properly sign or certify the next regularly scheduled report.	DPW

Noncompliance	Nature of Violation	Violation Category	Enforcement Response	Authority
	Report late by less than 30 calendar days.	0	NOV for missed deadline.	PC
	Report late 30 calendar days or more.	1	Informal meeting between the IU and the Pretreatment Coordinator. NOV requiring report submittal no later than 45 days from the original report deadline.	DPW PC
	Report late 45 calendar days or more. (SIGNIFICANT NONCOMPLIANCE)	2	Show Cause Order assessing a penalty per day of violation and requiring the IU to appear before the DPW to show cause why further enforcement should not be pursued.	DPW
	Report late 60 calendar days or more. (SIGNIFICANT NONCOMPLIANCE)	3	Compliance Order requiring IU to submit the required report within 15 calendar days.	DPW
	Report late 90 calendar days or more. (SIGNIFICANT NONCOMPLIANCE)	4	Civil Litigation.	DPW CA
	Failure to report SPILLS or CHANGED DISCHARGE. NO harm to POTW or environment. Isolated incident.	1	NOV and Compliance Order requiring the IU to develop and implement a spill prevention plan by a specified deadline.	PC
	Failure to report SPILLS or CHANGED DISCHARGE. Harm to the POTW or environment. (SIGNIFICANT NONCOMPLIANCE)	2	Cease and Desist Order requiring IU to halt the illegal discharge immediately or terminate its discharge altogether. Compliance Order assessing a penalty per day of violation and addressing cost recovery.	DPW
	Repeated failure to report SPILLS. (SIGNIFICANT NONCOMPLIANCE)	3	Show Cause Order assessing a penalty per incident and requiring the IU to appear before the DPW to show cause why further enforcement should not be pursued.	DPW

Noncompliance	Nature of Violation	Violation Category	Enforcement Response	Authority
Inadequate Recordkeeping	Pretreatment Coordinator finds files incomplete or missing (no evidence of intent).	0	NOV explaining the required recordkeeping and documentation.	PC
	Recurring incidence of files incomplete or missing.	1	Compliance Order requiring proper maintenance of records. Assessment of penalty to be issued on severity of violation.	DPW
Failure to Report	Pretreatment Coordinator finds additional files.	0	NOV requiring submittal of additional monitoring.	PC
Additional Monitoring	Recurring failure to report additional files (considered falsification).	3	Compliance Order requiring submittal of all additional monitoring. Assessment of a penalty to be based on the severity of the violation.	DPW
Falsification	First occurrence. (SIGNIFICANT NONCOMPLIANCE)	1	Show Cause Order requiring IU to appear before the Director to show cause why enforcement action should not be pursued.	DPW
	Subsequent occurrences. (SIGNIFICANT NONCOMPLIANCE)	4	Civil Litigation.	DPW CA
Improper	Failure to monitor all pollutants as required by IU's Permit.	0	Informal meeting with IU to review required sampling and reporting.	PC
Monitoring	Failure to monitor all pollutants as required by IU's Permit. (Second occurrence)	0	NOV requiring complete sampling and analysis with report due no later than 30 calendar days from receipt of NOV.	PC
	Recurring failure to monitor properly. (Third occurrence) (SIGNIFICANT NONCOMPLIANCE))	1	Show Cause Order assessing a penalty for each incidence and requiring the IU to appear before the DPW to show cause why further enforcement should not be pursued.	DPW

Noncompliance	Nature of Violation	Violation Category	<b>Enforcement Response</b>	Authority
Improper Sampling	No evidence of intent. (First violation)	0	NOV explaining correct procedure and requiring proper sampling for the next self-monitoring report.	PC
(Sample Type, Sample Location, Or	Improper sampling continues. (Second violation)	0	Informal meeting with IU to review proper sampling criteria.	PC
Collection Technique)	Evidence of Intent. (Failure to properly sample after informal meeting is viewed as evidence of intent.) (SIGNIFICANT NONCOMPLIANCE)	1	Show Cause Order assessing a penalty for each incidence. Order requires IU to appear before the DPW to show cause why further enforcement should not be pursued.	DPW
Failure to Install	Missed final installation deadline.	0	NOV requiring complete installation within 30 calendar days of receipt of NOV.	PC
Monitoring Equipment as Set forth in IU Permit or Compliance Order	Noncompliance with NOV. (Delay of more than 45 calendar days) (SIGNIFICANT NONCOMPLIANCE)	1	Compliance Order requiring final installation by a specified deadline. Assessment of a daily penalty if the requirements of this Order are not met.	DPW
Compliance Schedules (In a	Missed interim milestone date by less than 30 days will not affect final compliance deadline.	0	NOV which restates any remaining milestone deadlines.	PC
Permit or Order)	Missed interim milestone date by less than 30 days and will affect final compliance deadline.	1	Compliance Order detailing revised compliance schedule. Order may assess fines if delay was avoidable (no good cause).	DPW
	Missed interim milestone date by more than 30 days, and will not affect final compliance deadline.	0	Informal meeting with IU to review compliance schedule, milestone dates, and final compliance deadline.	DPW
	Missed interim milestone date by more than 30 days, and will affect final compliance deadline.	1	Show Cause Order requiring IU to appear before the DPW to show cause why further enforcement should not be pursued. Must result in a revised Compliance Order.	DPW

Noncompliance	Nature of Violation	Violation Category	Enforcement Response	Authority
	Missed interim milestone date by more than 90 days. (SIGNIFICANT NONCOMPLIANCE)	4	Civil Litigation.	DPW CA
Missed Final	Failure to comply with an Administrative Order	4	Compliance Order assessing a penalty per day past the Final Compliance Deadline and requiring immediate compliance.	DPW
Compliance Deadline			Civil Litigation should be pursued if IU has not complied within 45 calendar days of the original Final Compliance Deadline	CA
Waste Streams are Diluted	Dilution of regulated waste streams with non-polluted water.	0	NOV citing regulatory prohibition against dilution and requiring correction within 45 calendar days of receipt of the NOV	PC
	Recurring violations. (DILUTION continues to occur after NOV)	1	Informal meeting with IU to review Ordinance prohibitions. Compliance Order with deadline for correction.	DPW
Failure to Mitigate Noncompliance or Halt Production	Failure to reduce the severity of the violation(s) and/or failure to comply with a Cease and Desist Order.	4	Civil prosecution seeking an injunction to HALT DISCHARGE. Termination of Permit and Service if potential for POTW and/or environmental harm is evident.	DPW CA
<b>Entry Denial</b>	Entry denied or consent withdrawn. Record access denied.	0	Obtain warrant and return to IU.	PC
Illegal Discharge (Violation of	No harm to POTW or environment. No Interference or pass-through at the POTW	0	NOV explaining the General Prohibited Discharge Standards as contained in 40 CFR 403.5 (a) and (b).	PC
Standards [40 CFR 403.5(A) And (B)	Discharge causes harm, pass- through, or interference	3	Cease and Desist Order requiring the IU to halt the violation immediately or terminate the discharge altogether. Compliance Order assessing any penalties and/or cost recovery.	DPW PC
Failure to Properly Operate and	No violation results from failure of IU to properly operate & maintain facility	0	NOV explaining the requirement to properly operate and maintain pretreatment facilities.	PC

Noncompliance	Nature of Violation	Violation	Enforcement Response	Authority
		Category		
Maintain	Violations of Permit or	1	Compliance Order requiring proper maintenance and	DPW
Pretreatment	Pretreatment Standards occur		operation of pretreatment facility with schedule of	
Facility	because of failure of IU to		compliance.	
	properly maintain and operate			
	pretreatment facility.			
	Recurring violation or failure to	3	Compliance Order requiring proper maintenance and	DPW
	meet compliance schedule; no		operation of pretreatment facility with schedule of	CA
	harm to POTW.		compliance. Assessment of a penalty to be based on the	
			severity of the violation.	
	Recurring violation or failure to	4	Civil Litigation. Termination of Permit and Termination of	DPW
	meet compliance schedules; harm		Service. Assessment of Administrative Fines and Cost	CA, CM
	to POTW.		Recovery.	ŕ

#### IV ENFORCEMENT RESPONSES

## A. Levels of Response

There are three possible levels of response to all violations available to the City: no response, an informal response, or a formal response. For any violation, the City must review the violation and determine the appropriate response. Informal enforcement responses are commonly used for Category 0 or 1 violations, while formal enforcement responses are commonly used for Category 2 through 4 violations, as described in the Enforcement Response Guide in Section III.

Informal enforcement response can be an inspection, phone call, informal meeting, or a verbal Notice of Violation (NOV) to the industrial user (IU). The NOV can be limited to a notification of the violation or it can require the IU to take certain steps within specific timeframes. For some violations, the City may determine that no further actions are necessary. In other cases, the City may direct the IU to conduct additional sampling; review of procedures or permit; or conduct additional investigation and develop a plan to prevent future violations. It is the City's policy to issue a Notice of Violation for all violations of the numerical discharge limits setforth in the permit. Informal enforcement actions can be taken by the Pretreatment Coordinator. However, the City's Director of Public Works should be informed or included in the decision making and implementation of the enforcement action.

Formal enforcement responses are specified under the ordinance and include all enforcement remedies with the exception of a verbal NOV. The City has Administrative Orders, Service Termination, Criminal and Civil Litigation, and other options available to enforce the City Sewer Use Ordinance. Formal enforcement actions always require the action of the City's Director of Public Works, City Manager, City Attorney, and/or Mayor and Council. Most enforcement actions are administered by the Director of Public Works as authorized by the duties and responsibilities of his position. For those enforcement actions that involve a court action, the City Attorney and City Manager retain the authority to initiate actions as specified by the City.

Violations of monitoring, reporting, and treatment requirements may range from the relatively minor violations (e.g., reports submitted a week late) to major violations causing adverse environmental effects, health problems, or interference or pass through at the City's wastewater treatment plant. Each instance of noncompliance is a violation and sound enforcement policy would be to review each and respond appropriately. Selection of the appropriate enforcement response will relate to whether the violation is major or minor and other factors such as the duration of the violation, compliance history of the violator, good faith of the violator, and the harm caused by the violation. For example, if a self-monitoring report is late by a week, the City may not consider that a serious violation. In most cases, a telephone call or notice of violation from the City requesting an explanation will bring the problem to the attention of the IU's management. Frequently, such a notification is sufficient to correct the problem.

Isolated violations will usually be attributed to a relatively simple problem that can be easily corrected. Although the tendency is to assume that minor violations are unimportant, the persistence of minor violations could indicate a more serious problem and necessitate an escalated enforcement response. More aggressive enforcement actions should normally be taken against facilities that frequently exceed numerical pretreatment standards than those that report isolated violations (unless the isolated violations are large and troublesome). Informal meetings or a written notice of violation should seek specific explanations of the causes of frequent violations. If inadequate operating practices are found to be the cause, the City should seek specific commitments and deadlines to improve operating practices. If additional treatment is required, an enforceable compliance schedule should be issued to the industrial facility.

If the IU personnel appear to be attempting in good faith to comply with pretreatment requirements, the City enforcement actions should be on a more cooperative level than if the IU personnel do not appear to attempt to comply in good faith.

However, the City should be aware that the Clean Water Act requires extraordinary efforts to comply with its requirements in a timely way. Good faith must be measured against this standard. Congress clearly expresses the efforts that are expected:

"The act requires industry to take extraordinary efforts if the vital and ambitious goals of the Congress are to be met. This means that business-asusual is not enough. Prompt, vigorous, and in many cases, expensive pollution control measures must be initiated and completed as promptly as possible. In assessing the good faith of a discharger, the discharger is to be judged against these criteria. Moreover, it is an established principle, which applies to this act, that administrative and judicial reviews are sought on the discharger's own time." [Legislative History of the Clean Water Act, No. 95-14, Vol. 3, p. 463.]

A facility that challenges a permit or applicable pretreatment standard and delays progress toward compliance, the facility assumes the risk that the permit, contract, or standard will be upheld on judicial review. If the facility begins aggressively to come into compliance only after a decision is made adverse to its interests, it cannot be considered to have acted in good faith. Likewise, if a facility follows business-as-usual procedures, it cannot be considered to have acted in good faith.

IU noncompliance that results in interference with the publicly owned treatment works (POTW) or causes pass-through of pollutants should be addressed through formal enforcement action and penalties to ensure that adequate treatment and compliance is achieved promptly. In some cases, injunctive measures will also be appropriate.

## B. Descriptions of Enforcement Actions

#### 1. Notice of Violation

A NOV (LMC §13.26.110.B) is official notice to the discharger that a violation has occurred. A written NOV served upon an IU by Pretreatment Coordinator for violations of the pretreatment ordinance is considered a formal enforcement action. A verbal NOV is considered an informal enforcement action. A NOV notifies the discharger of the specific sections of the City Codes and/or discharge permit that are being violations and the basis of the evidence for determining noncompliance. In addition, the NOV may request that discharger conduct self-investigation into the cause and solutions to the noncompliance. In some cases, additional testing is warranted and may be included in an NOV, whether formal or informal. It is the preferred policy of the City that written formal NOVs be issued for all violations of numerical limits and failure to meet monitoring and reporting schedules. Informal NOVs should be used for minor noncompliance such as late reports (only a few days late), incomplete reports, or omissions in submittals that are considered to be minor infractions. (Refer to LMC §13.26.110.A.)

#### 2. Administrative Order

Administrative Orders are formal enforcement actions and never considered to be informal. An Administrative Order is typically an escalated enforcement response to unabated noncompliance following the issuance of several NOVs. However, if warranted by the severity of the violation, an Administrative Order may be issued without prior issuance of a Notice of Violation. The Administrative Order follows a similar format as a written NOV and establishes the legal authority of the City to issue the Administrative Order; the specific findings of noncompliance and the potential enforcement actions available to the City should an escalation of enforcement be necessary. In addition, the findings may provide additional historical information related to the noncompliance. The Administrative Order also establishes an Order requiring the discharger to take specific actions within a specified time limit and to report the results of the order within a specified time period. The actions ordered under an Administrative Order should provide a logical path to compliance. The City shall not specify specific treatment processes or service providers in an enforcement action but rather require the discharger to investigate the nature of the violation and appropriate options for resolving the noncompliance. Sometimes this takes the form of requiring the discharger to hire qualified professional assistance in studying the problem and identifying possible solutions. Administrative Orders may also require the discharger to develop action plans to achieve compliance which may include the purchase and installation of pretreatment equipment.

## a. Consent Order

A Consent Order (LMC §13.26.110.B) uses a format similar to a NOV. Consent Orders are issued when the appropriate solution to the noncompliance is known

and the discharger proposes a schedule of actions and a timeline for completing the actions and reporting progress and completion. Under a consent order, the City allows the discharger to continue the discharge, even if it is in violation of the permit requirements, providing the discharge does not result in pass through or interference, or pose a threat to life or health of the treatment plant/sewer system works or the general public. The violations are not excused during the period of the Consent Order, but the City reframes from escalation of enforcement providing the discharger conforms to the schedule and returns to compliance within the specified time period. In some cases, the City may establish interim discharge limits for those pollutants determined to be in noncompliance. These interim limits will only be in effect during the term of the Consent Order. Consent Orders may also establish modified self-monitoring and City monitoring requirements during the term of the Consent Order.

## b. Compliance Order

A Compliance Order (LMC §13.26.110.D) uses a format similar to a NOV. Compliance Orders are issued when the discharger does identify and develop solutions to the noncompliance. In some cases, the discharger fails to take a proactive approach to solving compliance issues and allows the noncompliance to continue unabated. A Compliance Order is a mandatory order originated and issued by the City. It establishes a schedule of corrective actions that are intended to bring the discharger into compliance. The Compliance Order establishes milestone dates for completion of activities and reporting the status and completion of the required activities. Compliance Orders often have monetary penalties associated with a failure to attain a milestone date.

Interim discharge limits may be established during the term of the compliance order. However, the City may retain the original discharge limitations and continue to enforce violations of the limits during the term of the Compliance Order. This may include the assessment of fines and penalties for additional violations during the term of the compliance order. Compliance Orders may require the discharger to halt or cease operations of certain production processes within the permitted facility until the corrective actions are completed.

A Compliance Order is considered to be an escalation of enforcement from a Consent Order or a NOV. However, the City may issue a Compliance Order without issuing a NOV or a Consent Order. The issuance of a consent order does not preclude the authority of the City to escalate enforcement by issuing a Compliance Order to replace a Consent Order.

## c. Cease & Desist Order

A Cease & Desist Order (LMC §13.26.110.E) is an escalated enforcement action intended to effect an immediate response. It is different from an Emergency

Suspension, in that, the Cease & Desist Order must be issued by the Director of Public Works or above and specifies the specific activities that must be halted immediately. A Cease & Desist Order is not intended to order a discharger to simply Cease & Desist noncompliance. The City must be specific and the order must be intended for immediate actions. A Cease & Desist Order is usually issued to halt one or more of the production processes within a facility due to the adverse impact created by those specific production processes.

A Cease & Desist Order does not require that a condition or date be established for a return to the activity ordered to be halted. The Cease & Desist Order should provide a mechanism for the discharger to restart their operations when corrective actions and preventative actions have been taken and the City has determined that resumption of operations will not result in a violation of the discharge permit or City Codes.

The City must be prepared to immediately escalate to more severe enforcement actions should the discharger fail to comply with a Cease & Desist Order. A failure to comply with a Cease & Desist Order should be enforced by a severance of water service of other means to halt the entire discharge from the facility.

## 3. Show Cause Hearing

A Show Cause Hearing (LMC §13.26.110.C) is a formal enforcement action and constitutes an escalation of enforcement. A Show Cause Hearing is a meeting between representatives of the City and the Discharger to allow the discharger to "show cause" why a proposed enforcement action should not be taken by the City against the discharger. This is an official meeting and may be attended by the City Attorney, Public Works Director, and City Manager. The discharger should be represented by one or more of those persons declared to be an Authorized Representative and in some cases by their attorney. The minutes of the meeting should be kept by a qualified secretary or court recorder. The Show Cause Hearing allows the discharger to present evidence supporting their position and demonstrating their corrective and preventative actions to comply with the ordinance and discharge permits. Show Cause Hearings are usually held prior to the City taking enforcement actions that result in the assessment of administrative fines; mandatory compliance orders; civil and/or criminal actions. The discharger should be advised prior to the hearing of the seriousness of the meeting and the possible outcomes of the meeting. The City is not obligated to make a decision at the time of the Show Cause Hearing. Rather, the City should evaluate the evidence presented and consider the evidence before making a final decision on the planned enforcement actions. The City is not obligated to hold a Show Cause Hearing and a failure to hold a Show Cause Hearing does not prevent the City from taking any enforcement action granted under the City Codes.

## 5. Termination of Discharge

Termination of Discharge (LMC §13.26.110.H) is the revocation of an IU's privilege to discharge industrial wastewater into the City's sewer system. Termination may be accomplished by physical severance of the industry's connection to the collection system; by issuance of an Administrative Order which requires the IU to terminate its discharge; or by a court ruling. Section G of this part discusses how and when to terminate an IU's privilege to discharge.

Significant IUs are required to obtain and maintain a wastewater discharge permit authorizing the discharge of process wastewater from their facility to the City Sewer. Termination of that permit typically results in the shutdown of the production process. However, if the discharger has sufficient storage capacity onsite, they may be able to continue discharging and to transport the process wastewater to an alternate disposal site and thus not discharging the process wastewater into the City's sewer system. Termination the Permit is not an emergency action. It is an escalation of enforcement and typically follows multiple enforcement actions for persistent violations of the permit and/or City Codes. However, the City may terminate a permit as an initial enforcement action based on the severity of the noncompliance. Typically, one or more Show Cause Hearings will have been held prior to termination. Once a permit has been terminated, the discharger must submit a new permit application and must demonstrate the ability to attain 100% compliance before a new permit is issued. A full start up plan that will allow the operation of the production process and discharge testing may be required before the permit becomes effective. If the start up fails to confirm compliance, the permit may become void immediately without further enforcement actions taken by the City.

#### 6. Administrative Fines

Administrative Fines (LMC §13.26.110.F) are punitive in nature and intended to encourage compliance. Administrative Fines are not a cost recovery tool, although they are often assessed at the same time as a cost recovery assessment. Administrative Fines are intended to make compliance more economically desirable than noncompliance. Section F of this part discusses the assessment of administrative fines and how to determine the amount of the administrative fine. The monetary penalties assessed by the City for violations of pretreatment standards and requirements are not to exceed one thousand dollars (\$1,000) per violation per day. Unlike Civil and Criminal Penalties, Administrative Fines do not require court intervention. The discharger may elect to pay the fines, or they may appeal the fine. The appeal process is conducted through the City staff, starting with the Director of Public Works, then the City Manager, and then to the Council. The City Attorney should be involved during the original assessment of the administrative fines and should be present during all appeal hearings. If the discharger expires all administrative appeals, they can then file their appeal with the courts and the City will have to defend the City's action with regards to the

administrative fine. In some cases, administrative fines may be established based on the successful accomplishment of a compliance activity on, or before a milestone completion date. In this case the administrative fine is assessed following the failure of the discharger to comply with the consent, or compliance order.

## 4. Emergency Suspensions

Emergency Suspension (LMC §13.26.110.G) of wastewater service and/or industrial wastewater discharge permit may be initiated by the City when necessary to stop an actual, or threatened, discharge which presents, or may present, an imminent endangerment to the health or welfare of persons, to the environment, causes interference to the POTW, or causes the City to violate any condition of its National Pollutant Discharge Elimination System (NPDES) permit. Emergency Suspensions may be implemented verbally by notification to the immediate shift manager/supervisor with written Emergency Suspension Notification to follow within 24 hours of the verbal notification. Emergency Suspension of sewer services means that the discharger must immediately halt all production unless they have sufficient storage capacity to prevent a discharge from the permitted facility. The City must be very certain of the situation and discharge conditions before ordering an Emergency Suspension, because the City may be held liable for losses incurred by the discharger as a result of the suspension. The City needs to gather all evidence and make certain the evidence is properly documented to be legally defensible evidence.

#### 7. Civil Penalties

Civil Penalties (LMC §13.26.120.B) are the formal process of filing lawsuits against IUs to secure court ordered action to correct violations and to secure penalties for violations including recovery of costs to the City as a result of noncompliance by the discharger. The discharger will not be fined more than one thousand dollars (\$1,000.00) for each offense. This process may include injunctive relief (LMC §13.26.120.A) to protect the wastewater treatment plant while the civil courts complete the case. The pretreatment staff should collect and document evidence. Civil actions are initiated by the City Manager and the City Attorney, with the approval of the City Council and Mayor.

## 8. Criminal Penalties

Criminal Penalties (LMC §13.26.120.C) are the formal process of charging individuals and/or organizations with violations of ordinance provisions that are punishable, upon conviction, by fines and/or imprisonment. The City of Lathrop Sewer Use Ordinance provides that anyone violating a provision of this ordinance, shall be deemed guilty of a misdemeanor, and upon conviction shall be punished by a fine not to exceed one thousand dollars (\$1,000.00) a day for

each violation and/or imprisonment not to exceed six (6) months for each offense. The pretreatment staff is tasked with the gathering and documentation of evidence. The City Manager and the City Attorney initiate criminal actions with the approval of the City Council and Mayor.

## 9. Supplemental Enforcement Responses

Additional enforcement responses are provided in Section 13.26.130 of the ordinance:

<u>Response</u>	<u>Reference</u>
Performance Bonds Requirement	§13.26.130.A
Liability Insurance Requirement	§13.26.130.B
Water Supply Severance	§13.26.130.C

Additionally, the City has sufficient flexibility in establishing permit conditions and requirements to utilize other supplemental responses such as short-term permits. The pretreatment staff is tasked with the gathering and documentation of evidence. The Public Works Director and City Manager establish the criteria for performance bonds and/or liability insurance to be provided by the discharger as a requirement of a compliance order.

## Water Supply Severance

Water Supply Severance (LMC §13.26.130.C) is an easily implemented supplemental enforcement action, unless the discharger receives water from a well or other jurisdiction. If the discharger receives water from the City's water system, the City may issue a disconnect order to the water department to sever the water supply to the facility. This action is usually not taken as an emergency enforcement action. It usually results in the halting of the production process but often follows multiple enforcement actions, escalating the enforcement to this action as an ultimate enforcement action. Unlike an Emergency Suspension, Waste Supply Severance is usually well documented over a period of time, and often follows multiple Show Cause Hearings. It is usually very difficult for the discharger to obtain recovery of financial and/or property damages from the courts due to the escalation of enforcement taken by the City. The City may sever the water supply as an initial enforcement action based on the severity of the noncompliance. As an initial enforcement action, the City will need to provide good evidence to support this enforcement action as an initial enforcement action. Once the water supply has been severed, the discharger must re-apply for the wastewater discharge permit and demonstrate the ability to obtain 100% compliance upon resumption of discharge.

## C. Enforcement Order Format

It is important to establish the seriousness of the enforcement order and not to leave any

doubt in the permit holder's mind that the enforcement order is an official document. All enforcement orders should be written on City Letterhead and should follow a set format. Enforcement orders should not take on the format of a business letter. The example orders provided in Appendix A are examples of official document formats with the elements needed in the different enforcement orders available under the City ordinance. An enforcement order should accomplish the following:

- 1. Identify the entity against whom the enforcement action is taken.
- 2. Establish the Legal Authority of the City to take the enforcement action.
- 3. Establish the evidence of violations, also termed "Findings."
- 4. Clearly notify the discharger that they are in violation of the permit and/or ordinance.
- 5. Clearly issue a Direct Order to the discharger specifying the actions necessary to comply with the order and to return the permitted facility to compliance. Specific milestone dates should be established and specific reports and report due dates should also be established. These dates should be established using calendar dates and not a specified number of days from the issue date of the order. This will eliminate confusion over the exact date the reports or activities are due.
- 6. The enforcement document must be signed by the City's authorized agent with appropriate authority for the type of enforcement action taken.
- 7. The date the Order is signed must also be clearly identified.

### D. Procedures

- 1. The enforcement personnel identified in ERP are responsible for determining that a violation has occurred and what type of enforcement response is required. The enforcement personnel identified in the ERP should be trained in the implementation and goals of the pretreatment ordinance and the contents of industrial wastewater discharge permits. When a discharger is determined to be in noncompliance, the persons identified in the ERP should review the evidence and the ERP and determine the appropriate enforcement action to be taken. The basis for taking an enforcement action inconsistent with the ERP should be well documented before the action is taken. Enforcement actions are usually reviewed by the State and/or EPA during routine inspections. If a discharger fails to comply with the enforcement order, the City should be able to demonstrate an escalation of enforcement consistent with the ERP.
- 2. The time frames for responses are as follows:
  - a. All violations should be identified and documented within five (5) days of receiving compliance information.
  - b. Initial enforcement responses (involving contact with the IU and requesting information on corrective or preventative action(s) should occur within fifteen (15) days of violation detection.
  - c. Follow up actions for continuing or recurring violations should be taken within thirty

- (30) days of the initial enforcement. For all continuing violations, the response will include a compliance schedule.
- d. Violations which threaten health, property or environmental quality are considered emergencies and will receive immediate responses such as halting the discharge or terminating service.
- e. All violations meeting the criteria for significant noncompliance should be addressed with an enforceable order within forty-five (45) days of significant noncompliance.
- 3. All investigative records and monitoring schedules shall be considered CONFIDENTIAL and shall be maintained as CONFIDENTIAL to the full extent of the Law. In the event of any requests for the release of investigative records and/or monitoring schedules, a written request shall be made to the City Attorney for release of such information.

### E. Tracking Enforcement Related Situations

The City utilizes manual records and computer spreadsheet software to track IU compliance. The City conducts monitoring and inspections at least annually at all significant industrial users. The pretreatment coordinator should maintain a record of enforcement actions taken and a summary of activities and milestone dates that are established in the enforcement order. As the discharge meets or fails to meet the milestone dates, the pretreatment coordinator should record the milestone completion dates.

#### F. Assessment of Administrative Fines

### 1. Purpose

Assessment of fines are among the most effective responses noncompliance because they may be assessed at the City's discretion and the amount of the fines may be determined on an individual basis. Fines are punitive in nature and are not related to a specific cost born by the City. Instead, fines are to recapture the full or partial economic benefit by the discharger as a result of the noncompliance, and to deter future violations.

### 2. Legal Authority

Legal authority of Administrative Finds is established in Section 13.26.110.F of LMC. The following is quoted from the ordinance.

1. When the City finds that a user has violated, or continues to violate, any provision of this ordinance, a wastewater discharge permit or order issued hereunder, or any other pretreatment standard or requirement, the City may fine such user in an amount not to exceed one thousand (1,000) dollars. Such fines shall be assessed on a per violation, per day basis. In the case of

monthly or other long term average discharge limits, fines shall be assessed for each day during the period of violation.

- 2. Unpaid charges, fines, and penalties shall, after 60 calendar days, be assessed an additional penalty of twenty-five percent (25%) of the unpaid balance, and interest shall accrue thereafter at a rate of one percent (1%) per month. A lien against the user's property will be sought for unpaid charges, fines, and penalties.
- 3. Users desiring to dispute such fines must file a written request for the City to reconsider the fine along with full payment of the fine amount within thirty (30) days of being notified of the fine. Where a request has merit, the City may convene a hearing on the matter. In the event the user's appeal is successful, the payment, together with any interest accruing thereto, shall be returned to the user. The City may add the costs of preparing administrative enforcement actions, such as notices and orders, to the fine.
- 4. Issuance of an administrative fine shall not be a bar against, or a prerequisite for, taking any other action against the user.

### 3. When to Assess Administrative Fines

Administrative Fines are recommended as an escalated enforcement response, particularly when NOVs or Administrative Orders have not prompted a return to compliance. Whether administrative fines are appropriate responses to noncompliance also depends greatly on the circumstances surrounding the violation. When using this enforcement response, either singly or in conjunction with another response the City should consider the following factors:

- The type and severity of the violation
- The number of violations cited
- *The duration of the noncompliance*
- The impact of the violation on the wastewater treatment plant and the environment
- Whether the violation threatened human health
- Whether the industrial user derived any economic benefit or savings form the noncompliance
- The compliance history of the user
- Whether the user is making good faith efforts to restore compliance
- Other policy considerations normally involved in an enforcement decision

### 4. Determining the Amount of the Fine

The amount of the fine should be proportionate to the economic benefit enjoyed by the discharger as a result of the noncompliance and the harm caused by the violation. Each violation in the Enforcement Response Matrix (provided in Part II in this Plan) has a fine or penalty category assigned to it. The categories are related to dollar amounts as shown in the following table:

FINE OR PENALTY PLAN BASED ON CATEGORY OF SEVERITY

Category	Fine or Penalty
0	\$0
1	\$100 to \$500
2	\$500 to \$750
3	\$750 to \$1,000
4	Administrative and/or Civil penalties imposed within the range of Category 3, plus all expenses reasonably incurred by the City as a direct result of the violation, and the cost of litigation including attorney fees and expert witness fees.

When it has been determined that a fine is appropriate, the fine assessed should reflect the severity of the noncompliance. The Enforcement Response Matrix provides a guide in determining the severity of the violation. Determining a fine amount which reflects the violation's significance is extremely important. If a fine is too small, its deterrent value is lost and the amount may be regarded by the discharger as a tax or nominal charge to pollute. If the fine is too great, it is more likely to be contested and could bankrupt the industry. In cases of extreme hardship, the City may consider reducing or suspending the fine as part of a Consent Order or a Show Cause proceeding. In some cases, the discharger may offer to carry out an alternative environmental activity that would be of benefit to the community, in lieu of a monetary fine. This practice is acceptable providing the discharger receives no financial benefit from the activity and that the discharger invest an equivalent amount in direct expenses or in-kind donations. For guidance on calculating fines based on the economic benefit of noncompliance, see the Guidance Manual for Calculation of Economic Benefit of Noncompliance with Pretreatment Standards, U.S. EPA, 1989.

### 5. Method of Assessing Administrative Fines

Once the violation is documented and an appropriate fine amount is determined, the City shall notify the industrial user of the fine by issuance of an Administrative Order. The Administrative Order shall specify the violation, the actions required to return to compliance, and the amount of the fine assessed. The Administrative Order shall specify the method of payment and the due date. Collection of the fine shall follow established City policy for collection of fines and fees. In no case shall the payment of the fine be submitted to the wastewater treatment plant.

### G. Termination of Sewer Service

### 1. General Discussion

Termination of service is the revocation of a discharger's privilege to discharge industrial wastewater into the City's sewer system. Termination is an administrative function and does not require a court ruling. Termination may be accomplished simply by the discharger halting all discharges. In some cases, a discharge isolation valve may

be shut and locked, while in other cases, the discharger may be required to physically disconnect the piping from their facility to the City sanitary sewer. In some cases, the City may have to actually dig up the sewer tap and physically disconnect and plug the discharge line. When terminating services, the City should not expect to recover the costs associated with the work necessary to accomplish the disconnect. However, if the discharger corrects the previous problems and applies for re-connection, the City may wish to impose additional costs to make the connection to recover the costs associated with the disconnect. Once sewer service has been terminated, the discharger must reapply for a new wastewater discharge permit, as if they were a new source and must provide evidence that the facility discharge will be in full compliance upon commencement of discharge. The City must be aware that terminating services will usually result in forcing the industry to halt production and may result in closure of the facility. In some cases, the discharger may be capable of capturing the discharge and using an alternative disposal method. However, this is typically not the rule. The City must carefully consider all of the legal and operational implications of termination before using this enforcement response. It is recommended that a Show Cause Hearing be held prior to termination of services. This will allow the discharger an opportunity to present his case for not terminating the service. It will also provide an opportunity for the City to determine if terminating services will pose a health or safety threat to the general public.

### 2. Legal Authority

LMC §13.26.110.H "Termination of Discharge;" §13.26.110.G "Emergency Suspensions;" and §13.26.130.C "Water Supply Severance" establishes the City's legal authority to terminate services to a discharger.

### 3. When to Terminate Service

Termination of service is an appropriate response to industries which have not responded adequately to previous enforcement responses and when the City must act immediately to halt or prevent a discharge which presents a threat to human health, the environment or the City's wastewater treatment plant. Termination of services is usually the only appropriate response for failure of the discharge to comply with a Cease and Desist Order. Unlike civil and criminal proceedings, termination of sewer service is an administrative response which can be implemented directly by the City. The decision to terminate service requires careful consideration of its legal and procedural consequences. It is likely that forcing an industrial user to halt production will damage the industry's economic position. Nonetheless, this drastic measure is sometimes necessary to address emergency situations or industries resistant to previous enforcement measures. Service termination is sometimes used as an initial response to noncompliance which causes or threatens to cause an emergency situation. However, it is more frequently used as an escalated response to persistent significant violations when other enforcement responses have failed to bring the discharger into compliance. Assuming other enforcement responses are unsuccessful, the types of violations

warranting termination of service are:

- a. Unauthorized discharges which violate the POTW's NPDES Permit or which create a dangerous situation threatening human health, the environment, or the treatment plant.
- b. Discharges that exceed local or categorical discharge limits and result in damage to the environment
- c. Slug loads causing interference, pass through, or damage to human health, the environment, or the treatment plant
- d. Failure of the industrial user to notify the City of effluent limit violations or slug discharges which resulted in environmental or POTW damage
- e. Complete failure of the industrial user to sample, monitor, or report as required by a discharge permit and/or an Administrative Order.
- f. Failure of the industrial user to install required pretreatment and/or monitoring equipment per the condition of a discharge permit and/or an Administrative Order
- g. Major violation of a permit condition and/or Administrative Order accompanied by evidence of negligence or intent.

### H. Publication

The City shall publish annually, in a newspaper of general circulation that provides meaningful public notice within the jurisdictions served by the POTW, a list of the Users which, at any time during the previous twelve (12) months, were in Significant Noncompliance with applicable pretreatment standards and requirements. LMC §13.26.090 establishes the City's legal authority to publish users in Significant Noncompliance. The term Significant Noncompliance is defined in LMC §13.26.090.

## APPENDIX A SAMPLE ENFORCEMENT DOCUMENTS

# City of Lathrop Department of Public Works



Engineering Division (209) 941-7430

IN THE MATTER OF <<COMPANY NAME>> <<Auth Rep NAME>>

<<ADDRESS>>

### SURCHARGES [TREATMENT COST RECOVERY]

Permit #<<permit number>>

### **LEGAL AUTHORITY**

Pursuant to the Lathrop City Codes, Chapter 13, Section 26, "Sewer Use Ordinance," the Lathrop Pretreatment Coordinator shall evaluate and assess surcharge fees based on the cost of treatment of pollutants discharged from <<COMPANY NAME>>in accordance with §13.26.150 "Pretreatment Fees," of the Sewer Use Ordinance and Wastewater Discharge Permit #<<pre>permit number>>.

### **FINDINGS**

The Lathrop Pretreatment Coordinator has reviewed the Self-Monitoring Report and has determined that Pollutants discharged from <<COMPANY NAME>> during the month of <<MONTH & YEAR>> are in excess of Domestic Loadage and therefore shall be SURCHARGED for additional treatment as detailed in the attached Surcharge Distribution Calculation.

### **ORDER**

THEREFORE, BASED ON THE ABOVE FINDINGS, <<COMPANY NAME>> IS HEREBY ASSESSED A TOTAL of \$<<AMOUNT>> for treatment of pollutants in excess of domestic loading.

SURCHARGES ARE DUE AND PAYABLE WITHIN 30 DAYS OF ASSESSMENT.

Please Make Check Payable to:	The City of Lathrop
Mail to the Attention of:	< <name city="" of="" official,="" title="">&gt; Wastewater Treatment Surcharges &lt;<submittal address="">&gt;</submittal></name>
Signed: << PUBLIC WORKS DIR	Date: < <date>&gt;</date>
cc. < <name of="" pwd="">&gt;, Pub Pretreatment File</name>	olic Works Director

### City of Lathrop

### Department of Public Works

Engineering Division (209) 941-7430



### IN THE MATTER OF

### NOTICE OF VIOLATION

<<COMPANY NAME>> <<Auth Rep NAME>> <<ADDRESS>>

Permit #<<permit number>>

### LEGAL AUTHORITY

Pursuant to the Lathrop City Codes, Chapter 13, Section 26, "Sewer Use Ordinance," the Lathrop Director of Public Works has issued Wastewater Discharge Permit #<<pre>ermit number>> to <<COMPANY
NAME>> in accordance with §13.26.050 "Wastewater Discharge Permits" of the Codes.

### **FINDINGS**

The Lathrop Pretreatment Coordinator has reviewed the Self-Monitoring Report for the month of <<MONTH & YEAR>> submitted by <<name of Authorized Representative of permit holder>>. It has been determined that the following pollutants reported by <<COMPANY NAME>> are in violation of the numerical limits as specified by permit #<<pre>permit number>>. (Example Findings table)

Parameter	Limit	Reported	Violati	ons
		Value	*Chronic	*TRC
BOD Conc Max Daily (5/26/05)	3,000 mg/L	3,130 mg/L	1	
BOD Loading Monthly Avg	540 lbs/day	657 lbs/day	1	

Note: \*Chronic Violations are simple numerical values greater than the Limit.

\*TRC Violations are Violations based on Technical Review Criteria; [Re: Lathrop Sewer Use Ordinance and/or Enforcement Response Guide]

### **NOTICE**

**THEREFORE, BASED ON THE ABOVE FINDING,** <<COMPANY NAME>> **IS HEREBY NOTIFIED THAT** it is in violation of the terms and conditions of discharge permit #<<pre>#<<pre>permit number>>.and City Code of Ordinance \$13.26.

#### ORDER

### THEREFORE, BASED ON THE ABOVE FINDINGS, <<COMPANY NAME>> IS HEREBY ORDERED TO TAKE THE FOLLOWING ACTIONS:

- 1. ex: Evaluate the production for May 2005 to determine unusual operations that could have resulted in the high BOD reported for that date.
- 2. ex: Report the results of the evaluation in the comments section of Monthly Self-Monitoring Report for the month of July 2005.

Signed:\_\_\_\_\_\_ Date: <<DATE>>

<< PRETREATMENT COORDINATOR NAME/TITLE>>

cc. <<NAME OF PWD>>,Public Works Director

Pretreatment File

RR # << Return Receipt Number from Certified Mail>>

# **City of Lathrop**Department of Public Works



Engineering Division (209) 941-7430

### IN THE MATTER OF

### **CEASE AND DESIST ORDER**

<<COMPANY NAME>> <<Auth Rep NAME>> <<ADDRESS>>

Permit #<<permit number>>

### **LEGAL AUTHORITY**

Pursuant to the Lathrop City Codes, Chapter 13, Section 26, "Sewer Use Ordinance," the Lathrop Director of Public Works has issued Wastewater Discharge Permit #<<pre>permit number>> to <<COMPANY</pre>
NAME>> in accordance with §13.26.050 "Wastewater Discharge Permits" of the Codes.

### **FINDINGS**

- 1. << COMPANY NAME>>discharges process wastewater containing pollutants into the Lathrop sanitary sewer system.
- 2. <<COMPANY NAME>> is a "significant industrial user" as defined by §§13.26.010.E. of the City Codes.
- 3. <<COMPANY NAME>> was issued a wastewater discharge permit on <<issued date>> which contains prohibitions, restrictions, and other limitations on the quality of the wastewater it discharges to the City sanitary sewer.
- 4. Pursuant to the ordinance and the above referenced permit, data is routinely collected or submitted on the compliance status of <<COMPANY NAME>>.
- 5. This data shows that <<COMPANY NAME>> has violated the Sewer Use Ordinance in the following manner:
  - a. Continuous violations of permit limits for <<identify parameter>> in each sample collected between <<br/>beginning date>> and <<ending date>>.
  - b. Failure to comply with an administrative compliance order requiring the installation of a pretreatment system and the achievement of compliance with its permit limits by <<milestone date>>.
  - c. Failure to appear at a show cause hearing pursuant to an order requiring said attendance.

### **ORDER**

Therefore, based on the above findings <<COMPANY NAME>> is hereby ordered to:

- 1. Within 24 hours of receiving this order, cease all non-domestic discharges into the City's sanitary sewer. Such discharges shall not recommence until such time as << COMPANY NAME>> is able to demonstrate that it will comply with its current permit limits.
- 2. Failure to comply with this order may subject << COMPANY NAME>> to having its connection to the sanitary sewer sealed by the City, and assessed the costs therefore.
- 3. Failure to comply with this order shall also constitute a further violation of the sewer use ordinance and subject << COMPANY NAME>> to civil or criminal penalties or such other enforcement as may be appropriate.

4. This order, entered this _	_ day of < <month, year="">&gt; shall be effective upon receipt by &lt;<company< th=""></company<></month,>
NAME>>.	

Signed:		Date: < <date>&gt;</date>
Ü	< <director of="" public="" title="" works="">&gt;</director>	

cc. <<NAME OF PWD>>, Public Works Director Pretreatment File

RR # << Return Receipt Number from Certified Mail>>

# City of Lathrop Department of Public Works

Engineering Division (209) 941-7430



### IN THE MATTER OF

**CONSENT ORDER** 

<<COMPANY NAME>> <<Auth Rep NAME>> <<ADDRESS>>

Permit #<<pre>permit number>>

### **CONSENT ORDER**

WHEREAS, The City of Lathrop Public Works Department pursuant to the powers, duties and responsibilities vested in and imposed upon the department by provisions of the Lathrop City Codes, Chapter 13, Section 26, "Sewer Use Ordinance," have conducted ongoing investigations of << COMPANY NAME>> and have determined that:

- 1. The City owns and operates a wastewater treatment plant which is adversely impacted by discharges from industrial users, including <<COMPANY NAME>>, and has implemented a pretreatment program to control such discharges.
- 2. <<COMPANY NAME>> has consistently violated the pollutant limits in its wastewater discharges permit as forth in Exhibit I, attached hereto.
- 3. Therefore, to ensure that <<COMPANY NAME>> is brought into compliance with its permit limits at the earliest possible date, IT IS HEREBY AGREED AND ORDERED, BETWEEN <<COMPANY NAME>> AND THE DIRECTOR OF PUBLIC WORKS FOR THE CITY OF LATHROP, THAT <<COMPANY NAME>> SHALL:
  - a. By <<MILESTONE DATE not to exceed 30 days>>, obtain the services of a licensed professional engineer specializing in wastewater treatment for the purpose of designing a pretreatment system which will bring <<COMPANY NAME>> into compliance with its wastewater discharge permit.
  - b. By << MILESTONE DATE not to exceed 30 days from previous milestone date>> submit to the City Pretreatment Coordinator, an engineer's report with the permit holders options for treating their discharge to permit standards with estimated capital and operating costs for each option.
  - c. By <<MILESTONE DATE not to exceed 30 days from previous milestone date>> submit a statement of decision to the pretreatment coordinator declaring the treatment option selected by <<COMPANY NAME>>.
  - d. By <<MILESTONE DATE not to exceed 30 days from previous milestone date>> submit an action plan for the design of the treatment system, funding of the capital costs, commencement of construction, completion of construction, and commencement of operations. This plan should provide milestone dates and routine status report due dates for the activities needed to design and build the treatment system.
  - e. <<COMPANY NAME>> shall pay \$<<fine amount>> per day for each and everyday it fails to comply with the schedule set out in items a-d above. The \$<<fine amount>> per day penalty shall be paid to the City of Lathrop through the Public Works Director within 5 days of

assessment of the fine by the City.

- 4. In the event <<COMPANY NAME>> fails to comply with any of the deadlines set forth, <<COMPANY NAME>> shall, within one (1) working day after expiration of the deadline, notify the City in writing. This notice shall describe the reasons for <<COMPANY NAME>> failure to comply, the additional amount of time needed to complete the remaining work, and the steps to be taken to avoid future delays. This notification in no way excuses <<COMPANY NAME>> from its responsibility to meet any later milestones required by this Consent Order.
- 5. Compliance with the terms and conditions of the Consent Order shall not be construed to relieve <<COMPANY NAME>> of its obligation to comply with its wastewater discharge permit which remains in full force and effect. The City reserves the right to seek any and all remedies available to it under the City's Code of Ordinances for any violation cited by this order.
- 6. Violation of this Consent Order shall constitute a further violation of the City's Sewer Use Ordinance and subjects << COMPANY NAME>> to all penalties described within the enforcement authority of the City pursuant to §13.26.110 thru 140 of the City Code.
- 7. Nothing in this Consent Order shall be construed to limit any authority of the City to issue any other orders or take any other action which it deems necessary to protect the wastewater treatment plant, the environment or the public health and safety.

### **SIGNATORIES**

FOR	(Permittee Name)	Date
FOR	THE CITY OF LATHROP < <signature authorized="" c<="" city="" td=""><td></td></signature>	
cc.	< <name of="" pwd="">&gt;, Public Works Director Pretreatment File</name>	
RR #	# < <return certified="" from="" mail="" number="" receipt="">&gt;</return>	>

# City of Lathrop Department of Public Works

Engineering Division (209) 941-7430



### IN THE MATTER OF

**SHOW CAUSE ORDER** 

<<COMPANY NAME>> <<Auth Rep NAME>> <<ADDRESS>>

Permit #<<permit number>>

### **LEGAL AUTHORITY**

Pursuant to the Lathrop City Codes, Chapter 13, Section 26, "Sewer Use Ordinance," the Lathrop Director of Public Works has issued Wastewater Discharge Permit #<<pre>permit #<<pre>permit number>>
to <<COMPANY
NAME>>.

### **FINDINGS**

- 1. <<COMPANY NAME>> discharges process wastewater containing pollutants into the sanitary sewer system of the City of Lathrop.
- 2. <<COMPANY NAME>> is a "significant industrial user" as defined by §13.26.010.E. of the City's Sewer Use Ordinance.
- 3. <<COMPANY NAME>> was issued a wastewater discharge permit on (date) which contains prohibitions, restrictions, and other limitations on the quality of the wastewater it discharges to the sanitary sewer.
- 4. Pursuant to the ordinance and the above-referenced permit, data is routinely collected or submitted on the compliance status of <<COMPANY NAME>>.
- 5. This data shows that <<COMPANY NAME>> has violated its wastewater discharge permit in the following manner:
  - a. <<COMPANY NAME>> has violated its permit limits for (parameter(s) in each sample collected between <<start date>>, and <<end date>> for a total of <number of violations>> separate violations of the permit.
  - b. <<COMPANY NAME>> has failed to submit a periodic compliance report due <<date>>.
  - c. All of these violations satisfy the City's definition of significant noncompliance.

### **ORDER**

THEREFORE, BASED ON THE ABOVE FINDINGS, <<COMPANY NAME>> IS HEREBY ORDERED TO:

- 1. Appear at a meeting with the Director of Public Works to be held on <<date and time>> at City Hall in the office of the Director of Public Works.
- 2. At this meeting, <<COMPANY NAME>> must demonstrate why the City should not pursue a judicial enforcement action against <<COMPANY NAME>> at this time.
- 3. This meeting will be closed to the public.
- 4. Representatives of <<COMPANY NAME>> may be accompanied by legal counsel if they so choose.

5. Fa	ailure to comply with this order shall also constitute a further vio and may subject << COMPANY NAME>> to civil or crimina enforcement response as may be appropriate.	
6. T	This order, entered thisth day of < <month year="">&gt;, &lt;<company name="">&gt;.</company></month>	shall be effective upon receipt by
Signe	ed < <signature authorized="" city="" name="" official="" title="">&gt;</signature>	Date:
cc.	< <name of="" pwd="">&gt;, Public Works Director Pretreatment File</name>	
RR#	< <return certified="" from="" mail="" number="" receipt="">&gt;</return>	

# City of Lathrop Department of Public Works

Lathrop

Engineering Division (209) 941-7430

### IN THE MATTER OF

### **COMPLIANCE ORDER**

<<COMPANY NAME>> <<Auth Rep NAME>> <<ADDRESS>>

Permit #<<pre>permit number>>

### **LEGAL AUTHORITY**

The following findings are made and order issued pursuant to the authority vested in the City Codes, Chapter 13, Section 26, "Sewer Use Ordinance." This order is based on findings of violation of the conditions of wastewater discharge permit #<<pre>permit number>> issued under §13.26.050 "Wastewater Discharge Permits" of the Codes.

### **FINDINGS**

- 1. << COMPANY NAME>> discharges non-domestic wastewater containing pollutants into the sanitary sewer system of the City of Lathrop (hereafter, "City").
- 2. << COMPANY NAME>> is a "significant industrial user" as defined by §13.26.010.E. "Definitions" of the City's Sewer Use Ordinance.
- 3. <<COMPANY NAME>> was issued a wastewater discharge permit on <<date issued>>, which contains prohibitions, restrictions, and other limitations on the quality of the wastewater it discharges to the sanitary sewer.
- 4. Pursuant to the ordinance and the above-referenced permit, data is routinely collected or submitted on the compliance status of <<COMPANY NAME>>.
- 5. This data shows that <<COMPANY NAME>> has violated its wastewater discharge permit in the following manner:
  - a. Violation of permit limit for <<pre>cyparameter>> in each sample collected between <<start
     Month/year>>, and <<end Month/year>>, for a total of <<number of violations>> separate
     violations of the permit.
  - b. <<COMPANY NAME>> has failed to submit all periodic compliance reports due since report due date>>.
  - c. All of these violations satisfy the City's definition of significant violation.

### **ORDER**

THEREFORE, BASED ON THE ABOVE FINDINGS, <<COMPANY NAME>> IS HEREBY ORDERED TO:

- 1. Within 180 days, install pretreatment technology which will adequately treat << COMPANY NAME>> wastewater to a level which will comply with its wastewater discharge permit.
- 2. Within 5 days, submit all periodic compliance reports due since << report due date>>.
- 3. Within 15 days, pay to City of Lathrop, a fine of \$<<amount of fine>> for the above-described violations in accordance with \$13.26.110.F. "Administrative Fines" of the City's Sewer Use Ordinance.
- 4. Report, on a monthly basis, the wastewater quality and corresponding flow and production information as described on page \_\_ of the wastewater discharge permit for a period of one year form the

effective date of this order.

5. All reports and notices required by this order shall be sent, in writing, to the following address:

Pretreatment Coordinator, City of Lathrop

16775 Howland Road

Lathrop, California 95330

6.	This order does not constitute a waiver of the wastewater discharge permit which remains in full force
	and effect. The City of Lathrop reserves the right to seek any and all remedies available to it under
	the Sewer Use Ordinance # for any violation cited by this order.

- 7. Failure to comply with the requirements of this order shall constitute a further violation of the sewer use ordinance and subject << COMPANY NAME>> to civil or criminal penalties or such other appropriate enforcement response as may be appropriate.
- 8. This order, entered this \_\_\_\_th day of <<Month/Year>>, shall be effective upon receipt by <<COMPANY NAME>>.

Signed		Date:	
C	<< Signature Authorized City Official Name/Title>>		

cc. <<NAME OF PWD>>, Public Works Director Pretreatment File

RR # << Return Receipt Number from Certified Mail>>

# City of Lathrop Department of Public Works



Engineering Division (209) 941-7430

### SUSPENSION OF WASTEWATER SERVICE ORDER Authorized Under §13.26.110.G. of the City Codes

Date of Notice
Business or Individual
Address
Person Contacted/Title
City Pretreatment Ordinance Section Violation
Results of Analysis
Due to the serious nature of your violation, the City of Lathrop is ordering you to immediately stop the discharge of process wastewater, and to eliminate any further industrial discharging by
< <date>&gt;</date>
Refused to sign (initials)  Signature of person contacted
Signature of City Representative Date
cc. < <name of="" pwd="">&gt;, Public Works Director Pretreatment File</name>
RR # < <return certified="" from="" mail="" number="" receipt="">&gt;</return>

### City of Lathrop, California

## **ENFORCEMENT RESPONSE PLAN**Fat, Oil & Grease Source Control Program

Enforcement of Lathrop Municipal Code Chapter 13.26.160 (Sewer Use Ordinance #05-254)

# City of Lathrop **ENFORCEMENT RESPONSE PLAN**Fat, Oil & Grease Source Control Program

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### City of Lathrop ENFORCEMENT RESPONSE PLAN

Fat, Oil & Grease Source Control Program

### I - INTRODUCTION

The City of Lathrop adopted Ordinance #05-254 amending Chapter 13.26.160 of the Lathrop Municipal Code (LMC). This ordinance established General Sewer Use Regulations including the adoption of Fat, Oil, and Grease (FOG) Control Regulations applicable to Food Service Establishments (FSEs).

Under this code the City has the authority to enter FSEs to conduct inspections and sampling as required to confirm compliance to the City Codes. This code also establishes mandatory maintenance of grease interceptors and the City's authority to take appropriate enforcement actions for failure to comply with the codes.

The Director of Public Works is responsible for the implementation and enforcement of this ordinance. Certain functions required to implement the ordinance are delegated to various staff and contract services by the Director of Public Works. This Enforcement Response Plan constitutes the policies and procedures that will be used to enforce the City's fat, oil and grease ordinance under the authority of the Public Works Director.

The FOG Enforcement Response Plan is directed at the enforcement of the FOG regulations. A separate Enforcement Response Plan has been established for the enforcement of the industrial user regulation contained in the City Code.

### II - PURPOSE OF THE FOG ERP

The purpose of the FOG Enforcement Response Plan is to provide uniform and consistent enforcement of the City Codes using a variety of enforcement options that are available to the City. This will allow the City to be flexible in their response to a violation and to provide guidance in responses to assure the response is appropriate to the type of violation that occurred.

### III - FOG CONTROL PROGRAM OFFICIALS/STAFF

Director of Public Works - 209-941-7430
City Attorney - 209-941-7235
Veolia Water-NA Project Manager - 209-858-1645
City Pretreatment Coordinator - 209-858-1645

### IV - ORDINANCE PROVISIONS

Ordinance	Provision		
13.26.160.A.	Findings (Purpose)		
13.26.160.B.	Applicability		
13.26.160.C.	Definitions		
13.26.160.D.1.	Grease Interceptor/Trap Required		
13.26.160.D.2.	Existing Facilities		
13.26.160.D.3.	New Facilities or New Interceptor Installations		
13.26.160.E.1.	Maintenance of Grease Interceptor/Traps Required		
13.26.160.E.2.	Routine Maintenance Schedules		
13.26.160.E.3.	Record Keeping Requirements		
13.26.160.E.4.	Record Retention Requirements		
13.26.160.F.	Disposal of Interceptor/Trap Wastes		
13.26.160.G.	Collection, Storage, and Disposal of Waste Grease and Solids		
13.26.160.H.	Clean up of Spilled Grease and Oil		
13.26.160.I.	Use of Chemicals and Other Additives		
13.26.160.J.	Right of Access		
13.26.160.K.	Enforcement		
13.26.160.K.1.	Mandatory Interceptor/Trap Service		
13.26.160.K.2.	Mandatory Interceptor/Trap Service Schedule		
13.26.160.K.3.	Cost Recovery		
13.26.160.K.4.	Administrative Fines		
13.26.160.K.5.	Emergency Suspensions		

### V - ENFORCEMENT RESPONSES

### A. Levels of Response

There are three possible levels of response to all violations available to the City:

Level 1 – Education and Training

Level 2 – Informal Enforcement

Level 3 – Formal Enforcement

### B. Response Actions

Level 1 responses are the most common enforcement tool used in the FOG program. A Level 1 response typically includes providing the user with a copy of the ordinance, and a summary of the FOG Program requirements, information on best management practices, and a brief discussion on the proper maintenance of the interceptor or trap used by the facility (a copy of the City's FSE best management practice hand-out is included in Part X of this ERP). It also includes an inspection and the gathering of general and specific information about the facility, the

owner/operators, the interceptors installed at the facility, and the current maintenance practices. A Level 1 response is intended to inform the user of their responsibilities, provide them with sufficient information to develop an effect maintenance program, and then to allow them time to attain compliance. A Level 1 response will always be followed up with inspections following an adequate amount of time for the user to develop and implement their maintenance plan.

### Level 1 – Responses

- Educate, Inform, Train
- Data Gathering
- Inspection

Level 2 responses are considered an escalation of enforcement. A Level 2 response is an appropriate response for the failure of the user to develop an appropriate maintenance plan (schedule), especially following a Level 1 action. A Level 2 response is typically a mandatory pumping order, requiring the user to hire a grease trap cleaning service to pump the interceptor and clean it within a specified time frame and to submit copies of the cleaning service pumping/transport manifest to document the service was performed. A Level 2 response may include a mandatory requirement that a licensed plumber be hired to inspect the grease interceptor when the cleaning service pumps down the interceptor to confirm the interceptor is properly installed and that none of the fittings and fixtures are damaged, broken, or missing. Level 2 responses require that mandatory actions be taken within a specified time period and that the results of the action be reported to the FOG Control Program Manager within a specified time period. Level 2 responses do not include the assessment fines or penalties. Level 2 responses are intended to mandate a corrective action to be taken by the user, at the user's expense.

### Level 2 – Responses

- Mandatory Cleaning of Interceptor
- Mandatory Inspection of Interceptor by Licensed Plumber
- Mandatory Repair of Damaged Interceptor
- Mandatory Reporting

Level 3 responses are considered an escalation of enforcement. A Level 3 response is an appropriate response for the user who refuses to conform to the ordinance and avoids or ignores Level 1 and Level 2 enforcement actions. A Level 3 response will typically include the mandatory actions that would be taken under a Level 2 response with the addition of an administrative fine and/or prescribe additional penalties if the user fails to perform the mandatory requirements. A Level 3 response may include a mandatory interceptor cleaning and reporting requirement that must be followed on a permanent (on-going) basis.

### Level 3 – Responses

Mandatory On-Going Interceptor Cleaning and Reporting Schedule

(example: monthly, quarterly, semi-annual)

- Mandatory Reconfiguration of plumbing to interceptor by Licensed Plumber (interceptor installed backwards, dishwasher discharge redirected from interceptor, removal of food grinder (garbage disposal), etc.
- Mandatory replacement of undersized interceptor with properly sized interceptor.
- Mandatory installation of interceptor in the discharge of an Existing Food Service Facility.
- Assessment of Administrative Fines.
- Halt discharge to City Sewer System.
- Civil Legal Action.
- Criminal Legal Action.

### C. Sequence of Actions

The City is not bound to taking the Level of Response in any sequential order. The City may use a combination of the actions recommended in different response levels. The City may take a Level 2 or a Level 3 as their first enforcement response based on the severity and the impact the violation had on the City sewer system and the community health and safety.

### VI - ADMINSTRATIVE FINES

It is not the intent of the FOG ERP to discuss how to assess and collect administrative fines. Other sections of the City Codes provide authority and protocols for the City to assess fines. In addition, the City's Sewer Use Ordinance ERP provides a discussion of assessing administrative fines for the City's pretreatment program. A brief discussion of when to assess an administrative fine under the FOG control program is provided herein.

Administrative fines are meant to be punitive in nature and are not related to cost recovery for expenses accrued by the City to abate the results of the non-compliance to the ordinances. Fines are not intended to replace enforcement actions that are directed at correcting the problem and bringing the user into compliance with the ordinances. The City must not assess a fine in excess of \$1,000 per day per violation as established by State law. The assessment of fines is usually reserved for those users who demonstrate a persistent pattern of non-compliance. The City should carefully consider the use of a fine and its ability to make non-compliance to the ordinance less profitable for the offender.

### VII - COST RECOVERY

The City may assess cost recovery fees to users whose non-compliance resulted in damages or restrictions to the City systems that resulted in expenses to the City above and beyond the normal operational and maintenance costs associated with the system. As this applies to the FOG control program there are two specific cases that the City may wish to assess cost

recovery fees to a user regulated under this ordinance.

- (1) Build up of FOG in the collection line as a result of improper maintenance of a grease interceptor that requires the City to clean that section of line more often than once every 2 years.
- (2) Cost related to the clean up of a Sanitary Sewer Overflow caused by the blockage to flow in the sanitary sewer line caused by improper maintenance of the grease interceptor servicing one or more users discharging to the blocked sewer line.

Cost recovery may be assessed on a one-time basis, which would be appropriate for a single sanitary sewer overflow event; or as an on-going surcharge on users of a specific line that services one or more FOG user. Cost recovery is not intended to be an enforcement tool, but a means to recovering costs due to negligence on the part of a user, who has received a Level 1 enforcement response in the past.

### VIII - TERMINATION OF WATER SERVICES

The City provides both sewer and water to the food service establishments. Therefore, the City may terminate water service as an ultimate enforcement tool. If a user fails to comply with the City ordinance, and is persistently in non-compliance even though the City has taken enforcement actions at the Level 1, 2 and 3, then the City may terminate water services. This is not an action to be taken lightly for it will mean that the business can no longer operate in the City.

Restoration of water service should only be granted upon documentation that the non-compliant issues have been resolved and that consistent compliance may be expected in the future. In addition, all previous enforcement actions and administrative fines and cost recovery assessments must be paid prior to restoration of service.

### IX - NOTIFICATION OF HEALTH DEPARTMENT

When in opinion of the City, a user grease interceptor is backing up causing a potential health hazard, the City is required to notify the County Health Department of the food service facility and the situation with the potential health risk.

### X - SAMPLE DOCUMENTS

The following documents are samples of documents that are used in the enforcement of the City FOG Control Ordinance.



Manager's Name: (print or type)

### Food Service Grease Trap Maintenance Report

				Report Due	Date:		
Please complete this form and submit it, along with a copy of the latest pumping transport manifest for your facility. Submittal of this report is required by the City. Failure to submit the completed and signed report is considered a violation of the City Codes and subject to enforcement. Submit this report to: <b>Lathrop FOG Control Program</b> , <b>18800 Christopher Way, Lathrop, CA 95330</b> . If you have questions concerning this matter please contact the Lathrop Pretreatment Coordinator at 209-858-1645.							
Business Name:			Business Own	Business Owner:			
Business Local	tion:		Business Own	er's Address &	Phone#		
Mailing Addre	ss:		Manager's Na	ıme:			
			Local Business	s Phone #			
Please circle	the correct resp	onse for all "YES" or	r "NO" questions	S.			
1. Business Facility sewer is connected to the City Sewer System?				YES	NO		
2. Grease Trap Installed?				YES	NO		
3. Provide the Volume of the Grease Trap measured in gallons:							
4. Chemicals, Bacteria, or other Grease Trap Additives are added to the Grease Trap?				Trap?	YES	NO	
5. Food Grinders or Garbage Disposal is installed and discharges to the Grease Trap?			Trap?	YES	NO		
6. Automatic Dishwasher is installed and discharges to the Grease Trap?				YES	NO		
7. Provide the Following Information on the Last 4 times the Grease Trap was Pumped:							
Pumping Date	Volume Pumped (gallons)	Pumping Service Name	Pumping Service State Registration No.	Disposa Site Name	1	Disposal Site State Registration No.	
"I Certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, are true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines. All records used to compile this report are on file and available for inspection on request."							

This report must be signed by a manager of the business and all additional requested information attached to be considered *COMPLETE* by the City.

Manager's Signature:

Date Signed:



### Food Service Grease Trap Mandatory Service Order

Business Name:	Manager's Name:			
Business Location:	Local Business Phone #			
2 is income december.	Zeedi Ziisiitess I itelie ii			
All businesses operating food service grease traps are requi	ired to properly maintain their grease trap	os in good working order		
to prevent the release of excess fat, oil, and grease to the				
implement a routine pumping schedule with a service that accordance with State laws.	hat collects, handles, transports, and di	sposes of the wastes in		
This Mandatory Service Order is issued because of	excessive buildups of fat, oil and grea	se (FOG) in the sewer		
collection system servicing your facility has been found by				
the source of this fat, oil and grease. The City is require				
wastewater, and all settled solids from your grease trap				
damages found in the grease trap must be properly repair FOG, wastewater, and solids must be properly manifestories.				
accomplished in the prescribed time period, the City is				
Pretreatment Coordinator. In addition, the City may have				
Trap Maintenance Report." This requested reporting is				
Failure to comply with this order shall be consider				
actions. The City may also seek cost recovery from you for	or expenses incurred by the City to remo	ve the excess FOG from		
the City's Sewer Lines.	ages feel free to contact the City's Protect	naturant Caardinatar at		
If you have any questions concerning this matter, ple 209-858-1645.	ease feet free to contact the City's Frette	eaument Coordinator, at		
Submit a copy of this order and the service manifes	st to the following:			
	, 18800 Christopher Way, Lathro	op, CA 95330		
Required Actions and Time Allowed for Comp				
1. Pump Grease Trap (completely) us		Hours,		
Maintenance Service. This task m	nust be completed within the	Days		
following time period:		Weeks		
2. Submit copy of Grease Trap Wast	- · · · · · · · · · · · · · · · · · · ·	15 days following		
Pretreatment Coordinator, 18800 Christopher Way, Lathrop, CA grease trap pumpin				
	95330. Submittal Due:			
	3. Complete the "Food Service Grease Trap Maintenance Report" and			
submit to City Pretreatment Coordinator, 18800 Christopher Way,  grease trap pumpi				
Lathrop, CA 95330. Submittal Due:				
4 O.1 B				
4. Other Required Actions:				
The City will consider any requests from the business for extension of due dates or modifications to the requested actions.				
However, the business may be held responsible for any a				
business's failure to take prompt corrective and prevent	rative actions.			
Order Issued by: (print or type) Signature Sig	Date Issued:			



Establishment Name:		Business Phone No.		
Location:		Owner/Manager:		
Mailing Address:				
City:	_ State:, Zip Code:			
box, and skip to the	ent does <b>NOT</b> have a grease trap or gne bottom and sign and date the questince <b>SERVICE COMPANY</b> : Identify the	onnaire.		
trap/interceptor at your estab	olishment.			
Company Name	Mailing Address	CA Transporter Registration No.		
Company Name	TE: Identify the facility that receives the great Mailing Address	cA Treatment or Disposal Site Registration No.		
	How often and how many gallons are	typically pumped from the trap/interceptor?		
	How many gallons can the trap/interco	eptor hold?		
YES NO YES NO YES NO NO	additives used at your establishment? Is there a food grinder in use at your e	Are Chemicals, Enzymes, Bacteria, or other grease trap/interceptor additives used at your establishment?  Is there a food grinder in use at your establishment?  Are there drain screens in use at your establishment?		
Name: (print):	Date: S	ignature:		

Mail To: Lathrop FOG Control Program 18800 Christopher Way Lathrop, CA 95330



### Food Service Establishment Notification of FOG Control Ordinance Requirements

In order to provide for the public health and welfare, and to comply with the laws and regulations of the State of California, the City of Lathrop adopted City Ordinance #05-254 adding Chapter 13.26 to the Lathrop Municipal Code. Section 13.26.160 provides for the control of Fat, Oil and Grease (FOG) discharged from food service establishments, such as restaurants and cafeterias. The intent of these regulations is to prevent the build up of grease causing sewer backups and overflows to the streets.

Your cooperation in the implementation of this ordinance is appreciated by the City. Wastewater inspectors will be visiting all food service establishments in the next few weeks to provide assistance in implementing the ordinance.

A copy of Section 13.26.160 of Ordinance No. 05-254, a summary of the Ordinance requirements, and a list of suggested best management practices (BMPs) are enclosed.

Please take the time to review the enclosed information and complete the Food Service Establishment Survey. Please mail the completed survey to the following address within 15 days:

Lathrop FOG Control Program 18800 Christopher Way Lathrop, CA 95330

If you have questions, please feel free to contact the undersigned at (209) 858-1645.

FOG Control Program Manager



Establishment Name:		Business Phone No.
		Owner/Manager:
City: S	tate:, Zip Code:	
box, and skip to the b	does <b>NOT</b> have a grease trap or greater outcom and sign and date the question <b>SERVICE COMPANY</b> : Identify the state of the service of the se	nnaire.
trap/interceptor at your establish Company Name	ment.  Mailing Address	CA Transporter Registration No.
IDENTIFY DISPOSAL SITE:  Company  Name	Identify the facility that receives the grease Mailing Address	e trap/interceptor wastes for final disposal.  CA Treatment or Disposal Site  Registration No.
YES NO YES NO YES NO	How often and how many gallons are ty  How many gallons can the trap/intercep  Are Chemicals, Enzymes, Bacteria, or cadditives used at your establishment?  Is there a food grinder in use at your establishment are there drain screens in use at your establishment.	other grease trap/interceptor
Name: (print):	Date: Sig	nature:

Mail To: Lathrop FOG Control Program 18800 Christopher Way Lathrop, CA 95330



Food Service Establishment
BEST MANAGEMENT PRACTICES

All food service establishments are encouraged to implement the following best management practices:

- **Installation of Drain Screens**. Drain screens must be installed on all drainage pipes in food preparation areas. Drain Screen cleanings should be disposed of directly into the trash or garbage and not in the sinks or drains.
- Segregation and Collection of Waste Cooking Oil. All waste cooking
   oil must be collected and stored properly in recycling receptacles
   such as barrels or drums. Such recycling receptacles must be
   maintained properly to ensure that they do not leak. Food service
   establishments must use licensed waste haulers and licensed
   recycling facilities to dispose of waste cooking oil.
- **Disposal of Food Waste**. All food waste must be disposed of directly into the trash or garbage, and not in sinks.
- **Kitchen Signage**. Best management and waste minimization practices must be posted conspicuously in the food preparation and dishwashing areas at all times.
- **Food Grinders**. Food grinders should not discharge to the grease trap.
- Odors. Grease trap devices must be installed and maintained, as necessary, so as to prevent odors, cross-contamination, sewer back-ups or Sanitary Sewer Overflows.
- Containers. Grease rendering containers must be installed and properly maintained.



Food Service Grease Trap
Inspection Report
Inspection Date:

				Inspector(s)			
Business Name:		Business Owner	Business Owner:				
Business Locat	ion:		Business Owner	r's Address & I	Phone#		
Mailing Addre	ss:		Manager's Nan	Manager's Name:			
			Local Business	Local Business Phone #			
1. Frequency	of Interceptor S	ervice?					
2. Intercepto	r Capacity (gallo	ons)?					
3. Name/Add	dress of Service	Company					
4. Name and	Rate of Additio	n of Interceptor Additiv	ves:				
5. Visual Ob	servations of Int	erceptor:					
6. Food Grin Trap?	ders or Garbage	d discharges to	the Grease YES		NO		
7. Automatic	Dishwasher is i	nstalled and discharges	s to the Grease	Trap? YES		NO	
8. Best Management Practices implemented?				YES		NO	
9. Provide th	e Following Info	ormation on the Last 3		e Interceptor	r was Pı	ımped:	
	X	. ·	Pumping	D: 1		Disposal	
Pumping	Volume Pumped	Pumping Service	Service State	Disposal Site		Site State	
Date	(gallons)	Name	Registration	Name		Registration	
	(guirons)	Tvarre	No.	1 (dillo		No.	
10. List all D	Deficiencies:						
11 11 11 11 11 11	1	D ' 1 A .'	1, 0,1	• • ,•			
11. List all R	tecommendation	s or Required Actions	as a result of the	is inspection	:		

# INTERJURISDICTIONAL PRETREATMENT AGREEMENT BETWEEN THE CITY OF MANTECA AND THE CITY OF LATHROP

This Agreement is entered into this day of	2005,
between the City of Manteca, hereinafter called "Manteca" and the City of Lathrop	, hereinaftei
called "Lathrop".	

### **RECITALS**

- 1. Whereas, Manteca owns and operates a wastewater treatment system.
- 2. Whereas, Lathrop currently utilizes this wastewater treatment system pursuant to the Service Agreement (Agreement *A765*) between Manteca and Lathrop dated March *5*, 1984. Such use is called, for purposes of this Agreement, "use of the WQCF system".
- 3. Whereas, Lathrop additionally owns and operates a second wastewater system, called, for purposes of this Agreement, the "WRP System".
- 4. Whereas, Facilities located in Lathrop currently contribute wastewater to the WQCF system, which includes industrial waste. These facilities are hereinafter referred to as industrial dischargers.
- 5. Whereas, Manteca must develop and implement an industrial pretreatment program to control industrial dischargers of its wastewater treatment system pursuant to conditions contained in its waste discharge permit (NPDES Permit No. CAOO8 1558 issued by the EPA), and the pretreatment requirements set out in 40 CFR Part 403 and Division 7 of the California Water Code.
- 6. Whereas, Lathrop desires to continue to utilize the WQCF system and recognize its industrial waste control obligations under 40 CFR 403, Division 7 of the California Water Code, and Agreement A765. In Agreement A765, Lathrop agreed to adopt and maintain a waste ordinance that is uniform and consistent with the Manteca waste ordinance so that the industrial dischargers—to the WQCF system within Lathrop's boundaries shall be subject to the necessary pretreatment controls. With this interjurisdictional agreement, Manteca is authorized to implement and enforce that waste ordinance within Lathrop's boundaries, with respect to those industrial dischargers whose waste flows to the WQCF system.

### AGREEMENT

- 1. Lathrop shall adopt a waste ordinance that is at least as stringent as to the waste ordinance adopted by Manteca. Lathrop shall forward to Manteca for review a draft of its proposed waste ordinance within (30) days of the date of this agreement. Lathrop shall adopt its waste ordinance within (30) days of receiving approval from Manteca of its content.
- 2. Whenever Manteca revises its waste ordinance, it shall forward a copy of the revisions to Lathrop. Lathrop shall adopt similar revisions to its waste ordinance. Lathrop shall forward to Manteca for review its proposed revision within (30) days of receipt of the Manteca revisions. Lathrop shall adopt its revisions within (30) days of receiving approval from Manteca of the content thereof.
- 3. Lathrop shall adopt pollutant specific local limits which include the same pollutant parameters and limits that are as stringent as the local limits enacted by Manteca within (30) days of the date of this agreement. If Manteca makes any revision or additions to its local limits, Manteca shall forward to Lathrop a copy of such revisions within 10 days of enactment thereof. Lathrop shall adopt any such revisions or additions within (30) days of receipt thereof
- 4. Lathrop designates Manteca as the agent of Lathrop for the purposes of implementation and enforcement of Lathrop's waste ordinance against industrial dischargers to the WQCF system located in Lathrop. Manteca may take any action under Lathrop's waste ordinance that could have been taken by Lathrop, including the enforcement of the ordinance in courts of law.
  - Manteca, on behalf of and as agent for Lathrop, shall perform technical and administrative duties necessary to implement and enforce Lathrop's waste ordinance. Manteca shall: (1.) issue permits to all industrial dischargers to the WQCF system required to obtain a permit; (2.) conduct inspections, sampling, and analysis; (3.) take all appropriate enforcement action outlined in Manteca's enforcement response plan and provided for in Lathrop's waste ordinance; and (4.) perform other technical and administrative duties required by Federal and State law or NPDES permit. In addition, Manteca may, as agent of Lathrop, take emergency action to stop or prevent any discharge to the WQCF system for an industrial user which presents or may present an imminent danger to the health or welfare of humans, which reasonably appears to threaten the environment, or which threatens to cause interference, pass through, or sludge contamination.
- 6. Manteca shall maintain an industrial user inventory of permitted and non-permitted industrial and commercial facilities discharging to the WQCF system. Manteca shall update the industrial user inventory annually and provide a copy of the inventory to Lathrop by December 15111 of each year. The industrial user inventory shall contain the name of the industrial user, the address, telephone number of the facility, the standard

industrial classification (SIC), and identify the product or service provided by the facility. Lathrop shall notify Manteca of any additional planned industrial waste discharges to the WQCF system thirty days before commencement of the discharge.

- 7. Before any industrial user located outside the jurisdictional boundaries of Lathrop discharges into the WQCF Sewer system, Lathrop and Manteca shall enter into an agreement with the jurisdiction in which such industry is located. Such agreement shall be substantially equivalent to this Agreement and must be entered into prior to a discharge from any such industrial user.
- 8. Manteca may recover costs for permitting, inspecting, sampling, and other industrial user monitoring and enforcement activities directly from the industrial dischargers located within Lathrop's jurisdiction.
- 9. If any term of this Agreement is held to be invalid in any judicial action, the remaining terms shall be unaffected.
- 10. Manteca and Lathrop shall review and revise this Agreement to ensure compliance with the Federal Clean Water Act (42 U.S.C. § 1251 et seq.) and rules and regulations (see 40 CFR part 403) issued thereunder, as necessary, but at least once every 5 years on a date to be determined by Manteca and Lathrop.
- 11. This Agreement shall remain in effect so long as Agreement A765 remains in effect. Termination of the Agreement A765 shall also result in the termination of this Agreement.
- 12. If the authority of Manteca to act as agent for Lathrop under this Agreement is questioned by an industrial user, court of law, or otherwise, Lathrop shall take whatever action is necessary to ensure the implementation and enforcement of its waste ordinance against its industrial dischargers, including, but not limited to, implementing and enforcing its waste ordinance on its own behalf and/or amending this Agreement to clarify Manteca's authority.
- 13. Any disputes between Manteca and Lathrop arising out of this Agreement shall be submitted to binding arbitration performed in accordance with the rules of American Arbitration Association.

CITY OF MANITECA

CITT OF LATHROP	CITY OF MANTECA
By:	By:
Its	Its

CITY OF LATIDOD

### APPENDIX C - Element 4 (Operations & Maintenance) Supporting Documents

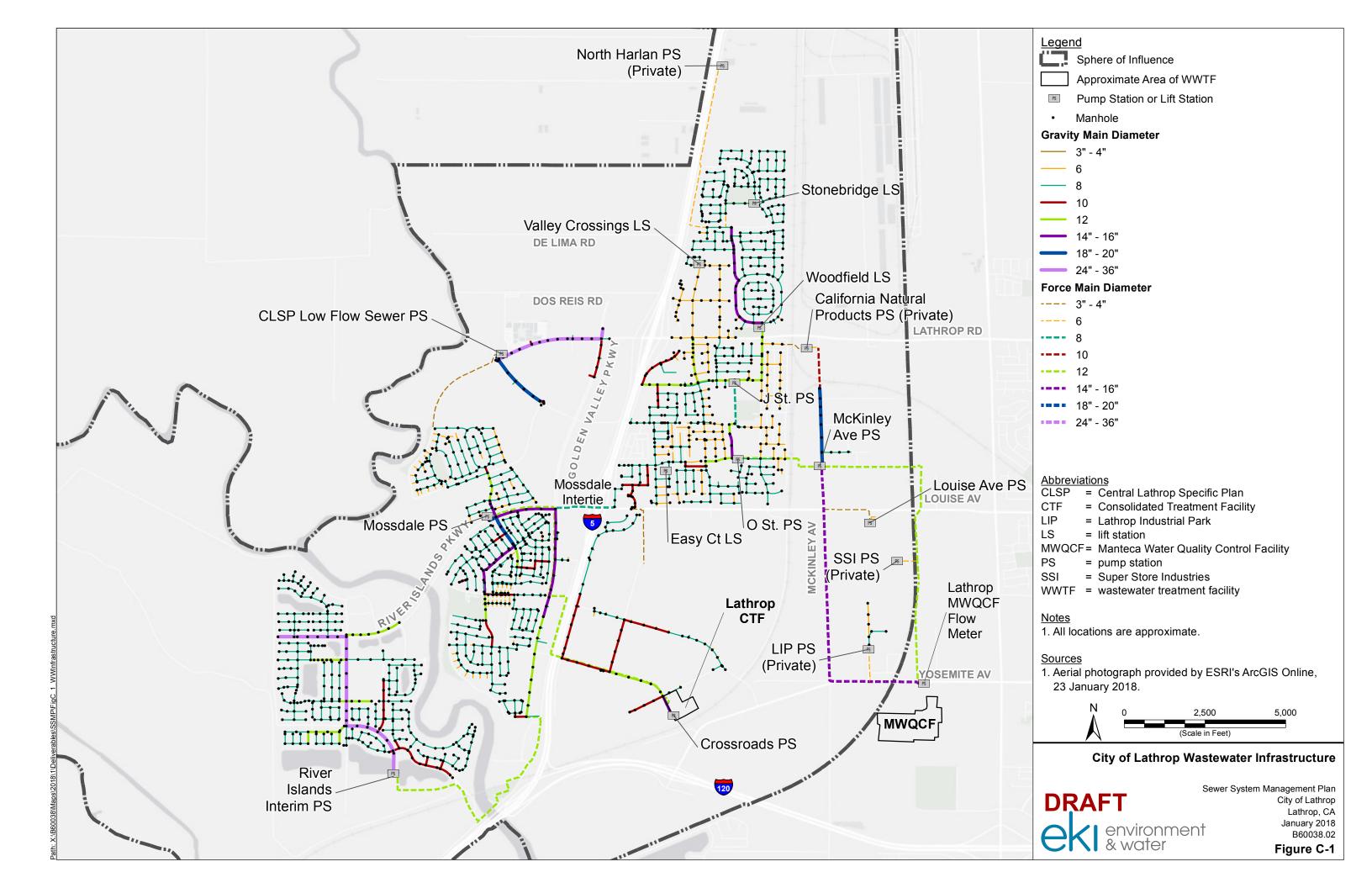
- 1. Figure C-1. City of Lathrop Wastewater Infrastructure
- 2. Figure C-2. City of Lathrop Sewer Collection Systems and Pump Station Drainage Areas
- 3. Sewer Flushing Report Form
- 4. Daily Lift Station Inspections Report Form
- 5. Pump Inspection Report Form
- 6. 12-Inch Force Main to Manteca Inspection Report
- 7. Air/Vacuum Release Valve Report
- 8. Table C-1. Wastewater Pump Station Pump and Motor Information

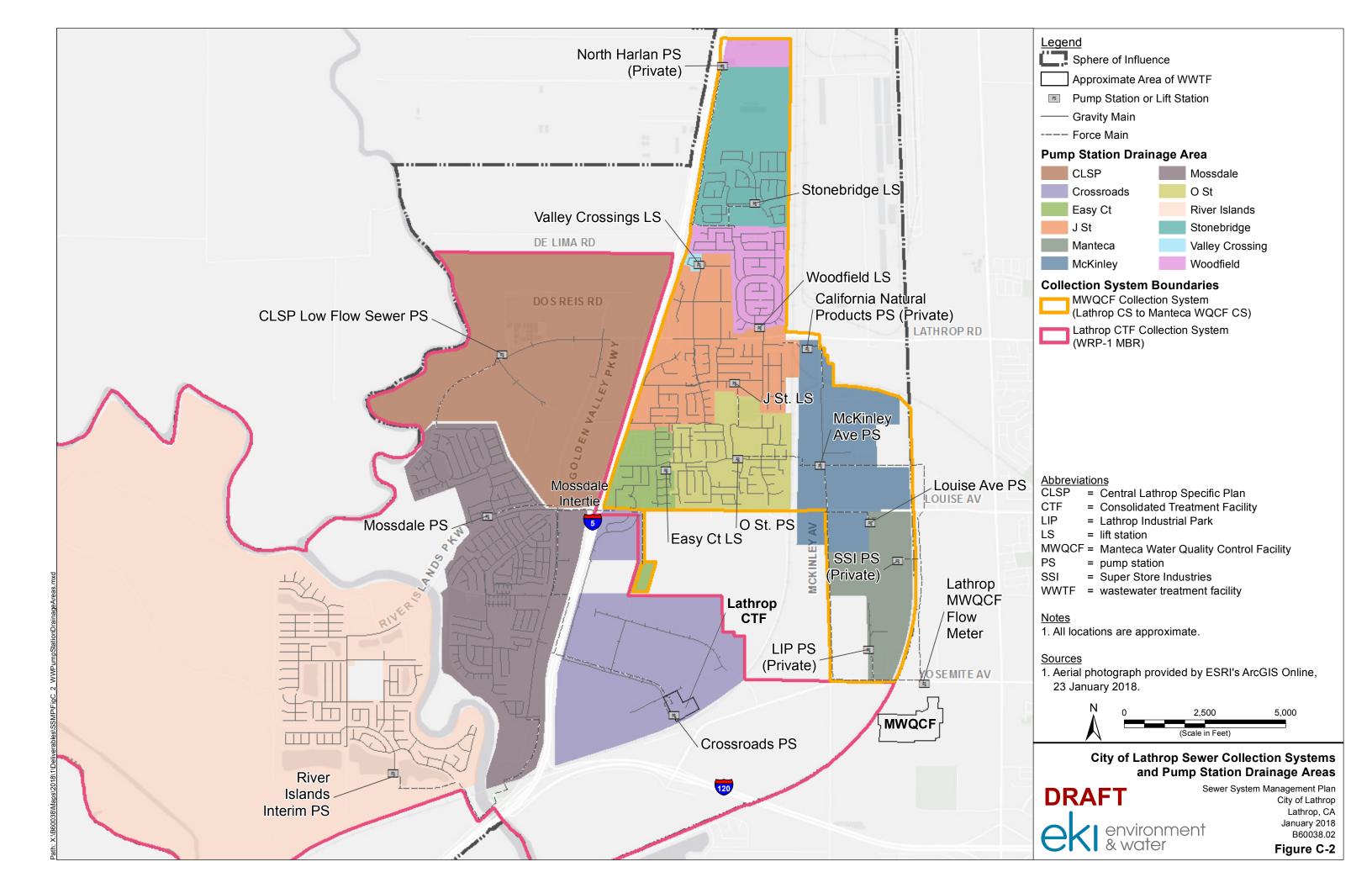
Table C-1
Wastewater Pump Station Pump and Motor Information

Dump Station	Number of	Force Main	<b>Design Capacity</b>	Firm Capacity	Horse Power	Pump Model	
Pump Station	Pumps	Diameter (in)	(gpm)	(gpm)	norse Power	Pullip Wodel	
MWQCF Collection System							
North Harlan PS	2	6"	250	245	10 HP (2)	FLYGT CP3127 IMP#438 (2)	
Stanahridga I S	2	6"	410	380	10 HD (2)	FLYGT N3127 IMP#489	
Stonebridge LS	2	b	410	360	10 HP (2)	FLYGT CP3127 IMP#2196	
Woodfield LS	2	8"	1,380	750	5 HP (2)	FLYGT N3102	
Valley Crossing LS	2	4"	83 (a)	83 (a)	3 HP (2)	FLYGT CP3085 IMP#434	
J Street LS	2	8"	800	625	10 HP (2)	FLYGT N3127 IMP#188 (2)	
Easy Court LS	2	-	1,000	500	3 HP (2)	FLYGT N3085 IMP#135	
O Street PS	3	12"	1 050	1 575	70 HP (2)	FLYGT NP3202 IMP#456(2)	
O Street PS	3	12	1,850	1,575	5 HP	5 HP Pump Model Unknown	
McKinloy Ayonyo DC	3	16"	2,550	1,670	25 HP (2)	FLYGT N3171 IMP#455 (2)	
McKinley Avenue PS	3	16	2,550	1,670	5 HP	FLYGT N3085 IMP#462	
Louise Avenue PS	2	4"	(b)	(b)	5 HP (2)	FLYGT N3085 IMP#463 (2)	
Lathrop CTF Collection System							
Central Lathrop Low Flow PS	1	4"	87		4 HP	FLYGT NP3085 SH	
Mossdale PS	4	8" & 12"	1,900	1,800	30 HP (4)	FLYGT NP3171 IMP#454 (4)	
River Islands Interim PS	1	12"	1,150		20 HP	FLYGT N3153 IMP#433	
Crossroads DS	2	8"	0.00	F.70	40 UD (2)	FLYGT CP3127 IMP#483	
Crossroads PS	2	٥	860	570	10 HP (2)	FLYGT NP3127 IMP#488	

#### Notes:

- (a) Capacity of the downstream 8" gravity main is listed as the lift station capacity, as the pumps are capacity to convey flow beyond this flow rate.
- (b) Pump station capacity depends on flows through the 16-inch force main to MWQCF.





# CITY OF LATHROP SEWER FLUSHING REPORT

Page 1 of 2

Line Information:			
Date:	Operators:		
Line Location:	Line Mate	erial:	Ft. of Run:
No. of Runs to Clear Line:		Condition of Line:	
Description of Material or Dan	nage to Line:	_	
Upstream Line Information:			
Location of Manhole:			
Depth to Invert:		Grout Condition:	
Lid Condition:		Manhole Material:	
Drop Manhole? Y or N	No. of	Services in Manhole	
Evidence of Flooding Due to B	Backup:		
Description of Material in Man	nhole:		

# CITY OF LATHROP SEWER FLUSHING REPORT

Page 2 of 2

Downstream Line Information:	
Location of Manhole:	
Depth to Invert:	Grout Condition:
Lid Condition:	Manhole Material:
Drop Manhole? Y or N	No. of Services in Manhole
Evidence of Flooding Due to Ba	 uckup:
Description of Material in Manh	nole:
C DI CII (IC (	T. I. F. II. 10 ( C. II.0 ( O. I
Sewer Plug Callout Information	: To be Filled Out on Call Out Only
N. CO.II	A.11 C.C. II
Name of Caller:	Address of Caller:
Phone # of Caller:	Customer C.O. Checked? Y or N
Plug on Customer Side?	Cleaned From C.O. to Main? Y or N
No. of Feet to Main Line Plug?	
Description of Removed From N	Main Line:
Reviewed By:	
Action Taken:	
Forwarded To: File	Supervisor P.W. Director

# CITY OF LATHROP DAILY LIFT STATION INSPECTION REPORT

Page 1 of 2

Lift Station:	Date:	

	Pump Run Times, hrs							
Day	Pun	Pump A Pump B Pump C Total for		Initials				
	Counter	Elapsed	Counter	Elapsed	Counter	Elapsed	Day	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
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26								
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28								
29								
30								
31								

# CITY OF LATHROP DAILY LIFT STATION INSPECTION REPORT

Page 2 of 2

Lift Station:	Date:	

Day	Station Alarm Triggered (Yes/No)	Pumps Free of Grease & Debris	Wet Well Drawn Down & Washed	Pumps OK Generator OK	Pumps Left in Auto (Yes/No)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						

# CITY OF LATHROP PUMP INSPECTION REPORT

Station:			
Pump #		Nameplate Info:	<del></del>
Model #:		SN #	:
KW:	HP:	Volts:	Amps:
Phase:	HZ:	RPM:	
Date of Inspection:		Operator:	
Start Time:		Finish Time:	
1. Pump Inspectio	n		
Oil Level	Oil Condition	Oil Added	Wear Ring
Case Cond.	Volute Cond.	Lift Strap	Guide Bar
Pull Cable	Cord Seal	Cord Cond.	Wet Well
Noise?	Vibration?	Bubbler Cond.	Float Cond.
2. Electrical Panel	Inspection		
Panel Clean?	Panel Do	oor eal	Panel Warning Light
HOA Switch	Starter Noi	se?	Overload Setting
Amperage Draw, T1	T2	T3	
Heat Discoloration?			
List Discrepancies,	, Corrections Made,	Comments, and R	Recommendations:
Reviewed By:			
Action Taken:			
_			
Forwarded To:	File	Supervisor	P.W. Director

# CITY OF LATHROP 12 INCH FORCE MAIN TO MANTECA INSPECTION REPORT

Operator(s):
Date:
Evidence of Leak(s) (Yes/No):
Location of Leak(s):
Notifications to:
Written Report Required (Yes/No):
Condition of Alignment:
Repairs Required:
Encroachment(s) onto Alignment (Yes/No):
Type of Encroachment(s) onto Alignment:
Comments:
Reviewed By:
Action Taken:
Forwarded To: Supervisor P.W. Director

# CITY OF LATHROP AIR/VACUUM RELEASE VALVE REPORT

Date: Operators: Evidence of Overflows Contained in Manhole? (Yes/No)  Condition of Ball Valve:  ARV Exercised:  Air Release Inspected:  Vacuum Break Inspected:  Items or Seals Replaced:  Comments:  Reviewed By: Action Taken:  Forwarded To:  File  Supervisor  P.W. Director	ARV Number:
Evidence of Overflows Contained in Manhole? (Yes/No)  Condition of Ball Valve:  ARV Exercised:  Air Release Inspected:  Vacuum Break Inspected:  Items or Seals Replaced:  Comments:  Reviewed By: Action Taken:	Date:
Condition of Ball Valve:  ARV Exercised:  Air Release Inspected:  Vacuum Break Inspected:  Items or Seals Replaced:  Comments:  Reviewed By:  Action Taken:	Operators:
ARV Exercised:  Air Release Inspected:  Vacuum Break Inspected:  Items or Seals Replaced:  Comments:  Reviewed By: Action Taken:	Evidence of Overflows Contained in Manhole? (Yes/No)
Air Release Inspected:  Vacuum Break Inspected:  Items or Seals Replaced:  Comments:  Reviewed By: Action Taken:	Condition of Ball Valve:
Vacuum Break Inspected:  Items or Seals Replaced:  Comments:  Reviewed By: Action Taken:	ARV Exercised:
Reviewed By: Action Taken:	Air Release Inspected:
Reviewed By: Action Taken:	Vacuum Break Inspected:
Reviewed By: Action Taken:	Items or Seals Replaced:
Action Taken:	Comments:
Action Taken:	

# APPENDIX D – Element 6 (Overflow Emergency Response Plan) Supporting Documents

- 1. Overflow Emergency Response Plan
- 2. Overflow Emergency Response Plan SSO Reporting Chain of Communication
- 3. Overflow Emergency Response Plan List of Contacts
- 4. Procedures for Estimating the Volume of Sewer Overflows
- 5. Sanitary Sewer Overflow Report Form

# OVERFLOW EMERGENCY RESPONSE PLAN

#### **PURPOSE**

This Overflow Emergency Response Plan is prepared to protect public health and the environment, satisfy regulatory agencies and waste discharge permit conditions for managing Sanitary Sewer Overflows (SSOs), and minimize risk of enforcement actions against the City in the event of an overflow.

#### **PROCEDURES**

#### I. Overflow Detection

City employees, contractors, or the public may detect an overflow. The Public Works Department (PWD) is primarily responsible for receiving phone calls from the public notifying the City of possible overflows from the wastewater conveyance system. The emergency response shall be available 24 hours per day, 365 days per year. During normal working hours, the call will be routed to the PWD receptionist. During off-hours the call will be routed to the PWD on-call employee. The PWD receptionist or on-call employee receiving the call will be responsible for the following procedures:

- 1) **First Step** Record information from the caller regarding the incidence. At a minimum, the following information should be recorded when taking the call:
  - (a) Full name of caller (first/last name)
  - (b) Caller's contact information (phone number, address, company name, etc.)
  - (c) Date and time call received
  - (d) Location of possible overflow (address and nearest cross street)
  - (e) Description of the problem
  - (f) Time problem was first observed by the caller
  - (g) Observations of the caller
  - (h) Other relevant information that will enable the PWD to quickly locate, assess, and stop the overflow (e.g. estimated spill volume, suspected cause of spill, are any hazardous chemicals involved)
- 2) **Second Step** After completing the call, notify operations and maintenance (O&M) staff as soon as possible in the following order (move to the next person on the list if no answer to first caller):
  - (a) Milton Daley, O&M Superintendent
  - (b) PWD Admin Staff Person doing Work Orders
  - (c) On-call O&M Staff Person

- 3) **Third Step** Send an email with the following information to the *Emergency Spill Response Group* (distribution list found in outlook)
  - (a) Information taken from call (First Step)
  - (b) Name of employee whom spill was reported to (Second Step)

# 4) Fourth Step (if applies)

(a) After the initial call, we may have other callers reporting the spill. Please take their name & number and return their call once the problem has been resolved.

The SCADA system will automatically dial the on-call O&M staff in the event of equipment failure or detection of a possible overflow. Sanitary sewer overflows detected by the SCADA system or any personnel in the course of their normal duties shall be immediately reported to their supervisor.

# **II.** Initial Response

Failure of any element within the City-owned and operated wastewater conveyance system that threatens to cause or causes a SSO will trigger a response to isolate and correct the problem. Crews and equipment shall be available to respond to any sewer overflow locations.

Upon receipt of a report of sewage overflow, all response crew members shall proceed to the Corporate Yard where they will gather all necessary equipment and resources before proceeding to the site of the SSO. Delays or conflicts in assignments and issues regarding equipment and resources should be reported to their supervisor.

In the event of a spill or overflow, it is the responder's role to protect public health, the environment, and property from wastewater overflows and to restore the area to normal as soon as possible. Specifically, the responder should:

- Upon arrival at the site of the SSO, note the time of arrival, assess the situation, develop an approach to contain the sewage and eliminate the cause of the overflow.
- Take photographs if time permits.
- Dispatch crews shall promptly notify their supervisor, if available, of preliminary information and potential impacts. If the supervisor is not available, the O&M Superintendent should be notified.
- Immediately notify the O&M Superintendent or the Public Works Director by telephone of all sanitary sewer overflows that could be greater than 1,000 gallons, that may have entered a body of water or that may have caused damage to private property.
- Establish safety parameter and control zones with cones, barricade, signs, vehicles or terrain.
- If hazardous conditions that may cause illness or injury are encountered, immediately notify the O&M Superintendent for guidance before taking further action.

- The O&M Superintendent shall alert the Lathrop Manteca Fire Department (LMFD) and request a hazardous materials response team.
- The maintenance personnel shall wait until the LMFD hazardous materials response team has determined it is safe for the sewer maintenance response team to proceed with containment, and cleanup activities.
- Contain or divert sewage, if possible, to prevent entry into a storm drain, body of water or environmentally sensitive areas. Use earthen berms, sand bags, air plugs in storm drains, vacuum unit or other available methods to contain or divert the flow. Determine if bypass pumping is feasible and, if so, have support staff divert flow around the blockage to the downstream manhole.
- Eliminate the cause of the overflow and restore the flow in the collection system. In most cases, this will be accomplished by removing a root, grease, or debris blockage in the sewer pipe using a hydrojet. Note the time that the flow is restored.
- If the blockage cannot be removed within 30 minutes of arrival, notify the maintenance supervisor, the O&M Superintendent, or the Public Works Director immediately. Remain on site and follow directions.
- After the overflow has been stopped and repairs have been made, return any sewage
  that can be collected back to the sewer system using the vacuum unit or trash pump.
  Note the time this activity began.
- If the blockage is in a private lateral, notify the property owner of the blockage and inform them that the City does not own or maintain private service laterals. Suggest the property owner to hire a contractor to clear their line.

# **III.** Recovery and Clean-up (Mitigation)

Perform site clean-up by removing signs of all gross contamination such as toilet paper, solids, and grease with a rake or with a vacuum unit. Wash down the affected area with clean water, contain the water, and dispose of the water in the sewer. In environmentally sensitive areas, obtain guidance from the governing state and federal agencies, such as the California Department of Fish and Wildlife or the United States Fish and Wildlife Service, on clean up procedures to prevent causing more damage. Clean up procedures in sensitive areas may cause more harm than the sewer overflow event.

The potential for human health issues and adverse environmental impacts resulting from sanitary sewer overflows can be reduced by following these clean up and mitigation procedures. The procedures described are for dry weather conditions. During wet weather conditions modify these procedures as necessary when storm waters are high and flushing is impractical. Cleanup flushing should be accomplished only with clean water.

# Paved Areas

Collect all signs of gross contamination by hand or with the use of rakes or brooms as appropriate and dispose as solid waste. Pressure-wash the affected area with clean water until the wash water is clear. Contain and vacuum the wash water. Allow the affected area to dry and repeat the process if necessary. For paved areas on private property, use a disinfectant solution for the final flush.

# Areas with Bare Soil or Vegetation

Collect all signs of gross contamination by hand or with the use of rakes as appropriate and dispose as solid waste. Flush the affected area with clean water until the wash water is clear. The volume of the flushing water should be approximately three times the amount of sanitary sewage volume that contaminated the area. Contain and vacuum up the wash water. Allow the affected area to dry and repeat the process if necessary.

#### **Environmentally Sensitive Areas**

Environmentally sensitive areas include streams, creeks and riparian habitat. Obtain guidance from the governing state and federal agencies if an environmentally sensitive area is impacted. In some cases, the disturbance caused by cleanup activities may be more damaging than the sewer overflow event. Divert and contain sewage quickly to minimize impact to these areas. Any water used to clean up these areas should be de-chlorinated prior to use to minimize impacts to aquatic life.

# IV. Public Access and Warning

Set up barricades and post warning signs in cases where public health may be at risk by contact with sewage or sewage contamination. Warning signs should contain the words "Raw Sewage, Avoid Contact". Place the barricades and signs at points of public access in an effort to warn the public in that immediate area.

Inspect all sewer overflow locations the following day. Identify any signs of gross contamination. Verify whether barricades and warning signs are still needed and whether the signs are still in place, especially at points of public access.

Check barricade signs daily until approval to remove signs is received from the San Joaquin County Department of Environmental Health.

# V. Water Quality Sampling and Analysis

Water quality samples shall be taken in any body of water receiving sewage to determine the extent of the contamination. Water quality sampling should be performed to:

- 1. Determine the extent of the area that has been impacted by sewage contamination; and
- 2. Determine when the area is safe for public contact.

Perform water quality sampling when it is suspected that over 1,000 gallons of sewage has entered a body of water or if there is a large, noticeable discharge and/or pooling of wastewater entering or potentially entering a creek or waterway.

Water quality sampling should be performed by trained City personnel or through a water quality testing laboratory that is under contract with the City.

If water quality samples are taken, the following information should be recorded:

• The date, exact place, and time of sampling or measurements.

- The individual(s) who performed the sampling or measurements.
- The date(s) analyses were performed.
- The individual(s) who performed the analyses.
- The analytical technique or method used.
- The results of such analyses.

# Sampling and Testing Procedures by City Staff

Sampling for ammonia should be conducted both upstream and downstream of the point where sewage entered the receiving water. Ammonia is a unique indicator of sewage contamination. Samples should be taken every 50 feet both upstream and downstream of the point where sewage entered the receiving water until ammonia is no longer detected in the receiving water. The testing is inexpensive and fast and will determine the limits of sewage contamination. The sampling and analysis should be performed following the directions contained in the Nitrogen Ammonia Test Strip Kit (<a href="www.hach.com">www.hach.com</a>) and the results recorded. More comprehensive testing should be performed on portions of the water body shown to be positive for ammonia. Samples should be analyzed for total coliform, fecal coliform, and dissolved oxygen. Each sampling location should be documented and follow up sampling should be performed in the same sampling locations for affected areas.

# Testing by San Joaquin Department of Environmental Health

The City should inform the San Joaquin County Department of Environmental Health (SJCDEH) of any sewage contamination in a body of water that may pose a threat to human health. This provides the SJCDEH the opportunity to perform water sampling and testing and make the final determination that the water body is no longer contaminated.

# VI. Investigation and Documentation

Investigate and document all SSOs. This information is useful in determining modifications to the operations and maintenance program, capital program decision making, and to respond to regulatory inquiries.

It is the responsibility of the appropriate PWD personnel or the response crew to gather all spill response data and communicate this data back to the O&M Superintendent as soon as possible. Information obtained on the SSO shall be reported on a Sanitary Sewer Overflow Report Form (included in this appendix), and kept in a file created for each SSO event.

Perform a preliminary estimate of the sewer overflow volume using the methods outlined in this Appendix: Procedures for Estimating the Volume of Sewer Overflows.

Fill out the attached Sanitary Sewer Overflow Report, note time and take photographs prior to leaving the site.

Submit the Sanitary Sewer Overflow Report. For major SSOs (i.e. SSO Categories 1 and 2), submit the form with immediately available information to the O&M Superintendent or the Public Works Director as soon as possible. For minor SSOs (i.e. SSO Category 3),

submit the Internal Overflow Report to the O&M Superintendent or the Public Works Director by 4:00 P.M. for overflows occurring during business hours or by 9:00 A.M. for overflows occurring outside of regular business hours (i.e. 8:00AM - 6:00PM Monday – Thursday; 8:00AM - 5:00 PM Friday).

# **Sewer Overflow Investigation**

The goal of a sewer overflow investigation is to determine the cause of the sewer overflow and to identify appropriate corrective actions to minimize the recurrence of that type of event. The investigation should follow immediately after the spill response is complete. Table E-1 provides a checklist of activities that should be performed following a sewer overflow.

# Table E-1 City of Lathrop Sewer System Management Plan Sewer Overflow Investigation Activities Checklist

SSO Investigation Activities	Checklist
Interview field personnel that responded to the sewer overflow	
Review maintenance history of pipes and manholes where the blockage or failure occurred	
Inspect the manhole or sewer pipe where the blockage or failure occurred using closed circuit television (CCTV)	
Inspect the sewer overflow site and the affected area	
Review available flow data and SCADA data (if appropriate)	
Review sewer overflow volume estimate	
Review water quality results	
Evaluate corrective actions	
Record results of investigation on Sewer Overflow Report	

# Sewer Overflow Tracking

Sewer overflows should be tracked on a map marking the location of all known sewer overflows. The map should identify the specific pipe or manhole that contained the blockage or failure. The sewer overflow event should also be documented in the maintenance management system.

#### Sewer Spill Documentation

Each sewer overflow, regardless of volume, should be documented in a unique file. The file should contain pertinent information that may be necessary to respond to future

regulatory audits or actions. A checklist of the information that should be included in the sewer overflow documentation file is provided in Table E-2. Use the following guidelines to document the spill:

- 1. Provide accurate flow measurements and duration of the spill. Refer to the end of this Appendix E for methods of sewer overflow volume estimates.
- 2. Provide a map of the problem location (manhole/s involved) and where the spill discharged (storm drain, field, stream, City of Lathrop, Sewer System Facilities Map).
- 3. Take photos of events if possible.

# TABLE E-2 SANITARY SEWER OVERFLOW DOCUMENTATION ACTIVITIES CHECKLIST

Documentation Item	In File
Service Call Data:	
Date and time received	
Caller name	
Caller address	
Caller telephone number	
Location of Sewer overflow	
Description of the problem	
Sewer Overflow Report	
Map showing location of the overflow and the location of the cause	
Notes regarding directions provided by the regulators	
Photographs:	
Overflow site upon arrival	
Actions taken during response (including people, equipment, activities)	
Upon completion of clean up and mitigation	
CCTV videotape and inspection pictures showing defects	
Record of completion of corrective action	

# VII. Regulatory Notification and Reporting

State Water Resources Control Board Order No. WQ 2013-0058-EXEC (State Order) for the Monitoring Reporting Program (MRP) establishes the monitoring, record keeping, reporting and public notification requirements for Order 2006-003-DWQ, "Statewide General Waste Discharge requirements for Sanitary Sewer Systems (SSS WDRs)".

The State Order establishes the following SSO Categories, as defined below:

- 1. **Category 1** Discharges of untreated or partially treated wastewater <u>of any volume</u> resulting from an enrollee's sanitary sewer system failure or flow conditions that:
  - a. Reach surface water and/or reach a drainage channel tributary to a surface water; or
  - b. 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).
- 2. 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.
- 3. Category 3 All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
- 4. **Private Lateral Sewage Discharge** (**PLSD**) Discharges of untreated or partially treated wastewater resulting from blockages or other problems <u>within a privately-owned sewer lateral</u> connected to the City's sanitary sewer system or other private sewer assets.

The State Order requires reporting of SSOs using an online SSO Database (Database). To report SSOs using the Database, the City must establish an account by registering through the California Integrated Water Quality System (CIWQS). In the event that the Database is not available, the City is required to fax all the requested information to the appropriate Regional Board office. The City must also enter all required information into the Database as soon as practical.

In addition, although not a collection system SSO, overflows may occur at the influent pump station of the wastewater treatment plant. The plant is contained to prevent overflows from reaching a surface water, a drainage channel, the MS4. In an event of a treatment plant overflow, it is recommended that the City follow response procedures outlined above

and notify the Regional Board of the event. A letter report will be required to be submitted to the Regional Board.

# **Private Lateral Sewage Discharge Reporting**

The City is strongly encouraged to notify California Office of Emergency Services (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 City becomes aware of the PLSD.

# **Category 1 Sanitary Sewer Overflow Notification Requirements (see section B of MRP)**

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 City shall, as soon as possible, but not later than two (2) hours after (A) the City 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.

# Office of Emergency Services (OES):

Call anytime: (800) 852-7550

To satisfy notification requirements for each applicable SSO, provide the information requested by Cal OES to receive a spill control number. The following information may be requested:

- 1. Name of person notifying Cal OES and direct return phone number.
- 2. Estimated SSO volume discharged (gallons).
- 3. If ongoing, estimated SSO discharge rate (gallons per minute).
- 4. 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. SSO cause (if known).
- 5. Indication of whether the SSO has been contained.
- 6. Indication of whether surface water is impacted.
- 7. Name of surface water impacted by the SSO, if applicable.
- 8. Indication of whether a drinking water supply is or may be impacted by the SSO.
- 9. Any other known SSO impacts.
- 10. SSO incident location (address, city, state and zip code).

Following the initial notification to Cal OES and until such time that the City certifies the SSO report in the CIWIQS Online SSO Database, the City 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).

# **Notification of SSOs to Other Regulatory Agencies:**

Other regulatory agencies should be notified depending on the location and/or impacts of the SSO:

# For impacts to recreational swimming areas or similar threats to public health:

Notify the San Joaquin County Department of Environmental Health (SJCDEH): (209) 468-3420.

# In case of impacts to the City's Drinking Water System or water supplies:

Notify the California State Water Resources Control Board, Division of Drinking Water, District 10 - Stockton: (209) 948-7696

### In case of a fish kill:

Immediately notify the California Department of Fish and Wildlife at (916) 227-2245 and provide updates as needed.

# Spill into South San Joaquin Irrigation District (SSJID) Canal:

Contact SSJID at (209) 823-3101.

Other local agencies and individuals that should be notified depending on the circumstances of the SSO:

# City of Manteca:

The City of Manteca should be notified if a sewer overflow from the City's collection system occurs in Manteca's service area. Call during working hours: (209) 456-8470

#### Internal Managers:

- For all SSOs, Notify the Public Works Maintenance Supervisor;
- Major spills (greater than 1,000 gallons), or those affecting surface water or human health (SSO Categories 1 and 2), notify the Public Works Director;
- For Major spills (greater than 50,000 gallons), or those affecting surface water or human health, notify the City Manager.

<u>Police Department</u>: Roadblock, traffic control, etc.

*Public Services:* Close areas such as parks, shopping centers, etc.

Water Department: Impact on drinking water storage or supply.

In addition, any local residents and businesses that may be impacted.

# **Reporting Requirements (see Section C of MRP)**

All reporting shall be done using the CIWQS Online SSO database (<a href="http://ciwqs.waterboards.ca.gov/">http://ciwqs.waterboards.ca.gov/</a>), certified by City's Legally Responsible Official(s).

<u>Category 1 and 2 SSOs:</u> Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date.

<u>Category 3 SSOs:</u> Submit certified report within 30 calendar days of the end of month in which the SSO 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.

# **Record Keeping Requirements (see Section E of MRP)**

The MRP include the following requirements for record keeping.

- 1. Individual SSO records shall be maintained by the City for a minimum of five years from the date of the SSO. This period may be extended when requested by a Regional Board Executive Officer.
- 2. SSO records shall be made available for review upon State or Regional Board staff's request.
- 3. SSO monitoring instruments and devices that are used by the City to conduct water quality monitoring for SSOs shall be properly maintained and calibrated as necessary to ensure their continued accuracy.
- 4. The City shall retain records of all SSOs, such as, but not limited to and when applicable:
  - a. Record of Certified report, as submitted to the Database.
  - b. All original recordings for continuous monitoring instrumentation.
  - c. Service call records and complaint logs of calls received by the City.
  - d. SSO calls.
  - e. SSO records.
  - f. Steps that have been and will be taken to prevent the SSO from recurring and a schedule to implement those steps.
  - g. Work orders, work completed, and any other maintenance records from the previous 5 years which are associated with responses and investigations of system problems related to SSOs.
  - h. A list and description of complaints from customers or others from the previous 5 years.
  - i. Documentation of performance and implementation measures for the previous 5 years.

# VIII. Equipment

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

#### VacCon Truck

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

#### Portable Pumps and Hoses

Portable pumps ranging in size from 2" to 6" are required to pump spilled sewage and/or contaminated water back into the sewer system.

## Street Sweeper

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

#### Closed Circuit Television (CCTV) Inspection Unit (or Lateral Inspection Unit)

A portable CCTV Inspection Unit is required to determine the root cause of all SSOs from gravity sewers. CCTV inspection services can be provided by a contractor.

# Emergency Response Truck(s)/Trailer

A utility body truck and/or trailer is required to store and transport the equipment needed to effectively respond to sewer emergencies. The equipment and tools should include an electric eel rodding machine, sectional rods, generator, lights, and spill containment and cleanup materials.

## Photographic Equipment

A digital, instant, or disposable camera is required to record the conditions upon arrival, during cleanup, and upon departure.

#### GPS Unit

A hand-held GPS unit (Global Positioning System) is required to determine the coordinates of spills for use in meeting RWQCB SSO reporting requirements.

# IX. Training

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

# Initial and Annual Refresher Training

All Wastewater Section personnel and Duty personnel should be trained in sewage overflow response, which includes this plan. The training program should be updated annually.

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

#### SSO Response Exercises

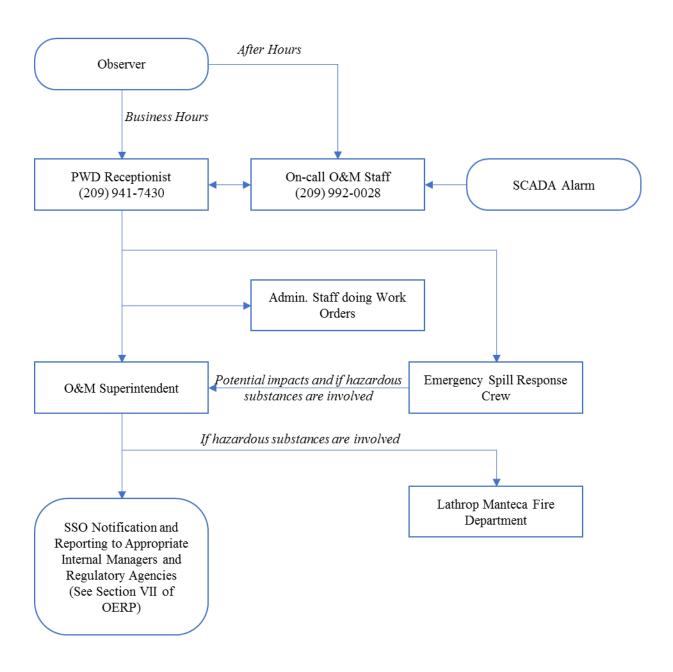
Periodic training exercises will be held to ensure that employees are up to date on the procedures, to verify the equipment is in working order, and the required materials are

readily available. The training exercises should cover scenarios typically observed during sewer-related emergencies (e.g. mainline blockage, mainline failure, force main failure, pump station failure, and lateral blockage). The results and the observations during the exercises should be recorded and action items should be tracked to ensure completion.

# **Record Keeping**

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

# CITY OF LATHROP OVERFLOW EMERGENCY RESPONSE PLAN SSO REPORTING CHAIN OF COMMUNICATION



# CITY OF LATHROP OVERFLOW EMERGENCY RESPONSE PLAN LIST OF CONTACTS

Contact	Phone Number	Email Address
Public Works After Hours Emergency	(209) 992-0028	
Milton Daley, O&M Superintendent	(209) 941-7475 (office) (209) 992-0044 (mobile)	mdaley@ci.lathrop.ca.us
Michael Dunn, Utility Operator	(209) 992-0021	mdunn@ci.lathrop.ca.us
Chris Hart, Utility Operator	(209) 992-0019	chart@ci.lathrop.ca.us
Public Works Director	(209) 941-7499 (office)	
Greg Gibson, Senior Civil Engineer	(209) 941-7442 (office) (209) 992-0017 (mobile)	ggibson@ci.lathrop.ca.us
Michael King, Senior Civil Engineer	(209) 941-7454 (office) (209) 992-0733 (mobile)	mking@ci.lathrop.ca.us
Emilia Knox, Senior Admin Assistant	(209) 941-7435	eknox@ci.lathrop.ca.us
Veronica Hedges, Senior Admin Assistant	(209) 941-7432	vhedges@ci.lathrop.ca.us
Teresa Vargas, City Clerk	(209) 941-7431	tvargas@ci.lathrop.ca.us
Stephen Salvatore, City Manager	(209) 941-7491 (office) (209) 992-0014 (mobile)	ssalvatore@ci.lathrop.ca.us
Lathrop Fire Department - J Street Station	(209) 941-5100	
Lathrop Police Department	(209) 468-4400	
Paul Zolfarelli, Project Manager, VWNA (Lathrop CTF)	(209) 858-1645 (office) (209) 406-3845 (mobile)	paul.zolfarelli@veolia.com

# PROCEDURES FOR ESTIMATING VOLUME OF SEWER OVERFLOWS

A variety of approaches exist for estimating the volume of a sanitary sewer overflow. This appendix documents five approaches that can be used. The individual preparing the estimate should select the approach most appropriate to the sewer overflow in question using the best information available. Every effort should be made to make the best possible estimate of the volume. Assistance from the engineering group within the PWD should be sought for larger sewer overflows.

# **Upstream Connections**

If the flow is coming from a cleanout or a broken line, count the number of upstream connections and estimate the time that the flow has been occurring. Remember that the flow was probably flowing before noticed and reported. Each residence contributes about 245 gallons per day per connection or about 10 gallons per hour. Multiply the number of residences by 245 or 10 and by the number of days or hours, respectively. This provides the number of gallons.

#### **Visual Estimate**

If the flow is coming from a manhole, use the photographs in this appendix to estimate the flow. Select which photograph in gallons per minute is similar to the overflow you are experiencing and multiply it by 60, then multiply this by the estimated number of hours the overflow has been occurring. This will estimate the amount of overflow in gallons.

# **Pump Station Estimate**

If the flow is coming from a pump station, use the previous days (same weather) flow and pump capacity to estimate the flow.

# **Eyeball Estimate**

The volume of very small spills can be estimated using an eyeball estimate. To use this method, imagine the amount of water that would spill from a bucket or a barrel. A bucket contains 5 gallons and a barrel contains 50 gallons. If the spill is larger than 50 gallons, try to break the standing water into barrels and then multiply by 50 gallons. This method is useful for contained spills up to 100 gallons.

#### **Measured Volume**

The volume of most spills can be estimated using this method. The shape, dimension and depth of the spilled wastewater are needed. The shape and dimension are used to calculate the area of the spill and the depth is used to calculate the volume.

- 1. Sketch the shape of the contained sewage.
- 2. Measure or pace off the dimensions.
- 3. Measure the depth at several locations.
- 4. Convert the dimensions, including depth, to feet.

5. Calculate the area using the following formulas:

```
Rectangle Area = length x width
Circle Area = diameter x 3.14
Triangle Area = \frac{1}{2} x base x height
```

- 6. Multiply the area times the depth.
- 7. Multiply the volume by 7.5 to convert to gallons.

#### **Duration and Flow Rate**

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

- 1. Duration: The duration is the elapsed time from the start of the spill to the time the spill stopped.
- 2. Start Time: This is sometimes difficult to establish. Three methods to establish start time are as follows:
  - a. Local residents can be used to establish start time. Inquire as to their observations. Spills that occur in rights-of-ways are usually observed and reported in short order. Spills that occur out of public view can go on longer. Sometimes, observations like odors or sounds (e.g. water running in a normally dry creek bed) can be used to estimate the start time.
  - b. Changes in flow on a downstream flow meter can be used to establish the start time. Typically, the daily flow peaks are cut off or flattened by the loss of flow. This can be identified by comparing hourly flow data, when available.
  - c. Conditions at the spill site change with time. Initially, there will be limited deposits of grease and toilet paper. After a few days to a week, the grease forms a light colored residue. After a few weeks to a month, the grease turns dark. In both cases, the quantity toilet paper and other materials of sewage origin increase in amount. These changes with time can be used to estimate the start time in the absence of other information.
- 3. End Time: This is much easier to establish. Field crews on-site observe the blow down that occurs when the blockage has been removed. The blow down can be observed in downstream flow meters.
- 4. Flow Rate: The flow rate is the average flow that left the sewer system during the time of the spill. There are three ways to estimate the flow rate:
  - a. Manhole flow rate chart: This chart shows the sewage flowing from a manhole cover for a variety of flow rates. The observations of the field crew are used to select the approximate flow rate from the chart.

- b. Flow meter: Changes in flows in the downstream flow meters can be used to estimate the flow rate during the spill.
- c. Once the location is known, the number of upstream connections can be determined from the field books. Multiply the number of residences by 245 gallons per day per connection or 10 gallons per hour per connection.

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

# ESTIMATING WASTEWATER FLOWS



















# SANITARY SEWER OVERFLOW REPORT FORM

Spill Name (Location): Date:
This report is (check one): Preliminary Final Revised Final
Sewer System (check one): WRP-1(MBR) Manteca WQCF Crossroads
Initial Contact Information (attach additional sheets if necessary)
Full name of caller (first/last name):
Phone number (home/office); (cell/alternate)
Caller Street Address:
Date Call Received: AM/PM (circle one)
Location of possible overflow (address and nearest cross street):
Description of the problem:
Time problem was first observed by the caller: AM/PM Observations of the caller:
Other relevant information that will enable the PWD or other first responders to quickly locate assess and stop the overflow (e.g. estimated spill volume, suspected cause of spill, are there any hazardous chemicals involved):
CIWQS Spill Report – General Information:
Spill Type (check one): Category 1 Category 2 Category 3 Private Lateral Sewage Discharge
Estimate Spill Volumes:
Estimated spill volume that reached a separate storm drain that flows to a surface water body?  gallons.
Estimated spill volume recovered from the separate storm drain that flows to a surface water body (do not include water used for clean-up) gallons

1.

2.

a)

b)

# Appendix D - Element 6: (Overflow Emergency Response Plan) c) Estimated spill volume that reached a drainage channel that flows to a surface water body? \_\_\_\_\_ gallons. d) Estimated spill volume recovered from a drainage channel that flows to a surface water body? \_\_\_\_\_ gallons. e) Estimated spill volume discharged directly to a surface water body? \_\_\_\_\_ gallons. f) Estimated spill volume reovered from a surface water body? \_\_\_\_\_ gallons. g) Estimated spill volume discharged to land? (Includes discharges directly to land, and discharges to a storm drain system or drainage channel that flows to a storm water infiltration/retention structure, field or other non-surface water location.) \_\_\_\_\_ gallons. h) Estimated spill volume recovered from the discharge to land (Do not include water used for cleangallons. Estimated Total spill Estimated Total spill Estimated Total spill Estimated Total spill volume to reach surface volume to Reach Land volume Recovered volume water (a+b+c+e)(b+d+f+h)(g) (a+c+e+g)3. Did the spill discharge to a drainage channel and/or surface water? \_\_\_\_\_ (yes/no) 4. Did the spill reach a storm drainpipe that is not part of a combined sewer system? (yes/no)

5. If spill reached a separate storm drainpipe, was all of the wastewater fully captured from the separate storm drain and returned to the sanitary sewer system? \_\_\_\_\_ (yes/no)

# **Physical Location Details**

6.	Spill location name:	
ο.	Spin focution nume.	

- 7. Latitude of spill location: \_\_\_\_\_ deg. \_\_\_\_ min. \_\_\_\_sec. OR \_\_\_\_\_decimal degrees
- 8. Longitude of spill location: \_\_\_\_\_ deg. \_\_\_\_ min. \_\_\_\_sec. OR \_\_\_\_\_ decimal degrees
- 9. County: San Joaquin
- 10. Regional Water Quality Control Board: Region 5S Central Valley

# Appendix D - Element 6: (Overflow Emergency Response Plan)

11. Spill location description:					
Spill Details					
12. Number of appearance points:					
13. Spill appearance point (see key below):					
	ed if spill appearance point is "Other" and/or multiple				
15. Final spill destination (see key below):					
	d if spill destination is "Other"):				
17. Estimated spill start date/time:	(MM/DD/YYYY): AM/PM				
18. Date and time sanitary sewer system agenc	Date and time sanitary sewer system agency was notified of or discovered spill:				
	(MM/DD/YYYY): AM/PM				
19. Estimated Operator arrival date & time:	(MM/DD/YYYY): AM/PM				
20. Estimated spill end date & time:	(MM/DD/YYYY): AM/PM				
21. Spill Cause (see key below):					
22. Spill cause explanation (required if Spill Ca	ause is "Other":				
23. Where did failure occur? (see key below) _					
24. Explanation of Where Failure Occurred (re	quired if Where Failure Occurred is "Other"):				
25. Was the spill associated with a storm event	? (yes/no):				
26. Diameter of sewer pipe at the point of block	kage or failure: inches				
27. Material of sewer pipe at the point of block	tage or failure: inches				
28. Estimated age of sewer pipe at the point of	blockage or spill cause (if applicable): years				
29. Spill response activities:					
30. Explanation of spill response activities (req	uired if spill response activities is "Other"):				
31. Spill response completion date & time:	(MM/DD/YYYY): AM/PM				
32. Spill corrective action taken:					

# Appendix D - Element 6: (Overflow Emergency Response Plan)

348	a - Is there an ongoing investigation?:
341	o - Reason for ongoing investigation?:
35.	Visual inspection results from impacted receiving water:
36.	Health warnings posted? (yes/no)
37.	Did the spill result in beach closure? (if YES, answer question 38): (yes/no)
38.	Name of impacted beach(es) (enter NA if none):
39.	Name of impacted surface water(s) (enter Un-named Tributary to XXXXX where XXXXX is the
	name of first named downstream tributary if receiving surface water body is un-named):
40.	Water quality samples analyzed for:
41. Explanation of water quality samples analyzed for (required if water quality samples ana	
	is "Other chemical indicator(s), "Biological indicators", or "Other"):
42.	Water quality samples reported to:
43.	Explanation of water quality sample results reported to (required if water quality sample results
	reported to is "Other"):
44.	Explanation of volume estimation methods used (describe how you developed the spill volume
	estimates for this spill):
	Notification Details
45.	OES Control Number :
	(Required for Category 1 – see SSO Monitoring and Reporting Program Requirements)
1	OES Called Date & Time; (MM/DD/YY): AM/PM
46.	(Required for Category 1 – see SSO Monitoring and Reporting Program Requirements)
46.	(Required for Category 1 – see 550 Monitoring and Reporting Frogram Requirements)

# CIWQS SSO Report Response Key to Questions #13, 15, 21, 23

# 13. Spill Appearance Points

- Combined Sewer DI (Combined CS Only N/A for Lathrop)
- Force Main
- Gravity Mainline
- Inside Building or Structure
- Lateral Clean Out (Private)
- Lateral Clean Out (Public)
- Lower Lateral (Private)
- Lower Lateral (Public)
- Manhole
- Other sewer system structure (specify in response to question #14)
- Pump Station
- Upper Lateral (Private)
- Upper Lateral (Public)

# 15. Final Spill Destination

- Beach
- Building or Structure
- Combined Storm Drain (Combined CS only N/A for Lathrop)
- Drainage Channel
- Other (specify in response to question #16)
- Paved Surface
- Separate Storm Drain
- Street/Curb and Gutter
- Surface Water
- Unpaved Surface

# 21. Spill Cause

- Air Relief Valve (ARV)/Blow-off Valve (BOV) Failure
- Construction Diversion Failure
- CS Maintenance Caused Spill/Damage
- Damage by Others Not Related to CS Construction/Maintenance (specify in response to question #22)
- Debris from Construction
- Debris from Lateral
- Debris General
- Debris Rags
- Flow Exceeded Capacity (Separate CS Only)
- Grease Deposition (FOG)
- Inappropriate Discharge to CS
- Natural Disaster
- Non-Dispersables

- Operator Error
- Other (specify in response to question #22)
- Pipe Structural Problem/Failure
- Pipe Structural Problem/Failure Installation
- Pump Station Failure Controls
- Pump Station Failure Mechanical
- Pump Station Failure Power
- Rainfall Exceeded Design I and I (Separate CS Only)
- Root Intrusion
- Siphon Failure
- Surcharged Pipe (Combined CS Only N/A for Lathrop)
- Vandalism

# 23. Where did failure occur?

- Air Relief Valve (ARV)/Blow-off Valve (BOV)
- Force Main
- Gravity Mainline
- Lower Lateral (Public)
- Manhole
- Other (specify in response to question #24)
- Pump Station Controls
- Pump Station Mechanical
- Pump Station Power
- Siphon
- Upper Lateral (Public)

# APPENDIX E – Element 7 (Fats Oils and Grease (FOG) Control Program) Supporting Documents

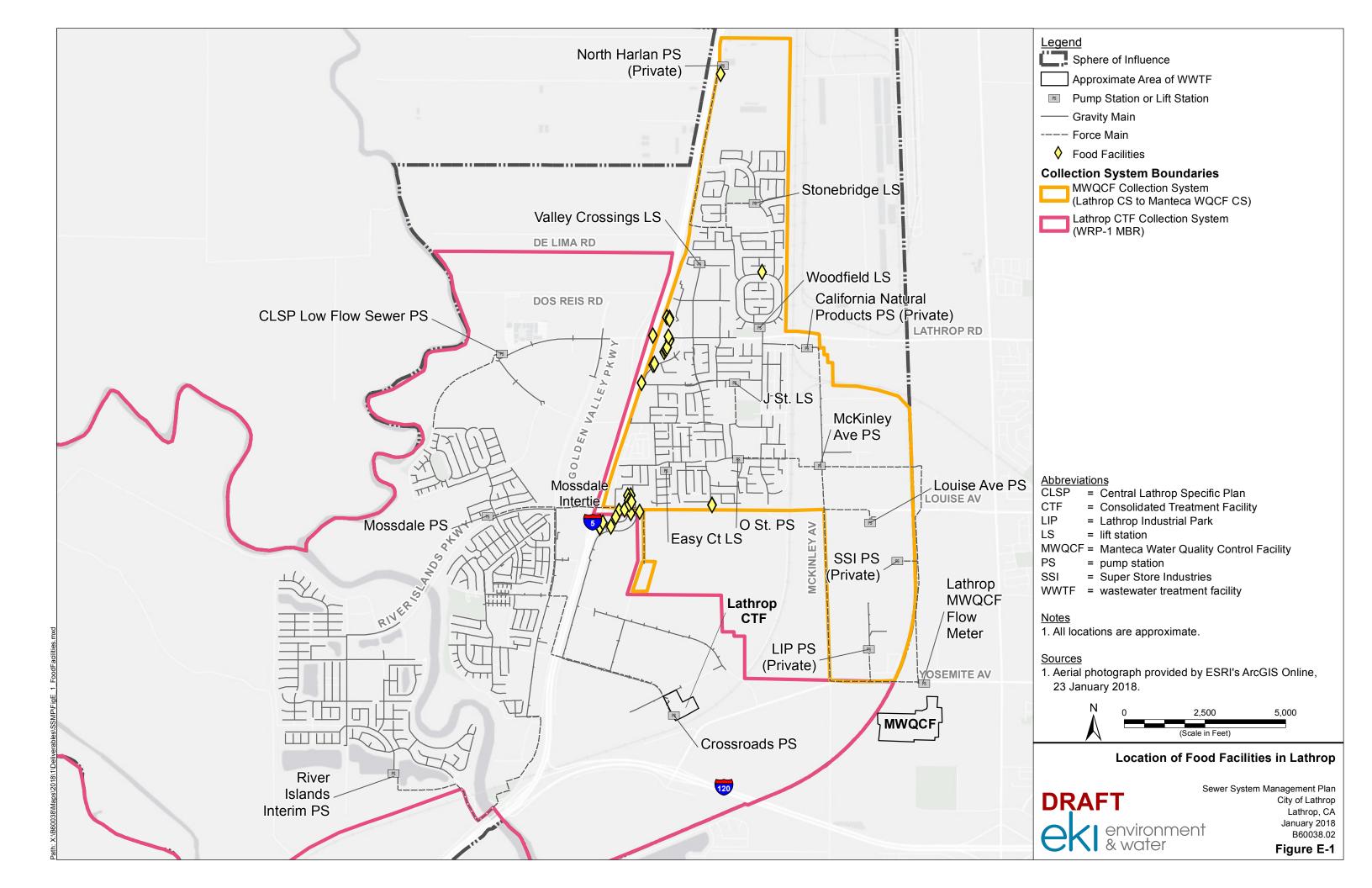
- 1. Table F-1. List of Food Facilities in Lathrop
- 2. Figure F-1. Location of Food Facilities in Lathrop
- 3. City of Lathrop Industrial Pretreatment Program, Implementation Procedures
- 4. "Preventing Sewer Backups" public outreach brochure.

Table F-1. List of food facilities in Lathrop

Business Name	Street Address
A & L Chinese	16438 Cambridge Dr
Amici Sushi	269 E Louise Ave
Baskin Robbins	15108 S Harlan Rd
Bella's Bakery	155 E Lathrop Rd
Bullock's BBQ	813 Sugar Pine Dr
Burger King 22460	15119 S Harlan Rd
Cafe Platano Bar & Grill	14725 S Harlan Rd
Carl's Jr. Restaurants	200 E Louise Ave
Chicagos Pizza	159 Lathrop Rd
China Wok Express	15020 S Harlan Rd
CK Grill Bar	14725 S Harlan Rd
Comfort Inn - Sandip Patel	14730 S Harlan Rd
Days Inn	14750 S Harlan Rd
Denny's	16851 S Harlan Rd
Denny's Restaurant	16851 S Harlan Rd
Dickey's BBQ	15338 S Harlan Rd
Flying J Travel Plaza # 1017 - Cinnabon	345 Roth Rd
Flying J Travel Plaza #1017 - PJ Fresh	345 Roth Rd
Ghirardelli Chocolate	11980 S Harlan Rd
Golden Bowl Restaurant	2490 W Louise Ave
Hampton Inn & Suites	103 E Louise Ave
Jack In the Box	100 E Louise Ave
KFC / A & W Leha 219 Inc	150 E Louise Ave
Krispy Krunchy Chicken	15600 S Harlan Rd
La Costa de Acapulco	16444 Cambridge Dr
La Hacienda Taqueria	15158 S Harlan Rd
Lathrop Gas & Food	140 E Lathrop Rd
Little Caesar's Pizza	15344 S Harlan Rd
McDonald's 8195	300 E Louise Ave
Mikasa Japanese Bistro	15138 S Harlan Rd
Milan's Pizza	15030 S Harlan Rd
•	<u> </u>

# **Appendix E - Element 7: (Fats Oils and Grease (FOG) Control Program)**

Business Name	Street Address
Mountain Mikes Pizza	229 E Louise Ave
MX Donuts	15126 S Harlan Rd
Papa Murphy's Pizza	15124 S Harlan Rd
Popeyes	16837 S Harlan Rd
Quality Inn & Suites	16855 S Old Harlan Rd
Quizno's Subs	209 E Louise Ave
Rasoi	15106 S Harlan Rd
Royal Pizza	159 Lathrop Rd
Siena Italian Restaurant	16925 S Harlan Rd
Starbucks Coffee #10220	15010 S Harlan Rd
Subway	15328 S Harlan Rd
Taqueria Los Primos	16444 Cambridge Dr
Taqueria Vallarta #2	245 E Louise Ave
The Boathouse	980 Lakeside Dr
Togos Lathrop	15600 S Harlan Rd
Yan Yan Deli	151 E Lathrop Rd



#### IMP 16 - Fat, Oil & Grease Control

Responsible Person: Investigation/Documentation: Pretreatment Coordinator

Enforcement: Director of Public Works

City Manager

Legal Services: City Attorney

Frequency: Annual

Activity: Monitor Maintenance of FOG Interceptors & Traps

Inspect FOG interceptors and traps for grease overload, failure to separate FOG from wastewater, excessive buildup of food wastes, and FOG pass through. Inspect FOG interceptor and trap maintenance records.

#### Background:

Food Preparation Facilities include Restaurants, Cafeterias (hospitals, nursing homes, schools, etc.) catering services, bakeries, and other facilities that prepare meals. Most of these facilities are required to install and maintain FOG interceptors or traps. FOG interceptor. The requirement to install an interceptor is a function of the building codes and administered through the issuance of a building permit and inspections conducted by the City building inspectors. Once the interceptor has been installed, the owner/operator is required to perform routine maintenance of the interceptor. It is the function of the Pretreatment Coordinator and other designated City inspectors, such as, a Code Enforcement Officer, to verify sufficient maintenance is being conducted to prevent carryover or pass through of FOG from the interceptor.

Definitions and Descriptions:

FOG means Fats, Oils, and Grease.

<u>FOG Interceptors</u> are installed below ground and may be made up of one, two, or three chambers.

Each chamber will have a cleanout (manhole cover) that can be easily removed for inspection and cleaning. Interceptors are usually cleaned by a commercial Grease Trap Cleaning Service using a vacuum pump to remove the entire contents of the interceptor and then fresh water to washdown the sides of the interceptor.

<u>FOG Traps</u> are small units installed under the sinks in the facility. Traps are usually hand cleaned.

The waste from the trap is collected in a drum. The drum is then collected by a commercial Waste Disposal Operator.

Waste Grease refers to greases and oils that are manually collected in the facility to prevent it from entering the FOG Interceptor/trap or the sewer system. Waste Grease is usually stored

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in a labeled tank above ground outside the facility. Waste Grease is usually collected by a commercial waste grease recycler.

- Garbage Disposals/Food Grinders refers to grinding units that shred and grind waste food that is discharged to the sewer system. These units should <u>not</u> discharge to the FOG Interceptor/Trap. Excessive build up of waste food will interfere with the separation of the FOG from the water wastestream.
- Automatic Dishwashers discharge wastewater that is significantly hotter than hand wash dishwater. Typically, Automatic Dishwashers should not discharge to a FOG Interceptor/Trap unless the interceptor/trap is specifically designed to detain the wash water long enough for the discharged wastewater to cool to allow the FOG to separate from the wastestream. Two and three compartment interceptors would be needed to facilitate the discharge of an Automatic Dishwasher.
- <u>Detention Time</u> refers to the length of time wastewater is held in the interceptor. Detention time is a function of discharge rate (gallons per minute) and the volume of the interceptor (gallons). Interceptors must be appropriately sized to allow sufficient detention time for the FOG to separate from the wastewater and float to the surface or for solids to sink to the bottom. Interceptors with insufficient Detention Time will allow pass through of FOG resulting in the buildup of FOG in the sewer collection lines.
- Baseline Data includes the following: Business Name, Facility Address, Mailing Address, Phone Number, Owner/Operator Name, Manager Name, Verification of Connection to City Sewer, Verification of FOG Interceptor/trap Installed, Inceptor/trap capacity, Interceptor/Trap Cleaning Frequency, Name, Address, and phone number of Interceptor/Trap Cleaning (pumping) Service used, Name, Address, and phone number of the FOG Waste Disposal Site used by the Cleaning Service. Baseline Data is collected by requiring the facility to complete a FOG Control Questionnaire. This questionnaire is authorized under Section 13.26.040 of the Sewer Use Ordinance. A sample FOG Control Questionnaire is provided in Attachment A of this IMP.
- Grease Trap Service Manifest refers to the document provided to the facility by the commercial Grease Trap Cleaning Service at the time the interceptor is cleaned. It should contain the Name of the Facility, the volume of grease/wastewater removed, the name, address, and phone number of the cleaning service, the name and signature of the cleaning service operator performing the work, the name and address of the disposal site that will be used, and the date the service was performed. Section 13.26.160 E of the Sewer Use Ordinance requires the food service facility to retain copies of these manifest on-site and available for inspection.
- Grease Trap Additives refers to any chemical, enzyme, or biological agent added to the FOG Interceptor/trap to improve its operation, destroy the FOG molecules, emulsify the FOG, or impact the operation of the interceptor in any way. Section 13.26.160 I of

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the Sewer Use Ordinance prohibits the use of Grease Trap Additives.

#### FOG Control Inspection

FOG Control Inspections can be divided into two types: records inspection and interceptor/trap inspection. Inspectors can use their best judgment whether to inspect the interceptor/trap, the records, or both.

#### **Records Inspection**

The FOG Control Inspection Report form provides a checklist of the minimum information that should be collected during the records inspection. The checklist items include: Business Name, Physical Address, Mailing Address, Phone number, Manager's Name, Name/Title of Business Representative present during the inspection, Date of Last three (3) interceptor cleaning, Service Company Name, Address; volume of waste removed; disposal site, address of disposal site.

If the business using a trap, review the in-house cleaning log; who performed the cleaning, date of the last three (3) cleanings, waste disposal record, volume of waste removed, disposal practices.

#### **Physical Inspection**

The FOG Control Inspection Report form provided a checklist for the minimum information that should be collected during the physical inspection. Note that the section of the report form that contains the business information is completed for both a records inspection and physical inspection. Additional information that should be included in the physical inspections include: Operator knew where the interceptor/trap was located; access was easily acquired to interceptor; a grease buildup was present but not excessive; food waste was/was not present; flow is/is not restricted through interceptor; physical damage is not visible; no evidence of recent overflows from interceptor; drain screens used in sinks; food grinders/garbage disposals used and are/ are not connected to interceptor; kitchen cleanliness (excellent, good, fair, poor); interceptor additives are/are not used; waste grease is/is not collected for recycling; area around waste grease collection tank is/is not clean.

#### Overflow Response

When responding to a report of a sewer overflow caused by an Interceptor, the inspector should conduct both the records and physical inspection. In addition, the Overflow section of the FOG Control Inspection Report form should be completed. Information in this section of the report would include a description of the overflow site; were other businesses impacted by the overflow; did the overflow reach a storm drain or receiving stream, when did the over flow start and stop, approximately how much wastewater overflowed; corrective actions taken, preventative actions taken.

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## Enforcement

Enforcement should be appropriate to level of the problems created by the operator not taking proper actions. The following are examples of the appropriate action level for typical situations:

Compliance Issue	Enforcement Action
Operator fails to retain maintenance records	-verbal notification of record retention
	requirements;
	- follow up inspection in 3 months.
Maintenance records are incomplete	-verbal notification of record retention
	requirements;
	- follow up inspection in 3 months.
Maintenance record indicates that only partial	-verbal notification of record retention
pumping of trap is be conducted (pumped	requirements;
volume is less than interceptor capacity)	- follow up inspection in 3 months
Operator applies grease trap additives to	-verbal notification of record retention
interceptor	requirements;
	- follow up inspection in 3 months.
FOG build up in sewer collection lines tracked	-verbal request to pump and clean interceptor
to user service line; maintenance record	and to visually inspect interceptor for
indicates reasonable cleaning frequency	damage to inlet, weirs, and outlets
	-follow up inspection in 1 to 2 weeks
FOG build up in sewer collection lines tracked	-verbal request to pump and clean interceptor
to user service line; maintenance record	within 48 hours and to visually inspect
indicates inappropriate cleaning frequency	interceptor for damage to inlet, weirs, and
	outlets.
	-follow up inspection within 72 hours
Inspection of interceptor indicates a lack of	-verbal request to pump and clean interceptor
pumping by an excessive buildup of grease	within 1 week and to visually inspect
(greater than 12 to 14 inches of floatable grease	interceptor for damage to inlet, weirs, and
collected)	outlets.
	-follow up inspection within 2 to 3 weeks
Sanitary Sewer Overflow caused by grease	-verbal notification of overflow;
blockage traced to food service facility; records	-verbal mandatory cleaning within 24 hours;
inspection indicate lack of pumping; physical	-written notification sent within 24 hours to
inspection indicates interceptor in need of	confirm notice of overflow and mandatory
pumping.	cleaning;
	-follow up inspection within 24 hours
Waste Grease collection tank is allowed to	-verbal notification with order to clean up area
overflow/spilling of waste grease around	and to resolve spillage and overflow;
collection tank allowing grease to enter	-follow up inspection in 24 to 48 hours
stormwater drains	

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#### **Escalation of Enforcement Actions**

In most cases, the enforcement actions is a cooperative effort to inform the user of the City Codes, what constitutes proper maintenance; proper disposal of wastes; record keeping requirements; and what to look for within the interceptor to make sure it is in good working order. However, once the initial enforcement action has been taken and the user fails to perform the required actions or is a repeat offender, the enforcement actions must be escalated. All escalated enforcement actions must be in writing and must be signed by the City Public Works Director. Escalated enforcement actions should be appropriate for the severity of the problem created. Escalated enforcement actions available for the city include, but are not limited to the following:

- 1. Mandatory Pumping Frequency;
- 2. Resizing and Replacement of Interceptor;
- 3. Cost recovery for spill clean up and collection line cleaning;
- 4. Assessment of Administrative Fines;
- 5. Suspension of Water/Sewer Services

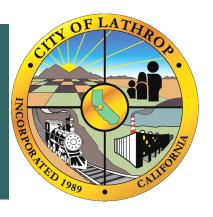
The City should consider all enforcement options and apply the appropriate action based on the severity of the problem created by the operator's lack of maintenance. In most cases education of the operator is more effective than a heavy handed enforcement policy. Administrative Fines and Cost Recovery should not be assessed at levels that make it more economical to violate the ordinance than to perform the appropriate maintenance.

#### City Liability for Sewer Overflows

Notwithstanding the NPDES and State compliance issues concerning Sanitary Sewer Overflows, the City has financial liabilities for sewer overflows that result in the damage to private property. A sewer overflow into a business or residence, may result is extensive repair bills when drywalls, carpet and flooring must be replaced. If the sewer overflow is due to a grease blockage traced to a restaurant or food preparation facility, that facility may be held liable for the damages. However, the City must show evidence (documentation) that the City has implemented a program to reduce or eliminate sewer overflows due to grease blockage if the City is not to be held liable for property damages. Therefore, it is important to implement and enforce the FOG Control program, uniformly and consistently to all food service providers.

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# Preventing Sewer Back-Ups & Sewer Overflows



# What To Do:

- Collect grease in a container and dispose of it in the garbage.
- Place food scraps in waste containers or garbage bags for disposal with solid waste, or start a compost pile.
- Place a wastebasket in the bathroom to dispose of solid waste. Disposable diapers, condoms and personal hygiene products do not belong in the sewer system.
- suggestions can save you These money too! Most sewer back-ups occur between the house and the City's main, where the sewer property owner is responsible for correcting the problem. Avoiding blockages means avoiding plumbing bills. When the blockage occurs in the City's sewer main, the City will correct the problem. Please call the Public Works Department at (209) 941-7430, to report a sewer back-up or overflow. After hours call the afterhours emergency number, (209) 992-0028.

# What Not To Do:

- Pour grease, fats and oils from cooking down the drain.
- Use the toilet as a wastebasket.
- Use the sewer as a means to dispose of food scraps.

# PUBLIC WORKS DEPARTMENT

Phone: (209) 941-7430 Fax:: (209) 941-7449

E-mail:: pweng@ci.lathrop.ca.us

When a sewer overflows, it is usually the result of inappropriate materials in the sewer system. Please Help the City Prevent Sewer Back-ups and Overflows!

Have you ever experienced a sanitary sewer back-up or overflow? Luckily, most sewer back-ups and overflows can be prevented with a progressive preventive maintenance program. All of us can help to prevent them by wisely using the City Of Lathrop's sanitary sewer system. The City is "recruiting" customer partners who are willing to join our efforts to prevent sewer back-ups and overflows.

Sewer back-ups and overflows are frequently caused by improper materials such as fats, oils and grease being placed into the sewer system by the City's customers. Since fats, oils and grease are lighter than water, they tend to accumulate at the top and sides of sewer pipes and can build up until a blockage occurs. If a blockage happens, the sewer backs up or overflows resulting in property and environmental damage.

of Lathrop's The City Sewer Use requires that restaurants Ordinance should install and maintain grease traps and/or interceptors to prevent grease entering the from sewer system. However, there are many more residential kitchens than there are taurants in Lathrop. By reducing the amount of fats, oils and grease that enter the sewer system from homes, you can help to protect the environment by preventing sewer back-ups and overflows.

Sanitary sewer systems are designed to handle three things: used water, human body waste, and toilet paper. You can do some simple things that will help the City protect water quality and maintain the sewer system in Lathrop.

# APPENDIX F – Element 8 (System Evaluation and Capacity Assurance Plan) Supporting Documents

- 1. Table F-1. Existing Wastewater Flow by Development Area
- 2. Table F-2. Projected Wastewater Flow by Development Area
- 3. Table F-3 Peak Wet Weather Flow at Pump Stations.
- 4. Table F-4. Recommended Collection System Improvement Projects
- 5. Table F-5. Summary of Capital Improvement Projects
- 6. Figure F-1. Overview of Capital Improvement Projects

Table F-1
Existing Wastewater Flow by Development Area

	Existing								
Land Use Designation	Development Built After 2013	Linite	Wastewater Flow Factor	Existing Wastewater Generation (gpd)					
Central Lathrop	Built After 2015	Ullits	Factor	Generation (200)					
Central Eathrop	20	113 Cent	ral Lathrop ADWF (a)	6,197					
		TO COME	10% Safety Factor	620					
School/Institutional	12	ас	245 gpd/ac	2,889					
Total Estimated Wastew				2,889					
Total Estimated Wastew			Central Lathrop ADWF	9,705					
Mossdale				37.00					
mossaure		2013	3 Mossdale ADWF (b)	293,256					
	10% Safety Factor								
Low Density Residential	136	du	245 gpd/du	29,326 33,320					
Medium Density Residential	21	du	170 gpd/du	3,570					
Parks	4.8	ас	55 gpd/ac	264					
Total Estimated Wastew				37,154					
Total Estimated Wastew			sisting Mossdale ADWF	359,736					
River Islands		TOTAL EX	istilig iviossuale ADVVF	333,730					
INVEL ISIUITUS		201	3 River Islands ADWF	0					
		201	10% Safety Factor	0					
Low Density Residential	449	du	245 gpd/du	110,005					
•	_			•					
Commercial Selection	4.7	ac	590 gpd/ac	<u>2,773</u>					
Schools	30	ас	245 gpd/ac	7,350					
Parks and Landscaping Parcels	12	ac	55 gpd/ac	660					
Total Estimated Wastew				120,788					
	Tot	<u>al Existi</u>	ng River Islands ADWF	120,788					
South Lathrop									
		2013	South Lathrop ADWF	0					
			10% Safety Factor	0					
Total Estimated Wastew				0					
	Total	Existing	South Lathrop ADWF	0					
Lathrop Gateway									
	2	2013 Lat	hrop Gateway ADWF	0					
			10% Safety Factor	0					
Total Estimated Wastew	ater Flow for Existing	Develo	oment Built After 2013	0					
	Total Ex	isting La	throp Gateway ADWF	0					
Crossroads									
		20	13 Crossroads ADWF	108,372					
	T		10% Safety Factor	10,837					
Industrial	11	ас	355 gpd/ac	3,912					
Total Estimated Wastew	ater Flow for Existing	Develo	pment Built After 2013	3,912					
	To	otal Exis	ting Crossroads ADWF	123,121					
Historic Lathrop and Other Developmen	t Areas								
		2013 Hi	storic Lathrop ADWF	949,856					
	-		10% Safety Factor	94,986					
Low Density Residential	27	du	245 gpd/du	6,615					
Commercial	43.8	ас	590 gpd/ac	25,842					
Parks	4.8	ас	55 gpd/ac	264					
Total Estimated Wastew	ater Flow for Existing	Develo		32,721					
			Historic Lathrop ADWF	1,077,563					
			TOTAL EXISTING ADWF	1,690,913					
			XISTING ADWF AT CTF	613,350					
			ING ADWF AT MWQCF	1.077.563					

- (a) Because historical wastewater flow data from the Central Lathrop area are not available, 2013 Central Lathrop ADWF is estimated using the wastewater flow factor for the Lathrop High School, which was the only facility that was sewered in Central Lathrop during 2013.
- (b) The 2013 Mossdale ADWF is historical flow measured at the Mossdale Pump Station subtracted by estimated flow for the Central Lathrop area.

Table F-2
Projected Wastewater Flow by Development Area

	Mastawataw		Duningto	ed New Wast	owata z Flavo	(and) (a)	
Land Has Designation	Wastewater	2020					Duildout
Land Use Designation	Flow Factor	2020	2025	2030	2035	2040	Buildout
Central Lathrop  Low Density Residential	24E and/du	147,000	266 215	480.020	489,020	489,020	1,494,010
Medium Density Residential	245 gpd/du 170 gpd/du	0	266,315	489,020	40,630	,	
•	170 gpd/du 170 gpd/du	0	40,630 46,580	40,630 46,580	46,580	40,630 46,580	40,630
High Density Residential  Commercial	590 gpd/ac	11,210	22,715	34,515	47,141	70,151	77,010
Parks	55 gpd/ac	473	1,947	3,674	3,674	3,674	164,315
				-		· · · · · · · · · · · · · · · · · · ·	6,325
Schools	245 gpd/ac	0	4,410	4,410	4,410	4,410	13,377
Public Landscaping	55 gpd/ac	1,188	1,309	1,997	1,997	1,997	2,549
	Lathrop ADWF	159,871	383,906	620,826	633,452	656,462	1,798,216
Existing Central	·	9,705	9,705	9,705	9,705	9,705	9,705
Projected Central	Latnrop ADWF	169,576	393,611	630,531	643,157	666,167	1,807,922
Mossdale - All Developments	245 1/1	0.065	0.005	25.225	25.225	25.225	406 445
Low Density Residential	245 gpd/du	9,065	9,065	25,235	25,235	25,235	186,445
Medium Density Residential	170 gpd/du	0	10,880	10,880	23,460	23,460	23,460
High Density Residential	170 gpd/du	45,220	45,220	45,220	58,480	71,740	71,740
Commercial	590 gpd/ac	0	8,201	8,201	20,886	28,556	28,556
Parks	55 gpd/ac	0	220	220	220	220	220
Schools	245 gpd/ac	0	3,979	3,979	3,979	3,979	3,979
	lossdale ADWF	54,285	77,565	93,735	132,260	153,190	314,400
9	lossdale ADWF	359,736	359,736	359,736	359,736	359,736	359,736
Projected M	lossdale ADWF	414,021	437,301	453,471	491,996	512,926	674,136
River Islands					,		
Low Density Residential	245 gpd/du	371,665	765,961	1,112,266	1,569,803	1,910,211	1,910,211
Medium Density Residential	170 gpd/du	43,032	99,069	148,286	213,311	261,690	261,690
High Density Residential	170 gpd/du	0	68,000	205,700	205,700	205,700	205,700
Commercial	590 gpd/ac	5,900	35,400	88,500	147,500	188,800	188,800
Golf Clubhouse	55 gpd/ac	0	0	0	0	0	0
Schools	245 gpd/ac	2,695	8,330	22,295	24,990	27,685	27,685
Animal Campus	245 gpd/ac	0	2,450	2,450	2,450	2,450	2,450
Parks and Landscaping Parcels	55 gpd/ac	1,320	3,355	5,555	7,535	9,020	9,020
	r Islands ADWF	424,612	982,565	1,585,052	2,171,289	2,605,556	2,605,556
Existing Rive	r Islands ADWF	120,788	120,788	120,788	120,788	120,788	120,788
Projected River	Islands ADWF	545,400	1,103,353	1,705,840	2,292,077	2,726,344	2,726,344
South Lathrop		·					
Light Industrial / R&D Flex	355 gpd/ac	58,398	78,526	78,526	78,526	78,526	86,194
Office Commercial	590 gpd/ac	0	5,168	5,168	5,168	5,168	5,168
Open Space	55 gpd/ac	373	373	373	373	373	373
Public Landscaping	55 gpd/ac	44	44	44	44	44	44
	Lathrop ADWF	58,814	84,111	84,111	84,111	84,111	91,779
	Lathrop ADWF	0	0	0	0	0	0
Projected South		58,814	84,111	84,111	84,111	84,111	91,779
Lathrop Gateway		,		,		,	,
Light Industrial / R&D Flex	355 gpd/ac	0	0	0	0	59,498	59,498
Office Commercial	590 gpd/ac	0	0	0	0	82,423	82,423
Open Space	55 gpd/ac	0	0	0	0	88	88
Public Landscaping	55 gpd/ac	0	0	0	0	0	0
	Gateway ADWF	0	0	0	0	142,009	142,009
Existing Lathrop (	•	0	0	0	0	0	0
Projected Lathrop G		0	0	0	0	142,009	142,009
Projectea Latinfop G	uleway ADWF	U	U	U	U	142,009	142,009

Table F-2 (Continued)
Projected Wastewater Flow by Development Area

	IWRMP		Projecte	d New Wast	ewater Flow	(gpd) (a)	
Land Use Designation	Flow Factor	2020	2025	2030	2035	2040	Buildout
Crossroads							
Industrial	355 gpd/ac	22,365	23,075	23,075	23,075	31,240	31,240
Commercial	590 gpd/ac	1,298	12,980	12,980	12,980	12,980	12,980
New Cro	ssroads ADWF	23,663	36,055	36,055	36,055	44,220	44,220
Existing Cro	ssroads ADWF	123,121	123,121	123,121	123,121	123,121	123,121
Projected Cro	ssroads ADWF	146,784	159,176	159,176	159,176	167,341	167,341
Historic Lathrop and Other Develop	ment Areas						
Low Density Residential	245 gpd/du	1,470	2,940	4,410	5,880	7,105	8,330
Medium Density Residential	170 gpd/du	4,590	9,180	13,600	18,020	22,440	26,860
High Density Residential	170 gpd/du	850	1,530	2,210	2,890	3,570	4,250
Commercial	590 gpd/ac	8,260	23,942	28,662	33,382	38,102	53,153
Industrial	355 gpd/ac	29,110	43,665	43,665	43,665	43,665	94,430
Parks	55 gpd/ac	0	0	0	0	0	0
Schools	245 gpd/ac	0	0	0	0	0	0
California Natural Products (b)		71,689	161,300	161,300	161,300	161,300	161,300
New Historic Lathrop	/ Other ADWF	115,969	242,557	253,847	265,137	276,182	348,323
Existing Historic Lathrop	/ Other ADWF	1,077,563	1,077,563	1,077,563	1,077,563	1,077,563	1,077,563
Projected Historic Lathrop	/ Other ADWF	1,193,532	1,320,120	1,331,410	1,342,700	1,353,745	1,425,886
Sharpe Army Depot							
Industrial		32,000	32,000	32,000	32,000	32,000	32,000
New Sharpe Arm	y Depot ADWF	32,000	32,000	32,000	32,000	32,000	32,000
Existing Sharpe Arm	y Depot ADWF	0	0	0	0	0	0
Projected Sharpe Arm	y Depot ADWF	32,000	32,000	32,000	32,000	32,000	32,000
Existing Development to be Connec	ted to City Sewe	r System					
Commercial	590 gpd/ac	6,549	6,549	6,549	6,549	6,549	6,549
Industrial	355 gpd/ac	22,685	22,685	22,685	22,685	22,685	22,685
Schools	245 gpd/ac	7,350	7,350	7,350	7,350	7,350	7,350
	New ADWF	7,350	7,350	7,350	7,350	7,350	7,350
Total Projected New ADWF		876,564	1,846,109	2,712,975	3,361,654	4,001,079	5,383,853
·	1,690,913	1,690,913	1,690,913	1,690,913	1,690,913	1,690,913	
TOTAL PRO	JECTED ADWF	2,567,477	3,537,022	4,403,888	5,052,567	5,691,992	7,074,766
PROJECTED	ADWF AT CTF	1,334,595	2,177,552	3,033,128	3,670,517	4,298,897	5,609,530
PROJECTED ADV	NF AT MWQCF	1,232,882	1,359,470	1,370,760	1,382,050	1,393,095	1,465,236

- (a) Projected residential wastewater generation calculated as the total number of projected residential dwelling units multiplied by the applicable wastewater flow factor (Table 8-1). Projected non-residential wastewater flow are calculated as the total projected acreage multiplied by the applicable wastewater flow factor (Table 8-1).
- (b) Existing ADWF from California Natural Products (CNP) in the Historic Lathrop area is estimated to be 38,700 gpd, based on the difference between 2013 ADWF at the McKinley PS and calculated ADWF for remaining parcels in the McKinley PS drainage area excluding CNP. Flows from CNP are projected to reach their allocated 200,000 gpd by 2025.

Table F-3
Peak Wet Weather Flow at Pump Stations

Lift Station or Pump Station	Ex	isting (201	.6)	Near-T	erm Future	(2025)	Long-T	erm Future	(2040)	Sel	ected Build	lout	
	ADWF	Peaking	PWWF	ADWF	Peaking	PWWF	ADWF	Peaking	PWWF	ADWF	Peaking	PWWF	
	(mgd)	Factor	(mgd)	(mgd)	Factor	(mgd)	(mgd)	Factor	(mgd)	(mgd)	Factor	(mgd)	
MWQCF Collection System													
North Harlan LS (a)				0.046	5.7	0.263	0.056	5.5	0.308	0.056	5.5	0.308	
Stonebridge LS	0.206	3.7	0.758	0.210	3.6	0.764	0.210	3.6	0.764	0.210	3.6	0.764	
Woodfield LS	0.390	2.7	1.071	0.440	2.6	1.151	0.450	2.6	1.167	0.450	2.6	1.167	
Valley Crossing LS	0.008	6.5	0.055	0.008	6.5	0.055	0.008	6.5	0.055	0.008	6.5	0.055	
J Street LS	0.646	2.3	1.509	0.264	3.3	0.866	0.276	3.2	0.886	0.276	3.2	0.886	
Easy Court LS	0.095	4.9	0.462	0.095	4.9	0.465	0.095	4.9	0.465	0.095	4.9	0.465	
O Street PS	0.925	2.2	2.063	0.551	2.4	1.338	0.572	2.4	1.375	0.572	2.4	1.375	
McKinley Avenue PS	0.131	4.4	0.578	0.754	2.3	1.716	0.768	2.3	1.744	0.768	2.3	1.744	
Louise Avenue PS	0.003	6.6	0.019										
Lathrop CTF Collection System													
Central Lathrop Low Flow PS	0.015	6.3	0.096						-				
Central Lathrop PS (Future)				0.401	2.7	1.088	0.676	2.3	1.567	0.676	2.3	1.567	
Mossdale PS	0.481	2.5	1.218	0.550	2.4	1.336	0.627	2.4	1.474	0.627	2.4	1.474	
River Islands Interim PS	0.113	4.6	0.523										
River Islands Sewer PS (b)				1.105	2.2	2.444	2.738	2.2	6.025	2.738	2.2	6.02	
Crossroads PS	0.143	4.3	0.611	0.210	3.6	0.765	0.219	3.6	0.782	0.219	3.6	0.782	
South Lathrop PS				0.088	5.0	0.439	0.088	5.0	0.439	0.095	4.9	0.462	
Lathrop Gateway PS							0.15	4.2	0.63	0.15	4.2	0.629	

- (a) North Harlan Pump Station is an existing private pump station and that will be upgraded and converted to a public pump station by 2018.
- (b) Wastewater from River Islands is conveyed through an interim pump station and will be redirected to a permanent pump station in its vicinity.

Table F-4
Recommended Collection System Improvement Projects

Improvement	Description	Quantity Unit Cost			Co	onstruction			
Type						OPC (a)			
Project WW-1	t WW-1: Stonebridge Gravity Main Replacement and Parallel Force Main Project								
Gravity Main	Install new 10" gravity main	1,140 LF	\$	180	\$	205,200			
Gravity Main	Install new 12" gravity main	1,230 LF	\$	216	\$	265,680			
Force Main	Install new 6" parallel force main	1,800 LF	\$	90	\$	162,000			
Laterals	Replace sewer laterals	35 ls	\$	2,000	\$	70,000			
Manhole	Rehabilitate manholes	15 ls	\$	3,000	\$	45,000			
	Constructi	on Conting	ency	(25%)	\$	186,970			
		Constru	uctio	n OPC	\$	934,850			
	Engineering and Admi	nistration (	Costs	(35%)	\$	261,758			
		Total P	roje	ct OPC	\$	1,200,000			
Project WW-2	2A: Woodfield West Deficiency Project - Alternative A								
Cravity Main	Install new 18" gravity main from Jasper St to Long	3,760 LF	۲	224	۲	1 210 240			
Gravity Main	Barn Dr	3,760 LF	\$	324	\$	1,218,240			
Laterals	Replace sewer laterals	104 ls	\$	2,000	\$	208,000			
Manhole	Rehabilitate manholes	18 ls	\$	3,000	\$	54,000			
	Constructi	on Conting	ency	(25%)	\$	370,060			
		Constru	uctio	n OPC	\$	1,850,300			
	Engineering and Admi	nistration (	Costs	(35%)	\$	518,084			
		Total P			\$	2,370,000			
Project WW-2	2B: Woodfield West Deficiency Project - Alternative B								
Force Main	Jack & Bore new 8" force main through I-5	500 LF	\$	1,000	\$	500,000			
Force Main	Install new 8" force main to Dos Reis Road	5,550 LF	\$	120	\$	666,000			
Pump Station	Stonebridge PS upgrade	1 ls	\$ 2	200,000	\$	200,000			
,		on Conting			\$	341,500			
		Constru			\$	1,707,500			
	Engineering and Admi				<i>\$</i>	478,100			
	3 3	Total P		. ,	\$	2,190,000			
Proiect WW-3	3: Woodfield Pump Station Upgrade								
· ·	Woodfield PS upgrade	1 ls	\$ 2	200,000	\$	200,000			
		on Conting			\$	50,000			
		Constru			\$	250,000			
	Engineering and Admi				\$	70,000			
	ggg	Total P		• •	\$	320,000			
Project WW-4	1: Woodfield East Gravity Main Replacement Project								
	Install new 10" gravity main from Pinewood Drive		Ι.		Π.				
Gravity Main	to Long Barn Dr	1,920 LF	\$	180	\$	345,600			
Laterals	Replace sewer laterals	56 ls	\$	2,000	\$	112,000			
Manholes	Rehabilitate manholes	8 ls	\$	3,000	\$	24,000			
					\$	120,400			
Construction Contingency (25%) \$ Construction OPC \$									
	Engineering and Admi				<b>,</b>	602,000 168,560			
	Engineering and Aami								
		Total P	roje	ct OPC	\$	770,000			

# Table F-4 (Continued) Recommended Collection System Improvement Projects

Improvement	Description	Quantity	Un	it Cost	Co	nstruction
Туре						OPC (a)
Project WW-5	5: J Street Gravity Main Replacement Project					
Gravity Main	Install new 8" gravity main on Cotton Drive	740 LF	\$	144	\$	106,560
Gravity Main	Install new 10" gravity main on Cambridge Drive	1,420 LF	\$	180	\$	255,600
Gravity Main	Install new 12" gravity main on Cambridge Drive	50 LF	\$	216	\$	10,800
Gravity Main	Install new 15" gravity main on J Street	850 LF	\$	270	\$	229,500
Gravity Main	Install new 18" gravity main on J Street	280 LF	\$	324	\$	90,720
Laterals	Replace sewer laterals	50 ls	\$	2,000	\$	100,000
Manholes	Rehabilitate manholes	12 ls	\$	3,000		36,000
	Constructi	on Conting	ency	(25%)	\$	207,295
		Constru	uctio	n OPC	\$	1,036,475
	Engineering and Admi	nistration (	Costs	(35%)	\$	290,213
		Total P	roje	ct OPC	\$	1,330,000
Project WW-6	6: Easy Court / O Street Gravity Main Replacement Pr	oject				
Gravity Main	Install new 8" gravity main on O Street	580 LF	\$	144		83,520
Gravity Main	Install new 10" gravity main on O Street	1,660 LF	\$	180	\$	298,800
Gravity Main	Install new 12" gravity main on O Street	1,460 LF	\$	216	\$	315,360
Gravity Main	Install new 15" gravity main on O Street	130 LF	\$	270	\$	35,100
Gravity Main	Install new 18" gravity main on O Street	850 LF	\$	324	\$	275,400
Laterals	Replace sewer laterals	97 ls	\$	2,000	\$	194,000
Laterals	Reconnect back alley laterals to replacement sewer	3 ls	\$	4,000	\$	12,000
Manholes	Rehabilitate manholes	20 ls	\$	3,000	\$	60,000
	Constructi	on Conting	ency	(25%)	\$	318,545
		Constru	uctio	n OPC	\$	1,592,725
	Engineering and Admi	nistration (	Costs	(35%)	\$	445,963
		Total P	roje	ct OPC	\$	2,040,000
Project WW-	7: Crossroads Gravity Main Replacement Project					
Gravity Main	Install new 12" gravity main on Murphy Parkway	1,690 LF	\$	240	\$	405,600
Gravity Main	Install new 15" gravity main on Nestle Way	1,730 LF	\$	330	\$	570,900
Laterals	Replace sewer laterals	7 ls	\$	2,500	\$	17,500
Manholes	Rehabilitate manholes	11 ls	\$	3,000	\$	33,000
	Constructi	on Conting	ency	(25%)	\$	256,750
		Constru			\$	1,283,750
	Engineering and Admi	nistration C	Costs	(35%)	\$	359,450
	3 3	Total P				1,640,000

Table F-4 (Continued)
Recommended Collection System Improvement Projects

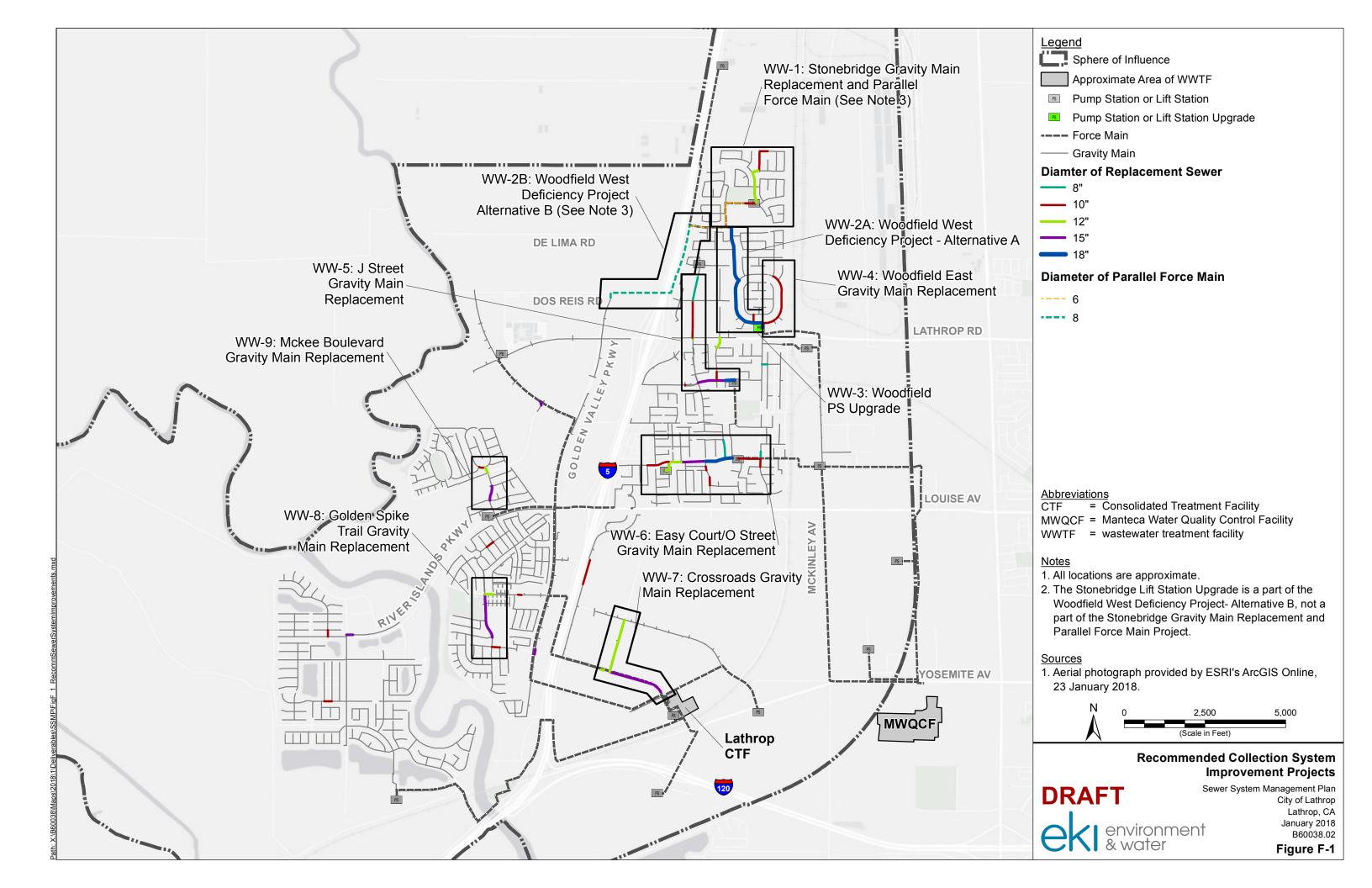
Improvement	Description	Quantity	Ur	Со	nstruction				
Type						OPC (a)			
Project WW-8	8: Golden Spike Trail Gravity Main Replacement Proje	ct							
Gravity Main	Install new 15" gravity main on Golden Spike Trail	1,380 LF	\$	270	\$	372,600			
Laterals	Replace sewer laterals	1 ls	\$	2,250	\$	2,250			
Manholes	Rehabilitate manholes	7 ls	\$	3,000	\$	21,000			
	Construction	on Conting	ency	(25%)	\$	98,963			
		Constru	uctio	on OPC	\$	494,813			
	Engineering and Admi	nistration C	Costs	s (35%)	\$	138,548			
		Total P	roje	ct OPC	\$	630,000			
Project WW-9	9: McKee Boulevard Gravity Main Replacement Projec	ct							
Gravity Main	Install new 10" gravity main on McKee Boulevard	200 LF	\$	180	\$	36,000			
Gravity Main	Install new 12" gravity main on McKee Boulevard	200 LF	\$	216	\$	43,200			
Gravity Main	Install new 15" gravity main on McKee Boulevard	460 LF	\$	300	\$	138,000			
Laterals	Replace sewer laterals	5 ls	\$	2,250	\$	11,250			
Manholes	Rehabilitate manholes	6 Is	\$	3,000	\$	18,000			
	Construction	on Conting	ency	ı (25%)	\$	61,613			
		Constru			\$	308,063			
	Engineering and Admi	nistration C	Costs	s (35%)	\$	86,258			
		Total P	roje	ct OPC	\$	390,000			
Project WW-1	10: Other Gravity Main Replacements								
Gravity Main	Install new 8" gravity main	410 LF	\$	144	\$	59,040			
Gravity Main	Install new 10" gravity main	2,780 LF	\$	180	\$	500,400			
Gravity Main	Install new 12" gravity main	680 LF	\$	216	\$	146,880			
Gravity Main	Install new 15" gravity main	470 LF	\$	270	\$	126,900			
Laterals	Replace sewer laterals	52 ls	\$	2,000	\$	104,000			
Manholes	Rehabilitate manholes	38 ls	\$	3,000	\$	114,000			
	Construction	on Conting	ency	(25%)	\$	262,805			
		Constru			\$	1,314,025			
	Engineering and Administration Costs (35%)								
Total Project OPC									
	TION SYSTEM CIP COST (ALTERNATIVE A)					12,370,000			
TOTAL COLLECT	TION SYSTEM CIP COST (ALTERNATIVE B)				\$	12,190,000			

(a) Costs shown are presented in September 2017 dollars based on an ENR CCI of 10,823 (20-city average).

Table F-5
Summary of Capital Improvement Projects

Project Number	Project	Timeframe	Addresses Modeled Surcharging in Existing Scenario		otal Project OPC (a)
Treatm	ent Facility Improvement Projects				
WWT-1	Lathrop CTP Expansion to 5.5 MGD	Long-Term Future		\$ 4	5,000,000 (c)
Collection	on System Improvement Projects				
WW-1	Stonebridge Gravity Main Replacement and Parallel Force Main Project	Existing (b)	Yes	\$	1,200,000
WW-2A	Woodfield West Deficiency Project - Alternative A	Existing (b)	No	\$	2,370,000
WW-2B	Woodfield West Deficiency Project - Alternative B	Existing (b)	No	\$	2,190,000
WW-3	Woodfield Pump Station Upgrade	Existing (b)	No	\$	320,000
WW-4	Woodfield East Gravity Main Replacement Project	Existing	No	\$	770,000
WW-5	J Street Gravity Main Replacement Project	Existing (b)	Yes	\$	1,330,000
WW-6	Easy Court / O Street Gravity Main Replacement Project	Existing (b)	Yes	\$	2,040,000
WW-7	Crossroads Gravity Main Replacement Project	Existing (b)	No	\$	1,640,000
WW-8	Golden Spike Trail Gravity Main Replacement Project	Existing (b)	No	\$	630,000
WW-9	McKee Boulevard Gravity Main Replacement Project	Existing	No	\$	390,000
WW-10	Other Gravity Main Replacements	Existing (b)	No	\$	1,680,000
	Collection System	CIP Cost Subtotal	\$ 12,190,000 -	\$	12,370,000
Miscella	nneous Collection System Projects				
WW-11	Installation of Permanent Flow Meters and Flow Monitoring			\$	100,000
		TOTAL CIP COST	\$ 57,290,000 -	\$	57,470,000

- (a) Costs shown are presented in September 2017 dollars based on an ENR CCI of 10,823 (20-city average).
- (b) Project addresses existing deficiencies, however future development influences recommended pipe or pump sizes to be installed.
- (c) Total project OPC consists of construction OPC developed based on a unit cost of \$9 per gallon additional ADWF capacity, 25% construction contingency, and 35% engineering and administration costs.



# APPENDIX G – Element 9 (Monitoring, Measurement and Program Modifications) Supporting Documents

- 1. SSMP Monitoring Tracking Sheet
- 2. SSMP Change Log

## **APPENDIX G – Element 9 (Monitoring, Measurement and Program Modifications)**

## CITY OF LATHROP SEWER SYSTEM MANAGEMENT PLAN MONITORING TRACKING SHEET

	2013	2014	2015	2016	2017
SSO Summary					
Total Number of SSOs	5	1	1	5	1
Total Volume of SSOs	2,570	100	100	2,360	5
Vol of SSO Contained and/or Returned	2,570	100	100	2,360	5
Vol of SSO Reached Surface Water	0	0	0	0	0
% of SSO Volume Contained and/or Returned	100%	100%	100%	100%	100%
% of SSO Volume Reaching Waters	0%	0%	0%	0%	0%
SSO by Cause					
Grease Deposition (FOG)	0	1	1	4	0
Debris	3	0	0	0	1
Capacity/Hydraulic Deficiency	0	0	0	0	0
Pump Station Failure	1	0	0	0	0
Other	1	0	0	1	0
SSO by Location					
Gravity Main SSO	4	1	1	5	1
Pump Station SSO	1	0	0	0	0
Force Main SSO	0	0	0	0	0
Maintenance Summary					
Length of Pipe Cleaned			10.8	15.7	7.9
Length of Pipe CCTV'ed				5	0.5

## CITY OF LATHROP SEWER SYSTEM MANAGEMENT PLAN CHANGE LOG

Date	SSMP Element /Section	Description of Change/Revision Made	Authorized By:
Feb 2018	Introduction	Updated system description and statistics in the City Service Area and Sewer System section.	G. Gibson
Feb 2018	1	Updated goals and condensed the number of goals.	G. Gibson
Feb 2018	2	<ul> <li>Updated the organization discussion in Section 2.3.</li> <li>Updated organization chart, contact information, and descriptions of general responsibilities in Appendix A.</li> <li>Added Table A-2, list of staff responsible for SSMP elements.</li> <li>Updated SSO chain of communication and moved to the OERP in Appendix D.</li> <li>Added City Manager, CDPH, CDF&amp;G, SSJID to Table 2-1, officials receiving immediate notification of SSO per the OERP. Revised the circumstance for immediate notification to Cal OES to be consistent with the MRP</li> </ul>	G. Gibson
Feb 2018	3	<ul> <li>Updated the Sewer Use Ordinance ERP and the FOG ERP.</li> <li>Removed code sections from appendix and included link to City's website.</li> <li>Added the City's CPC adoption in the Municipal Code discussion in Section 3.3. Updated "Prevention of Illicit Discharges" and "Enforcement Measures" discussions.</li> </ul>	G. Gibson
Feb 2018	4	<ul> <li>Updated the collection system map discussion to reflect current City practices using a GIS database in Section 4.3.</li> <li>Updated O&amp;M activities and confirmed maintenance frequencies in Section 4.4.</li> <li>Added a description of the SEMS asset management software to Section 4.5 and added a link to City's five-year CIP.</li> <li>Added details regarding training programs in the training discussion in Section 4.6.</li> </ul>	G. Gibson

Date	SSMP Element /Section	Description of Change/Revision Made	Authorized By:
Feb 2018	5	<ul> <li>Updated information regarding the 2014 Design and Construction Standards update and provided a link to the 2014 Design and Construction Standards. Removed Appendix D.</li> <li>Updated description regarding the role of the Senior Construction Inspector.</li> </ul>	G. Gibson
Feb 2018	6	Updated the SSO categories in the OERP discussion to match the OERP attached and the MRP.	G. Gibson
Feb 2018	OERP	<ul> <li>Made editorial changes to the OERP.</li> <li>Added description of responses to private lateral blockages.</li> <li>Added discussion of responses to overflows at the treatment plant.</li> <li>Edited description of Category 1 SSO to be consistent with the MRP.</li> <li>Added details regarding notification to internal managers to be consistent with Table 2-1.</li> <li>Added a SSO Reporting Chain of Communication flow chart.</li> <li>Updated OERP contact information.</li> </ul>	G. Gibson
Feb 2018	7	<ul> <li>Updated Table E-1, list of food service facilities in Lathrop and added Figure E-1, location of food service facilities in Lathrop.</li> <li>Removed FOG program sample forms from Appendix E as they are attached in the FOG ERP in Appendix B.</li> <li>Added a FOG disposal plan discussion in Section 7.3.</li> <li>Added information on FOG program education conducted during inspection and enforcement.</li> </ul>	G. Gibson
Feb 2018	8	Updated Element 8 to reflect findings from the City's recent (2018) Wastewater System Master Plan update and included additional tables and figures in Appendix F.	G. Gibson
Feb 2018	9	Updated SSMP monitoring parameters and the monitoring template in Appendix G.	G. Gibson
Feb 2018	10	Added a template SSMP program audit form in Appendix H.	G. Gibson

# **APPENDIX G – Element 9 (Monitoring, Measurement and Program Modifications)**

Date	SSMP Element /Section	Description of Change/Revision Made	Authorized By:
Jun 2016	2	Updated staff contact information and organization chart in Appendix A.	G. Gibson
Jun 2016	6	Updated SSO contact information.	G. Gibson
Jun 2013	2	Updated staff contact information and organization chart in Appendix A.	G. Gibson
Jun 2013	6	Updated SSO contact information.	G. Gibson

# APPENDIX H – Element 10 (SSMP Program Audits) Supporting Documents

- 1. Blank SSMP Program Audit Form
- 2. Completed SSMP Program Audits

City of Lathrop			
	Sewer System Management Plan Audit Report		
	through		
	e: pared by: iewed by:		
	purpose of the SSMP Audit is to evaluate the effectiveness of the City of MP and to identify any need for improvement.	Lathrop's (City's)	
	ections: Please check YES or NO for each question. If No is answered to a cribe the updates/changes and the timeline to complete those changes.	any question,	
INI	RODUCTION		
A.	Is the current system description complete and up-to-date? Are infrastructure statistics current and complete?	YES NO	
Disc	cussion/Deficiencies/Corrective Actions:		
ELI	EMENT 1 – GOALS		
A.	Are the goals stated in the SSMP still appropriate and current?	YES NO	
Disc	cussion/Deficiencies/Corrective Actions:		
ELI	EMENT 2 – ORGANIZATION		
A.	Is the Organization Chart in Figure A-1 of the SSMP current??	YES NO	
B.	Are the position descriptions an accurate portrayal of staff responsibilities?	YES NO	
C.	Is the chain of communication for reporting and responding to SSOs accurate and up-to-date?	YES NO	
D.	Is the contact information in Table A-1 current?	YES NO	
E.	Is the List of City Staff Responsible for SSMP in Table A-2 current?	YES NO	
Disc	cussion/Deficiencies/Corrective Actions:		
ELI	EMENT 3 – LEGAL AUTHORITY		
	es the SSMP contain current references to the Lathrop Municipal Code door's legal authority to:	cumenting the	

A.	Prevent illicit discharges?	YES NO			
B.	Require proper design and construction of sewers and connections?	YES NO			
C.	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the City?	YES NO			
D.	Limit discharges of fats, oils, and grease?	YES NO			
E.	Enforce any violation of its sewer ordinances?	YES NO			
F.	Were any changes or modifications made in the past two years (this audit period) to City Sewer Ordinances, Regulations, or standards?	(discuss below)			
Disc	cussion/Deficiencies/Corrective Actions:				
ELI	EMENT 4 – OPERATIONS AND MAINTENANCE				
Coll	lection System Maps				
A.	Does the SSMP reference the current process and procedures for maintaining the City's sewer system maps?	YES NO NO			
B.	Are the City's collection system maps complete, up-to-date, and sufficiently detailed?	YES NO			
Prev	ventative Maintenance				
C.	Does the SSMP describe current preventative maintenance activities and the system for prioritizing the cleaning of sewer lines?	YES NO NO			
D.	Are the City's preventive maintenance activities sufficient and effective in reducing and preventing SSOs and blockages?	YES NO			
Reh	abilitation and Replacement Plan				
E.	Is there an ongoing condition assessment program sufficient to rank the condition of sewer pipes and schedule rehabilitation? Are the current components of this program documented in the SSMP?	YES NO			
F.	Are scheduled inspections and the condition assessment system effective in identifying, prioritizing, and addressing deficiencies?	YES NO NO			
G.	Does the rehabilitation and replacement plan include a capital improvement plan that addresses proper management and protection of the infrastructure assets? Does the plan include a time schedule for implementing the short and long-term plans plus a schedule for developing the funds needed for the capital improvement plan?	YES NO			
Trai	Training				
H.	Does the SSMP document current training expectations and programs?	YES NO			
I.	Do supervisors believe their staff are sufficiently trained?	YES NO			
J.	Are the training records current?	YES NO			
Equ	Equipment and Replacement Part Inventories				

K.	Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system?	YES NO
L.	Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?	YES NO
Dis	cussion/Deficiencies/Corrective Actions:	
EL	EMENT 5 – DESIGN AND PERFORMANCE PROVISIONS	
A.	Does the SSMP reference current design and construction standards for the installation of new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sanitary sewer systems?	YES NO
B.	Does the SSMP document current procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and the rehabilitation and repair of existing sewer lines?	YES NO
Dis	cussion/Deficiencies/Corrective Actions:	
EL	EMENT 6 – OVERFLOW EMERGENCY RESPOSNE PLAN	
A.	Does the City's Overflow Emergency Response Plan (OERP) contain proper notification procedures so that the primary responders and regulatory agencies are informed of all sanitary sewer overflows (SSOs) as required by the WDR and MRP?	YES NO
B.	Does the OERP have a program to ensure an appropriate response to all overflows?	YES NO NO
C.	Does the OERP contain procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities of all SSOs that potentially affect public health or reach waters of the State in accordance with the MRP? Does the SSMP identify the officials who will receive immediate notification of such SSOs?	YES NO
D.	Are staff and contractor personnel aware of and appropriately trained on the procedures of the OERP?	YES NO
E.	Does the OERP contain procedures to address emergency operations such as traffic and crowd control and other necessary response activities?	YES NO
F.	Does the OERP ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge?	YES NO

G.	Considering SSO performance data, is the OERP effective in handling SSOs in order to safeguard public health and the environment?	YES NO			
H.	Is the Water Quality Monitoring Plan current and has it been trained on and practiced by staff that would be involved in a SSO of large volume?	YES NO			
I.	If applicable, was sampling performed within 48 hours for all SSOs greater than 50,000 gallons and was a Technical Report prepared and filed on the CIWQS website?	YES NO			
Disc	cussion/Deficiencies/Corrective Actions:				
EL	EMENT 7 – FATS, OILS, AND GREASE (FOG) CONTROL PROGE	RAM			
A.	Does the FOG Control Program include a description of public education outreach efforts that promote proper handling and disposal of FOG?	YES NO			
B.	Does the FOG program include a plan for the disposal of FOG generated within the sewer system service area?	YES NO			
C.	Does the City have sufficient legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG?	YES NO			
D.	Are there requirements to install grease removal devices (such as traps or interceptors), best management practices (BMP) requirements, record keeping, maintenance requirements and reporting requirements established in the City's FOG Control Program?	YES NO			
E.	Does the City have authority to inspect grease producing facilities and have sufficient staff to inspect and enforce the FOG ordinance?	YES NO			
F.	Does the FOG control program identify sections of the collection system subject to FOG blockages, establish a cleaning schedule and address source control measures to minimize these blockages?	YES NO			
G.	Does the FOG control program implement source control measures for all sources of FOG discharged to the collection system?	YES NO NO			
H.	Is the current FOG program effective in minimizing blockages of sewer lines resulting from discharges of FOG to the system?	YES NO			
Dis	cussion/Deficiencies/Corrective Actions:				
EL	ELEMENT 8 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN				
A.	Does the System Evaluation and Capacity Assurance Plan evaluate hydraulic deficiencies in the system and provide estimates of peak	YES NO NO			

	flows associated with conditions similar to those causing overflow events, if applicable?	
B.	Does the City take steps needed to establish a short and long-term CIP to address hydraulic deficiencies, including prioritization, alternatives analysis, and schedules? Are repair and replacement projects developed based upon condition assessment and/or field maintenance results?	YES NO
C.	Does the City's capital improvement program (CIP) establish a schedule of approximate completion dates for both short-term and long-term improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity accomplishment?	YES NO
Disc	cussion/Deficiencies/Corrective Actions:	
	EMENT 9 – MONITORING, MEASUREMENT, AND PROGRAM DIFICATIONS	
A.	Does the City maintain relevant information that can be used to establish and prioritize appropriate SSMP activities?	YES NO
B.	Does the SSMP identify and illustrate SSO trends, including frequency, location and volume of SSOs?	YES NO
C.	Is the City able to sufficiently evaluate the effectiveness of the SSMP elements based on relevant information?	YES NO
D.	Does the City update program elements, as appropriate, based upon monitoring or performance evaluations?	YES NO
Disc	cussion/Deficiencies/Corrective Actions:	
ELI	EMENT 10 – SSMP PROGRAM AUDITS	
A.	Does the audit focus on the effectiveness of the SSMP?	YES NO
B.	Was the SSMP Audit completed, reviewed, and filed as an Appendix to the SSMP on a biennial basis?	YES NO
Disc	cussion/Deficiencies/Corrective Actions:	
ELI	EMENT 11 – COMMUNICATION PROGRAM	
A.	Does the City communicate on a regular basis with the public and other agencies about the development and implementation of the SSMP?  Does the communication system provide the public the opportunity to provide input as the program is developed and implemented?	YES NO

# **APPENDIX H – Element 10 (SSMP Program Audits)**

Discussion/Deficiencies/Corrective Actions:					
CH	IANGE LOG				
A.	Is the SSMP Change Log current and up-to-date?	YES NO			
Disc	Discussion/Deficiencies/Corrective Actions:				

City of Lathrop Sewer System Management Plan Audit Report 2016 through 2017

Date: 5 March 2018

Prepared by: Tina Wang, P.E., EKI Environment & Water, Inc.

Jonathan Sutter, P.E., EKI Environment & Water, Inc.

Reviewed by: Greg Gibson, P.E., City of Lathrop

Milton Daley, City of Lathrop

The purpose of the SSMP Audit is to evaluate the effectiveness of the City of Lathrop's (City's) SSMP and to identify any need for improvement.

Directions: Please check YES or NO for each question. If No is answered to any question, describe the updates/changes and the timeline to complete those changes.

-				
INT	TRODUCTION			
A.	Is the current system description complete and up-to-date? Are infrastructure statistics current and complete?	YES ⊠ NO□		
Disc	cussion/Deficiencies/Corrective Actions:			
The	The system description and infrastructure statistics reflect current conditions.			
EL	EMENT 1 – GOALS			
A.	Are the goals stated in the SSMP still appropriate and current?	YES ⊠ NO□		
Disc	cussion/Deficiencies/Corrective Actions:			
Goals are appropriate and the City monitors results relevant to their goals.				
EL	ELEMENT 2 – ORGANIZATION			
A.	Is the Organization Chart in Figure A-1 of the SSMP current?	YES ⊠ NO□		
B.	Are the position descriptions an accurate portrayal of staff responsibilities?	YES ⊠ NO□		
C.	Is the chain of communication for reporting and responding to SSOs accurate and up-to-date?	YES ⊠ NO□		
D.	Is the contact information in Table A-1 current?	YES ⊠ NO□		
E.	Is the List of City Staff Responsible for SSMP in Table A-2 current?	YES ⊠ NO□		
Disc	Discussion/Deficiencies/Corrective Actions:			
No changes were needed for this element as the City's organizational chart and staff responsibilities are up-to-date.				

EL	EMENT 3 – LEGAL AUTHORITY	
	es the SSMP contain current references to the Lathrop Municipal Code docu il authority to:	imenting the City's
A.	Prevent illicit discharges?	YES ⊠ NO□
B.	Require proper design and construction of sewers and connections?	YES ⊠ NO□
C.	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the City?	YES ⊠ NO□
D.	Limit discharges of fats, oils, and grease?	YES ⊠ NO□
E.	Enforce any violation of its sewer ordinances?	YES ⊠ NO□
F.	Were any changes or modifications made in the past two years (this audit period) to City Sewer Ordinances, Regulations, or standards?	(discuss below)
aspe	changes were made to the Lathrop Municipal Code that affects any of ects of the SSMP.  EMENT 4 – OPERATIONS AND MAINTENANCE	the legal authority
	lection System Maps	VEC NO
A.	Does the SSMP reference the current process and procedures for maintaining the City's sewer system maps?	YES ⊠ NO□
B.	Are the City's collection system maps complete, up-to-date, and sufficiently detailed?	YES ⊠ NO□
Prev	ventative Maintenance	
C.	Does the SSMP describe current preventative maintenance activities and the system for prioritizing the cleaning of sewer lines?	YES ⊠ NO□
D.	Are the City's preventive maintenance activities sufficient and effective in reducing and preventing SSOs and blockages?	YES ⊠ NO□
Reh	abilitation and Replacement Plan	
E.	Is there an ongoing condition assessment program sufficient to rank the condition of sewer pipes and schedule rehabilitation? Are the current components of this program documented in the SSMP?	YES ⊠ NO□
F.	Are scheduled inspections and the condition assessment system effective in identifying, prioritizing, and addressing deficiencies?	YES ⊠ NO□
G.	Does the rehabilitation and replacement plan include a capital improvement plan that addresses proper management and protection of the infrastructure assets? Does the plan include a time schedule for implementing the short and long-term plans plus a schedule for developing the funds needed for the capital improvement plan?	YES ⊠ NO□

Trai	Training			
H.	Does the SSMP document current training expectations and programs?	YES ⊠ NO□		
I.	Do supervisors believe their staff are sufficiently trained?	YES ⊠ NO□		
J.	Are the training records current?	YES ⊠ NO□		
Equ	Equipment and Replacement Part Inventories			
K.	Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system?	YES ⊠ NO□		
L.	Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?	YES 🖾 NO		

#### **Discussion/Deficiencies/Corrective Actions:**

City's system maps are updated regularly. The preventative maintenance program descriptions were recently updated to reflect current practices. As shown in the SSO Performance Summary, below, the City has a small number and volume of SSOs yearly, which is indicative of an effective maintenance program in preventing SSOs and blockages.

The City has reviewed pipe cleaning and manhole inspection statistics for the past five years and re-assessed the cleaning frequency goal. The biennial cleaning goal has been over-aggressive for the City's staff resources, as the City was only able to achieve cleaning of approximately 21% of the collection system annually during the audit period (i.e., an annual average of 12 miles out of 56 miles of gravity mains<sup>1</sup>). Considering the current rate of cleaning appears to be effective in preventing SSOs and blockages, the City has decided to adjust the goal to complete a cleaning and inspection cycle of every five years<sup>2</sup>, with more frequent cleaning of problem areas every two or three months. Therefore, it is recommended that (1) the City target pipe cleaning and manhole inspection for approximately one-third of the City's sewer main mileage each year, (2) develop a formal cleaning schedule, such as a map dividing the City to designated areas for annual cleaning and illustrating problem areas for frequent cleaning, and (3) continue to maintain accurate records.

The City prioritizes rehabilitation and replacement using its own rating system based on inspections during system flushing and CCTV inspections. During the audit period, the City CCTV'ed approximately 9% of gravity mains during 2016, and 1% during 2017. Similar to the pipe cleaning and manhole inspection program, the City has decided to adjust the annual CCTV goal from 20% to 10% of the system in consideration of staff resources and that the national average was approximately 7%<sup>3</sup>. The City may consider adopt a national standard rating system, such as the PACP system developed by NASSCO, to score the condition of its asset.

Training on equipment and system operation is conducted on a regular basis. Training records are

<sup>&</sup>lt;sup>1</sup> The City currently has 72 miles of gravity mains, while only 56 miles were built before 2016.

<sup>&</sup>lt;sup>2</sup> Per U.S. EPA's "Guide for Evaluating CMOM Programs at Sanitary Sewer Collection Systems", newer PVC systems with no significant grease contribution and reasonable slopes may last five years without cleaning with no problems.

<sup>&</sup>lt;sup>3</sup> ASCE, 1999. Optimization of Collection System Maintenance Frequencies and System Performance.

	ntained at the Public Works Department. The City maintains an equipment edules maintenance using a CMMS system.	t inventory list and		
ELEMENT 5 – DESIGN AND PERFORMANCE PROVISIONS				
A.	Does the SSMP reference current design and construction standards for the installation of new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sanitary sewer systems?	YES ⊠ NO□		
В.	Does the SSMP document current procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and the rehabilitation and repair of existing sewer lines?	YES ⊠ NO□		
Disc	cussion/Deficiencies/Corrective Actions:			
	changes were needed as the City's design and performance standards are cuaccurately reflected in the existing SSMP.	urrent, appropriate,		
ELI	EMENT 6 – OVERFLOW EMERGENCY RESPOSNE PLAN			
A.	Does the City's Overflow Emergency Response Plan (OERP) contain proper notification procedures so that the primary responders and regulatory agencies are informed of all sanitary sewer overflows (SSOs) as required by the WDR and MRP?	YES ⊠ NO□		
B.	Does the OERP have a program to ensure an appropriate response to all overflows?	YES ⊠ NO□		
C.	Does the OERP contain procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities of all SSOs that potentially affect public health or reach waters of the State in accordance with the MRP? Does the SSMP identify the officials who will receive immediate notification of such SSOs?	YES ⊠ NO□		
D.	Are staff and contractor personnel aware of and appropriately trained on the procedures of the OERP?	YES 🖾 NO		
E.	Does the OERP contain procedures to address emergency operations such as traffic and crowd control and other necessary response activities?	YES 🖾 NO		
F.	Does the OERP ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge?	YES ⊠ NO□		
G.	Considering SSO performance data, is the OERP effective in handling SSOs in order to safeguard public health and the environment?	YES ⊠ NO□		

H.	Is the Water Quality Monitoring Plan current and has it been trained on and practiced by staff that would be involved in a SSO of large volume?	YES ⊠ NO□
I.	If applicable, was sampling performed within 48 hours for all SSOs greater than 50,000 gallons and was a Technical Report prepared and filed on the CIWQS website?	YES ☐ NO☐ NA ⊠
Disc	cussion/Deficiencies/Corrective Actions:	
been Sum retur and	OERP is current and addresses WDR requirements for emergency responsactively referring to the OERP when responding to SSOs. As shown in the amary, below, the SSOs that occurred during the past five years were 100% rned. All SSOs were reported to appropriate regulatory agencies within uploaded to CIWQS. There has not been a major SSO requiring water satt period (i.e., all SSOs were less than 50,000 gallons).	e SSO Performance % contained and/or required timelines
ELF	EMENT 7 – FATS, OILS, AND GREASE (FOG) CONTROL PROGE	RAM
A.	Does the FOG Control Program include a description of public education outreach efforts that promote proper handling and disposal of FOG?	YES ⊠ NO□
B.	Does the FOG program include a plan for the disposal of FOG generated within the sewer system service area?	YES 🗌 NO🖂
C.	Does the City have sufficient legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG?	YES ⊠ NO□
D.	Are there requirements to install grease removal devices (such as traps or interceptors), best management practices (BMP) requirements, record keeping, maintenance requirements and reporting requirements established in the City's FOG Control Program?	YES ⊠ NO□
E.	Does the City have authority to inspect grease producing facilities and have sufficient staff to inspect and enforce the FOG ordinance?	YES ⊠ NO□
F.	Does the FOG control program identify sections of the collection system subject to FOG blockages, establish a cleaning schedule and address source control measures to minimize these blockages?	YES ⊠ NO□
G.	Does the FOG control program implement source control measures for all sources of FOG discharged to the collection system?	YES ⊠ NO□
Н.	Is the current FOG program effective in minimizing blockages of sewer lines resulting from discharges of FOG to the system?	YES ⊠ NO□
Disc	cussion/Deficiencies/Corrective Actions:	
exce requ	City has a comprehensive FOG Control Program that addresses all requireption of a FOG disposal plan. The City itself does not generate or distires all FSEs to maintain copies of grease trap pumping transport manifests lable for City inspection.	spose any FOG; it

As shown in the SSO Performance Summary, below, the major cause for SSOs in the City is FOG. Frequency of FOG-related SSOs varied from none to four incidences per year over the past five years. Although the City has recently had a small number of SSOs each year, it is important that the City continue to enforce the FOG program and frequently clean grease problem areas to prevent future SSOs. The City currently does not have a formal procedure for obtaining and reviewing inspection reports from the Pretreatment Coordinator (VWNA). It is recommended that the City develop a formal process for coordinating with VWNA to regularly review FSE inspection reports and incorporate the coordination procedure into the ERP.

ELEMENT 8 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN					
A.	Does the System Evaluation and Capacity Assurance Plan evaluate hydraulic deficiencies in the system and provide estimates of peak flows associated with conditions similar to those causing overflow events, if applicable?	YES ⊠ NO□			
В.	Does the City take steps needed to establish a short and long-term CIP to address hydraulic deficiencies, including prioritization, alternatives analysis, and schedules? Are repair and replacement projects developed based upon condition assessment and/or field maintenance results?	YES ⊠ NO□			
C.	Does the City's capital improvement program (CIP) establish a schedule of approximate completion dates for both short-term and long-term improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity accomplishment?	YES ⊠ NO□			
Discussion/Deficiencies/Corrective Actions:  The City's system evaluation and capacity assurance plan reflects conclusions from the City's recent Wastewater System Master Plan update. There have been no SSOs caused by hydraulic deficiencies within the past five years.					
	EMENT 9 – MONITORING, MEASUREMENT, AND PROGRAM DIFICATIONS				
A.	Does the City maintain relevant information that can be used to establish and prioritize appropriate SSMP activities?	YES 🖾 NO			
B.	Does the SSMP identify and illustrate SSO trends, including frequency, location and volume of SSOs?	YES 🖾 NO			
C.	Is the City able to sufficiently evaluate the effectiveness of the SSMP elements based on relevant information?	YES ⊠ NO□			
D.	Does the City update program elements, as appropriate, based upon monitoring or performance evaluations?	YES ⊠ NO□			

Disc	cussion/Deficiencies/Corrective Actions:		
estal this	City maintains relevant information, including SSO information and oblish and prioritize appropriate SSMP activities. Additional analyses were SSMP audit to evaluate the effectiveness of the SSMP. It is recommendate to track and illustrate the number of SSOs by cause, volumes, and volumes to track and illustrate the number of SSOs by cause, volumes, and volumes to track and illustrate the number of SSOs by cause, volumes, and volumes to track and illustrate the number of SSOs by cause, volumes, and volumes to track and illustrate the number of SSOs by cause, volumes, and volumes to track and illustrate the number of SSOs by cause, volumes, and volumes to track and illustrate the number of SSOs by cause, volumes, and volumes to track and illustrate the number of SSOs by cause, volumes, and volumes to track and illustrate the number of SSOs by cause, volumes, and volumes to track and illustrate the number of SSOs by cause, volumes, and volumes to track and illustrate the number of SSOs by cause, volumes, and volumes to track and illustrate the number of SSOs by cause, volumes to track and illustrate the number of SSOs by cause, volumes, and volumes to track and illustrate the number of SSOs by cause the number of SSOs by cause, volumes to track and illustrate the number of SSOs by cause the number o	performed during nded that the City	
ELF	EMENT 10 – SSMP PROGRAM AUDITS		
A.	Does the audit focus on the effectiveness of the SSMP?	YES ⊠ NO□	
B.	Was the SSMP Audit completed, reviewed, and filed as an Appendix to the SSMP on a biennial basis?	YES 🗌 NO🖂	
Disc	cussion/Deficiencies/Corrective Actions:		
the (	IP audits were not conducted at the required biennial frequency prior to the City has completed, reviewed, and filed this SSMP audit for 2016-2017 re audits every two years. The last three audit reports will be retained as IP.	and will perform	
ELF	EMENT 11 – COMMUNICATION PROGRAM		
A.	Does the City communicate on a regular basis with the public and other agencies about the development and implementation of the SSMP? Does the communication system provide the public the opportunity to provide input as the program is developed and implemented?	YES NO	
Disc	cussion/Deficiencies/Corrective Actions:		
	current SSMP and appendices are available at City Hall for public municates regularly with the City of Manteca per the Interjurisdictional S		
CH	ANGE LOG		
A.	Is the SSMP Change Log current and up-to-date?	YES ⊠ NO□	
Disc	cussion/Deficiencies/Corrective Actions:		
The change log is current and notes the major changes made during the SSMP update.			

## **Summary of Recommendations:**

This audit finds the City to be in general compliance with the WDR. Based on findings of the audit, a summary of recommendation to further optimize system performance is provided below:

• Target pipe cleaning and manhole inspection for approximately one-third of the City's sewer main mileage each year;

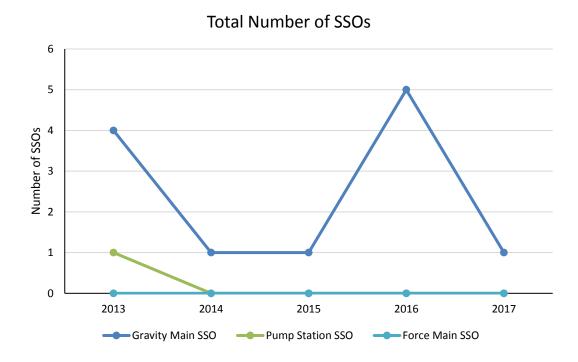
- Develop a formal cleaning schedule, such as a map dividing the City to designated areas for annual cleaning and illustrating problem areas for frequent cleaning;
- Consider adopt a national standard rating system, such as the PACP system developed by NASSCO, to score the condition of pipes and manholes; and
- Develop a formal process for coordinating with VWNA to regularly review FSE inspection reports and incorporate the coordination procedure into the ERP.

#### SSO PERFORMANCE SUMMARY, 2013 – 2017

The charts and tables below summarizes SSO trends over the past five years (2013-2017) based on SSO data reported to the SWRCBs California Integrated Water Quality System (CIWQS).

The City's average SSO rate at 3.61 SSOs/100 miles/year is below the regional average (Region 5) at 8.76 SSOs/100 miles/year and the State average at 4.01 SSOs/100 miles/year<sup>4</sup>. The City's SSO rate remained low during the past five years, which some fluctuation in the number of occurrences from year to year. The volume of City's SSOs was very low, around 2,500 gallons in 2013 and 2016, and less than 100 gallons in 2014, 2015, and 2017. All SSO volumes were recovered and returned to the sewer system. The cause of the City's SSOs were mainly FOG and debris. A total of 13 SSOs occurred between 2013 and 2017, among which six were due to FOG deposition and four were due to debris.

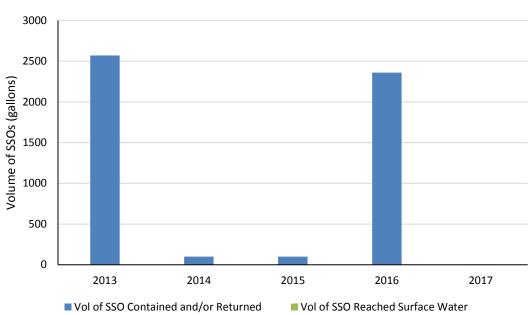
These data indicate that the City has effectively addressed factors that cause SSOs and has effectively responded to SSOs that have occurred. The City has also been successful in protecting public health and private property in recovering as much SSO volume as possible.



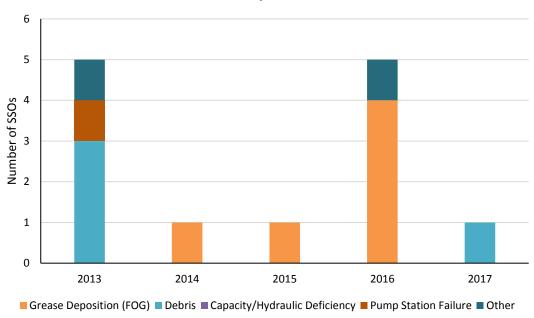
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<sup>&</sup>lt;sup>4</sup> The California Water Boards' Annual Performance Report - Fiscal Year 2015-16. https://www.waterboards.ca.gov/about\_us/performance\_report\_1516/plan\_assess/12411\_sso\_sewa\_ge\_volume.shtml accessed 24 January 2018.





# SSO by Cause



# APPENDIX I – Element 11 (Communication Program) Supporting Documents

1. Copy of Public Notifications Posted on City's Website

# Public Notification Sewer System Management Plan

The State Water Resources Control Board has issued Order No. 2006-0003 known as "Statewide General WDR (*Waste Discharge Requirements*) For Wastewater Collection Agencies.

#### The order states that:

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

To facilitate proper funding and management of sanitary sewer systems, each Enrollee must develop and implement a system-specific Sewer System Management Plan (SSMP). To be effective, SSMPs must include provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and cost benefit analysis. Additionally, an SSMP must contain a spill response plan that establishes standard procedures for immediate response to an SSO in a manner designed to minimize water quality impacts and potential nuisance conditions. One of the requirements of the SSMP is that each Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. This communication system shall provide the public the opportunity to provide input to the collection system agency as the program is developed and implemented.

The City of Lathrop will complete its draft SSMP in May 2009, and plans to complete the final SSMP in July 2009. The draft SSMP is available for public review and comment on the City's website at the following address:

#### http://www.lathropgov.org/pwd/ssmp

Please provide any questions or comments regarding you may have regarding the City's SSMP to:

Greg Gibson Senior Civil Engineer City of Lathrop Public Works Dept. 390 Towne Centre Drive Lathrop, CA 95530

(209) 941-7430 office (209) 941-7442 direct (209) 941-7449 fax

e-mail: ggibson@ci.lathrop.ca.us

# Public Notification Sewer System Management Plan, 2018 Update

The State Water Resources Control Board has issued Order No. 2006-0003 known as "Statewide General WDR (*Waste Discharge Requirements*) For Wastewater Collection Agencies". The order requires the City to develop and implement a system-specific Sewer System Management Plan (SSMP) to facilitate proper funding and management of sanitary sewer systems. One of the requirements of the SSMP is that the City shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP.

The City of Lathrop is reviewing its existing SSMP and considering revisions to the document. The City plans to complete the update and recertify the SSMP in March 2018. A draft 2018 update to the SSMP is available for public review and comment on the City's website at the following address:

#### http://www.lathropgov.org/pwd/ssmp

Please provide any questions or comments regarding you may have regarding the City's SSMP update to:

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