City of Manteca
Sewer System Management Plan

4 April 2014

Prepared for

City of Manteca
1001 W. Center Street
Manteca, CA 95337

Prepared by

Kennedy/Jenks Consultants
10850 Gold Center Drive, Suite 350
Rancho Cordova, CA 95670

K/J Project No. 1270003.00

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Abbreviations and Acronyms

ARV	air release valves
AVRV	air/vacuum release valve
BMP	best management practices
CCTV	closed circuit television
CIP	Capital Improvement Plan or Capital Improvement Program
CIPP	Capital Improvement Projects Plan
City	City of Manteca
CIWQS	California Integrated Water Quality System
CMMS	Computerized Management and Maintenance System
CWEA	California Water Environment Association
DEH	Department of Environmental Health
FOG	fats, oils and grease
FTE	full-time equivalent
gal	gallon
GIS	Geographic Information System
gpm	gallons per minute
HAZMAT	hazardous materials
hp	horse power
I/I	infiltration and inflow
mgd	million gallons per day
MRP	Monitoring and Reporting Program
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
O&M	operation and maintenance
OES	Office of Emergency Services
OSHA	Occupational Safety and Health Administration
PFIP	Public Facilities Implementation Plan
PLSD	private lateral sewage discharge
PM	preventative maintenance
RWQCB	Regional Water Quality Control Board
SCADA	supervisory control and data acquisition
SSMP	Sewer System Management Plan

SSO	sanitary sewer overflow
SSORP	Sanitary Sewer Overflow Response Plan
SWRCB	State Water Resources Control Board
TV	television
U.S.	United States
URPS	Union Road Pump Station
VFD	variable frequency drive
WDR	Waste Discharge Requirement
WQCF	Wastewater Quality Control Facility

Executive Summary

The City of Manteca (City) is currently operating under Waste Discharge Requirement (WDR) Order No. R5-2009-0095 and National Pollutant Discharge Elimination System (NPDES) Permit CA0081558. Special Provision VII.B.5.c of this WDR/NPDES requires the City to submit a Sewer System Management Plan (SSMP). The State Water Resources Control Board (SWRCB) has developed a statewide general WDR whose provisions also require all publicly-owned wastewater dischargers with a collection system greater than one-mile in length develop a SSMP. As the SWRCB adopted the new statewide general WDR in May 2006, this SSMP has been prepared in accordance with the SWRCB WDRs.

Table ES-1 below summarizes where the specific SWRCB WDRs are addressed in the following sections of this SSMP report.

Table ES-1: Waste Discharge Requirements

WDR Section	WDR Description	SSMP Section
D.13.ii.a	The name of the responsible or authorized representative as described in Section J of this Order.	2.2
D.13.ii.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	Attachment V of Appendix A & Figure 2-2 in Section 2.2
D.13.ii.c	The chain of communication for reporting sanitary sewer overflows (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 [OES]).	Figure 1 in Appendix A
D.13.iii.a	Prevent illicit discharges into its sanitary sewer system (examples may include infiltration and inflow [I/I], stormwater, chemical dumping, unauthorized debris and cut roots, etc.);	5.1
D.13.iii.b	Require that sewers and connections be properly designed and constructed;	5.3
D.13.iii.c	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;	5.5
D.13.iii.d	Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and	5.6
D.13.iii.e	Enforce any violation of its sewer ordinances.	5.7
D.13.iv.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 stormwater conveyance facilities;	6.1

WDR Section	WDR Description	SSMP Section
D.13.iv.b	Describe routine preventive operation and maintenance (O&M) 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;	6.3
D.13.iv.c	Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and television (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 (CIP) 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 CIP	6.8
D.13.iv.d	Provide training on a regular basis for staff in sanitary sewer system O&M, and require contractors to be appropriately trained; and	6.5 & 6.6
D.13.iv.e	Provide equipment and replacement part inventories, including identification of critical replacement parts.	6.4
D.13.v.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	7.1
D.13.v.b	Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.	7.2
D.13.vi.a	Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;	Appendix A
D.13.vi.b	A program to ensure an appropriate response to all overflows;	Appendix A
D.13.vi.c	Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g., health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the Monitoring and Reporting Program (MRP). All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;	Appendix A
D.13.vi.d	Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;	6.5 & Appendix A
D.13.vi.e	Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and	Appendix A

WDR Section	WDR Description	SSMP Section
D.13.vi.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 (U.S.) 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.	Appendix A
D.13.vii.a	An implementation plan and schedule for a public education outreach program that promotes proper disposal of fats, oils and grease (FOG);	4.5
D.13.vii.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;	4.2
D.13.vii.c	The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;	4.4
D.13.vii.d	Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, Best Management Practices (BMP) requirements, record keeping and reporting requirements;	4.2
D.13.vii.e	Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;	4.3
D.13.vii.f	An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and	4.1
D.13.vii.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.	4.2
D.13.viii.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;	Section 8
D.13.viii.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	Section 8 and 7.1
D.13.viii.c	Capacity Enhancement Measures: The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe 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.	Section 8 & 6.8
D.13.viii.d	Schedule: The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program (CIP) 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.	6.8

WDR Section	WDR Description	SSMP Section
D.13.ix.a	Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;	9.1
D.13.ix.b	Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;	9.1
D.13.ix.c	Assess the success of the PM program;	9.3
D.13.ix.d	Update program elements, as appropriate, based on monitoring or performance evaluations; and	9.2
D.13.ix.e	Identify and illustrate SSO trends, including: frequency, location, and volume.	Appendix E and Figure 2-1
D.13.x	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.	9.3
D.13.xi	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.	10.1.1

The City's current O&M procedures, are largely informal with minimal written procedures and documentation. Throughout this document recommendations will be made for the City to formalize their programs with references of examples in Appendix C. A summary of the recommendations made in the 2006 SSMP are listed below with an update as to whether the recommendation is still warranted for this 2014 SSMP. For the recommendations that are still warranted they are further described throughout the SSMP.

Table ES-2: Summary of Recommendations

2006 Recommendation	2014 SSMP Update	SSMP Section
Staffing Workload Evaluation	Recommendation is still warranted as staffing will need to be continually evaluated with changes in organization structure, population growth in the City and maintenance activities.	2.3.1
Tracking and Recording SSOs	The City is recording and tracking their SSOs; therefore, this recommendation is no longer warranted.	N/A
Reporting	The City is currently reporting their SSOs per the SWRCB WDR requirements; therefore, this recommendation is no longer warranted.	N/A
Database Objective	Recommendation is still warranted as the City is initiating the use of the Computerized Management and Maintenance System (CMMS) and will be populating with data in order to assist the objectives described in the recommendation.	3.2.1
FOG Program	The City updated and adopted the Industrial Waste Ordinance, which includes FOG Control component; therefore, the recommendation has been fulfilled and no longer warranted.	N/A
Pollutant Requirements	The City recently updated their Industrial Waste Ordinance; therefore, the recommendation is no longer warranted.	N/A
Inspection Services	Recommendation is still warranted as the City should review and consider the CCTV and inspection of installed sewer mains and laterals prior to the one year warranty period expiring.	5.8.2
Ownership of Laterals	The City is in the process of clarifying ownership of laterals. For now, the current policy remains in place.	Appendix G
Collection System Map	The City has completed the transfer of collection system components from AutoCAD to Geographic Information System (GIS) and has begun the integration process with other City owned utilities. The City is commencing the next phase of integrating the mapping with the CMMS.	N/A
Updating As-Builts	The City has a procedure in place for updating collection system mapping; therefore, this recommendation is no longer warranted.	N/A

2006 Recommendation	2014 SSMP Update	SSMP Section
Wastewater Collection System Asset Identification	As part of the conversion into GIS mapping the City has assigned a unique identifier to each collection system sewer asset; therefore, this recommendation is no longer warranted.	N/A
CIP Prioritization	Recommendation is still warranted.	6.8.1
Updated Rate Study	The City performed an updated rate study in 2008; therefore, this recommendation is no longer warranted.	N/A
Formal Inspection/Cleaning Procedures	Recommendation is still warranted.	6.8.2
CMMS	Recommendation is still warranted.	6.8.3
Condition Assessment Program	Recommendation is still warranted.	6.8.4
Contingency Equipment and Replacement Inventories	The City keeps on hand the necessary contingency equipment and has their process in place for replacement inventories; therefore, this recommendation is no longer warranted.	N/A
Training	The City keeps track of training attendance by date and topic covered for internal training or on the job training. Documentation is also kept on file for attendance to California Water Environment Association (CWEA) or other professional training. The current training program meets their needs, therefore, the recommendation is no longer warranted.	N/A
Plumbers and Contractors Outreach Program	Recommendation is no longer warranted as the number of SSOs attributed to construction/contractor is minimal.	N/A
Sanitary Sewer Standards Update	Recommendation is still warranted.	7.3.1
Inspection and Testing Standards	Recommendation is still warranted.	7.3.2
Implementation Schedule	Recommendation is still warranted.	8.3.1
SSMP Monitoring	This recommendation is addressed within the SSMP Audit Template, therefor, this recommendation is no longer warranted.	N/A
Audit Report	This recommendation is addressed within the SSMP Audit Template; therefore, this recommendation is no longer warranted.	N/A
Public Outreach Communication Program	Recommendation is still warranted as the City will need to continually evaluate the effectiveness of its outreach program/activities.	10.1.1

Section 1: Introduction

The purpose of the Sewer System Management Plan (SSMP) is to describe the actions that will prevent and/or minimize sanitary sewer overflows (SSOs). The City is also completing the SSMP in order to comply with State Water Resources Control Board (SWRCB) Waste Discharge Requirement (WDR) Order No. 2006-0003-DWQ.

A SSO is any overflow, spill, release, discharge or diversion of untreated sewage from a sanitary sewer system. SSOs often contain high levels of suspended solid, pathogenic organisms, toxic pollutants, nutrients, oxygen demanding organic compounds, oil and grease and other pollutants. SSOs may cause a nuisance, a temporary exceedance of water quality standards when the sewage is discharged to surface waters of the United States (U.S.), pose a threat to the public health, adversely affect aquatic life and impair the public recreational use and aesthetic enjoyment of surface waters (SWRCB).

1.1 Regulatory Requirements

As California's wastewater collection system begins to age, the need to proactively manage this valuable asset becomes increasingly important. Collection systems are the most recent major component of the wastewater management system to be regulated. On May 2, 2006 the SWRCB adopted Order No. 2006-0003, Statewide General WDRs for Sanitary Sewer Systems. The primary objectives of the WDR being 1) to initiate a proactive approach among public entities to ensure the development of system wide operation, maintenance and management plans to reduce SSOs thereby reducing impacts to the State's water bodies and protecting public health and 2) to establish an enforceable regulation that allows the SWRCB to gather consistent data on causes and sources of SSOs. Under the WDR, all public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially untreated wastewater to a publicly owned treatment facility in the State of California are required to comply with these requirements. Another component of the WDR is the Monitoring and Reporting Program (MRP) that includes specific SSO notification, reporting and record keeping requirements to meet SSO reporting requirements in the Water Code and facilitate compliance monitoring and enforcement for violations. On August 6, 2013 the SWRCB adopted Amending MRP Order No. WQ 2013-0058-EXEC, which became effective September 9, 2013 and rescinded MRP Order 2008-0002-EXEC. This report incorporates the requirements of SWRCB WQ 2013-0058-EXEC.

1.2 System Overview

The City's Wastewater Quality Control Facility (i.e., WQCF or Wastewater Treatment Plant) serves the City of Manteca, City of Lathrop, and Raymus Village in San Joaquin County. The City provides wastewater service through approximately 19,500 connections to a population of approximately 74,915 (City of Manteca website). There are an estimated 225 miles of sewer trunk lines and 110 miles of local laterals in the sewer collection system. The WQCF currently treats 6.2 million gallons per day (mgd) of wastewater, and has been rated with a capacity of approximately 9.8 mgd. A plant expansion to 9.8 mgd was completed in 2007 (City of Manteca website).

The existing sewer collection system consists of 6- to 36-inch-diameter gravity flow pipelines, 6- to 24-inch-diameter force mains, and fourteen wastewater pump stations. A summary of the City's wastewater pump stations is shown in Table 1-1.

Table 1-1: Summary of City of Manteca Wastewater Pump Stations

		Pump Information				
Wastewater Pump Station Name	Description of Approximate Location	No. of Pumps	Manufacturer	Horsepower (hp)	Design Flow (gpm)	Design Head (feet)
Union Road	Union Road and Center Street	1 2	Fairbanks Morse Worthington	25 50	3,500 7,000	19 19
Robert Estates	Airport Way and Wawona Street	2	Flygt	3	200	13
Fishback	Yosemite Avenue and Fishback Road	2	Flygt	3	100	14
Chadwick Unit 5	Airport Way and Geneva Way	2	Flygt	10	875	24
Frito Lay	Spreckels Avenue and Moffat Blvd.	2	Flygt	3	200	48
Curran Grove	Norman Drive and Dyer Avenue	2	Flygt	3	140	18
Airport Daniels	Airport Way and Daniels Street	2	Flygt	20	600	58
Villa Ticino	Airport Way and Northgate Drive	2	Flygt	7.5	510	23
Woodward Park	Woodward Avenue and Buena Vista Drive	2	Flygt	10	550	63
Bella Vista	Woodward Avenue and Bella Terra Drive	2	Flygt	20	600	58
Eckert Cold Storage	Moffat Blvd. near South Powers Avenue	2	Flygt	20	750	51
Antigua	Pagola Avenue and Woodard Avenue	2	Flygt	10	193	53
Tara Park	McKinley Avenue and Woodward Avenue	2	Cornell	25	Not Available	Not Available
Woodbridge	Daisywood Drive and Airport Way	2	Flygt	30	1,450	50

Source: Table 3-1 City of Manteca Wastewater Collection System Master Plan Update (Nolte, 2005)

The majority of the collection system serves the core of the City (Central Trunk Sewer Shed or Central Shed), approximately bound by SR-120, Austin Road, Union Road, and Lathrop Road. Several subdivisions located on the perimeter or beyond the Central Shed have installed temporary wastewater pump stations. These pump stations will be decommissioned in the future and these subdivisions will connect to gravity trunk sewers. Within the Central Shed, the majority of the collection system flows by gravity to the Union Road Pump Station (URPS). Downstream of the URPS, wastewater flows to the WQCF by gravity via a 36-inch diameter

sewer. A map of the existing sewer collection system showing gravity sewers 6-inch and larger is provided in Appendix D as Figure 1-1 Existing Collection System.

City personnel perform regular maintenance on the collection system and wastewater pumping stations. Regular maintenance activities include clearing blockages due to solids and grease buildup with high pressure jetting and vacuuming equipment, inspection of the system with closed circuit television (CCTV) and removing floating material and submerged debris from wastewater pump stations to mitigate the potential for pump and vacuum/air-release valve fowling and failures. Problems detected in the system are recorded and corrective actions are taken when warranted.

1.3 Objectives

The objective of the SSMP is to provide a plan and schedule to properly manage, operate and maintain all parts of the wastewater collection system and to:

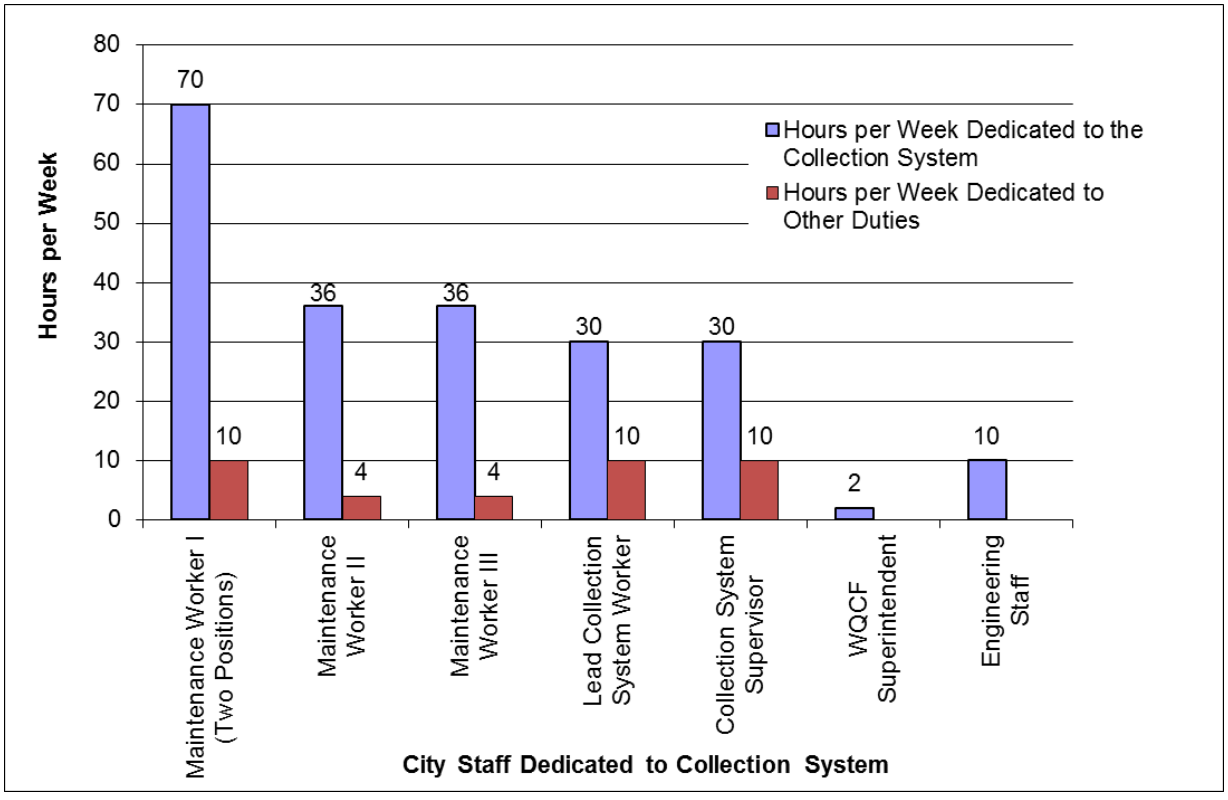
- Eliminate preventable SSOs
- Protect public health and safety
- Minimize adverse impacts of SSOs
- Prevent adverse impacts to the environment, waterways of the U.S., and their beneficial uses
- Ensure corrective action is taken in a timely manner
- Ensure compliance with current regulatory requirements
- Document and define procedures to address SSO prevention and response

Section 2: Organization

2.1 City Wastewater Collection System Organization

The City's wastewater collection system staff consists of maintenance workers, supervisors, administrative staff and engineering. A summary of the City staff time dedicated to the operation, maintenance and improvement of the wastewater collection system is shown in Figure 2-1 in Appendix D. There are five maintenance workers operating a modified five days per week schedule. On average two maintenance workers dedicate 35 hours per week to the collection system, the third maintenance worker spends about 36 hours per week on the wastewater pump stations and vacuum/air-release valves, and the forth maintenance worker spends about 36 hours per week on service lateral installation/repairs and customer service calls. The Lead Collection System Worker spends about 30 hours per week coordinating and recording work activity. The remainder of the time these maintenance workers are working at the WQCF or conducting storm drain system maintenance. Two supervisory positions: WQCF Superintendent, which on average dedicates 1 to 2 hours per week to the collection system, and Collection System Supervisor, which on average dedicates 30 hours per week to the collection system, are both assigned to manage, operate and maintain the wastewater collection system. The collection system crew is responsible for gravity and force main sewers, pump stations and storm water system maintenance. The system is monitored twenty-four hours a day either by staff during regular hours or by the WQCF operator on duty during evenings, nights, and weekends using a supervisory control and data acquisition (SCADA) system to monitor wastewater pump station operation.

Figure 2-2: City Staff Dedicated to Collection System Operation, Maintenance and Improvements



The engineering staff dedicated to the wastewater collection system includes one senior engineer with support from one engineering technician in the Public Works Department and the City's Public Works Director and Deputy Public Works Director. The administrative assistant at the WQCF handles all of the administrative duties for the twenty-seven employees that maintain and work at both the WQCF and collection system. The administrative assistant answers all incoming calls for the staff including customer complaints, routes them to the appropriate individual and inputs data into the Computerized Management and Maintenance System (CMMS) database. The City over the last five years on average has dedicated about 1.2 engineering staff years to planning, managing and improving the wastewater collection system. Based on review of system performance, the City seems to have the proper organizational staff in place for proper maintenance and response to collection system problems. The administrative assistant at the WQCF may need additional support should the workload or additional duties be redistributed. This is further detailed in Section 2.3.1 Staffing Workload Evaluation.

2.2 Implementing, Managing and Updating the Sanitary Sewer Maintenance Plan

The City's formal organizational chart showing staff responsibility for implementing, managing and updating the SSMP is shown in Figure 2-2 City of Manteca Organizational Chart for Implementing, Managing and Updating the SSMP. The authorized representative for the City is Laurie Ramirez.

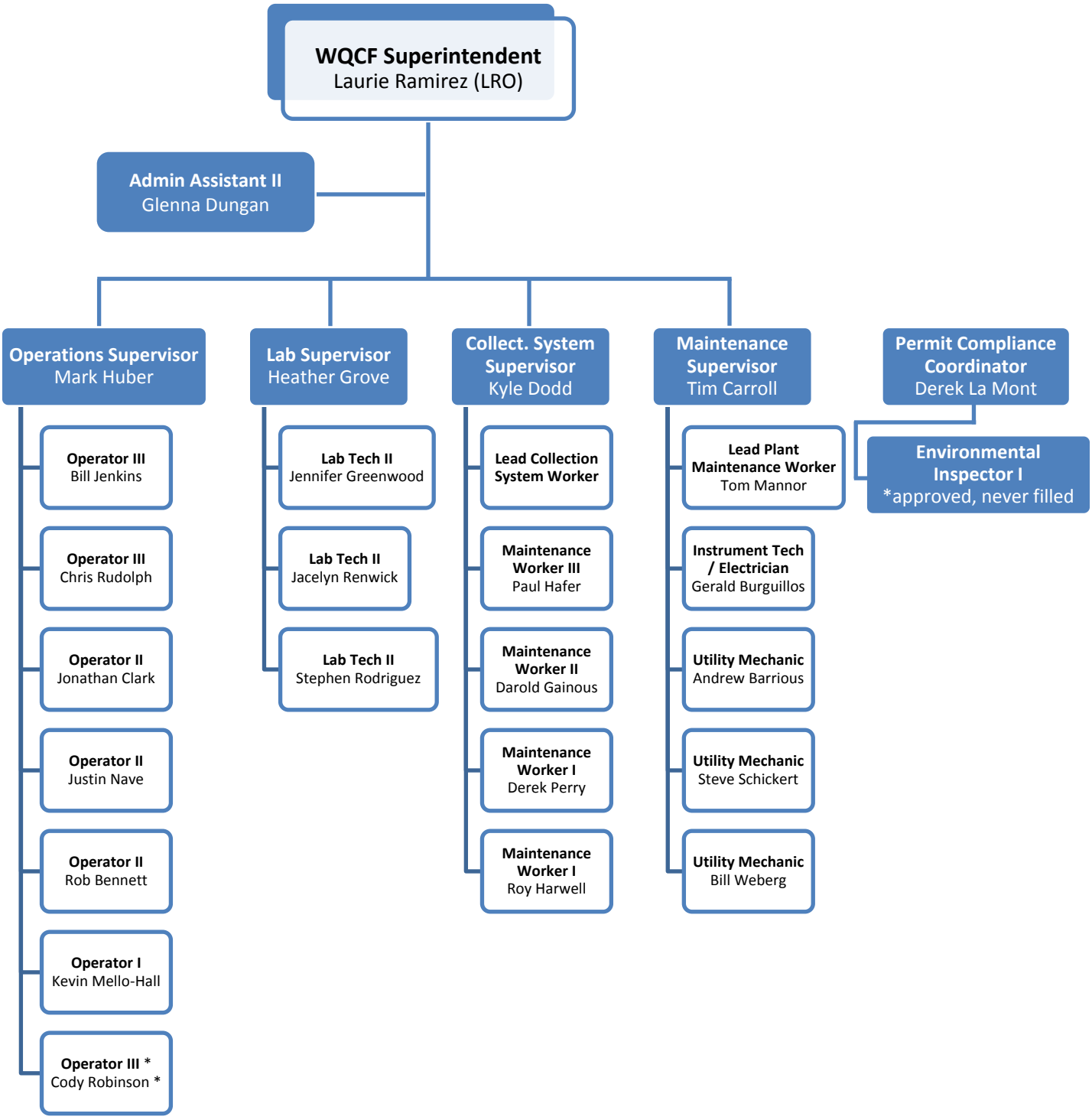
The collection system staff responsible for implementing, managing and updating the SSMP includes: The WQCF Superintendent and Collection System Supervisor, with contribution from the Lead Collection System Worker and maintenance workers. Responsibilities of the wastewater collection system staff are:

Senior Engineer – Plan, coordinate and manage public works construction, alteration and installation projects; perform a variety of professional engineering duties in the planning, design, contracting, budgeting, bidding and analysis of assigned projects; and train and provide work direction and guidance to assigned personnel.

WQCF Superintendent – Plan, organize and direct the laboratory, operations and activities related to the maintenance and repair of City wastewater and storm water systems, facilities and related equipment; coordinate and manage the development and implementation of Department guidelines and procedures to assure compliance with established local, State and federal laws, codes and regulations; and train and evaluate the performance of assigned personnel.

Maintenance Supervisor – Under the direction of the WQCF Superintendent, organize and direct operations and activities related to the maintenance and repair of WQCF facilities and related equipment; provide adequate scheduling, supplies and equipment to assure smooth and efficient system operations; and train and provide work direction to assigned personnel.

Figure 2-3: City of Manteca Organizational Chart for Implementing, Managing and Updating the SSMP



Collection System Supervisor – Under the direction of the WQCF Superintendent, organize and direct the maintenance and repair activities of the wastewater treatment facility and/or wastewater and storm water conveyance systems. Plan, organize and direct assigned staff performing skilled work in the maintenance and repair of the sewer collection and storm water pumping systems, ensure that all work performed is done in compliance with proper procedures provide adequate scheduling, supplies and equipment to assure smooth and efficient system operations; and train assigned personnel. Oversee and ensure that the CMMS is functioning properly and that all necessary records, readings and reports are complete, organized and up to date.

Utilities Mechanic – Under the direction of the Maintenance Supervisor, perform skilled work in the maintenance and repair of wastewater and storm water facilities. Troubleshoot and repair wastewater and storm water facilities, including motor, pumps and blowers.

Maintenance Worker III – Under the direction of the Collection System Supervisor, lead and participate in a variety of skilled work in the installation, and maintenance of City sewer lines and laterals, storm drains, and the WQCF; operate a variety of light and heavy maintenance and construction equipment; and train and provide work direction to assigned staff.

Maintenance Worker II – Under the direction of the Collection System Supervisor, perform a variety of skilled duties in the maintenance and repair of City wastewater and storm water systems, facilities and related equipment; and operate a variety of power-driven and heavy equipment to perform assigned duties.

Maintenance Worker I – Under the direction of the Collection System Supervisor, perform a variety of duties in the maintenance and repair of City wastewater and storm water systems, facilities and related equipment; and operate a variety of power-driven and heavy equipment to perform assigned duties.

Instrumentation/Electrician – Under the direction of the Maintenance Supervisor, performs skilled work in the maintenance, repair and calibration of electrical systems, equipment, appurtenances, instrumentation and controls related to the wastewater treatment facility and/or wastewater and storm water conveyance systems.

Permit Compliance Coordinator – Administers the Fats, Oils and Grease (FOG) program.

Environmental Compliance Inspector – Implements the FOG program (vacant position).

Also, Figure 1 in Appendix A - City of Manteca SSO Response Field and Reporting Procedures flowchart illustrates the organizational chart for SSO response and reporting. For a full description of the SSO Response Plan see Appendix A.

2.3 Recommendations

The following recommendation for organization of the wastewater collection system staff is based on the evaluation of the City's current full time equivalent staff and the time spent servicing and maintaining the collection system.

2.3.1 Staffing Workload Evaluation

The City wastewater collection system is divided up into three different sewer sheds per the Wastewater Collection System Master Plan Update and as shown on Figure 2-3 in Appendix D as follows:

- Central Trunk Sewer Shed (Central Shed)
- North Trunk Sewer Shed (North Shed)
- South Trunk Sewer Shed (South Shed)

The Central Shed serves the majority of the City with the other areas serving newer developed areas that surrounds the central area of the City. The Central Trunk Sewer Shed (Central Shed) is predominantly where the City historically spends most of their resources responding to sewer spills and maintenance requests (e.g., grease blockages, etc.). The estimate is about 80% of the resources are used in the Central Shed to operate and maintain the system.

Considering the City currently has six full-time equivalent (FTE) staff dedicated to the collection system and eighty percent (80%) of the City's resources are used to maintain the Central Shed, 4.8 FTEs are assigned to service and maintain the central sewer shed and 1.2 FTEs to maintain the remainder of the collection system. In addition to the FTE staff evaluation for maintenance of the collection system, 0.8 FTE of administrative staff is used to support the Central Shed and 0.2 FTE the two other sheds.

In Sections 9 and 10 it is stated that this SSMP should be updated every five years and audited every two years. The City will use the information developed in this section to evaluate future FTE needs and distribution among the different sewer sheds as the system ages and improvements are made per the Wastewater Collection System Master Plan Update.

Section 3: Overflow Response Plan

3.1 Sanitary Sewer Overflow History

The causes of SSOs are specific to each system, some of the principal causes of SSOs include: grease blockages, root blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, storm or ground water inflow/infiltration, debris blockages, sanitary sewer system age and construction material failures, lack of proper operation and maintenance (O&M), lack of capacity and contractor caused damages (reference: SWRCB).

SSOs have been categorized by the SWRCB WDR in the MRP as category 1, category 2, category 3, and private lateral sewage discharge (PLSD). The definition of these are described in Appendix A – SSO Response Plan.

The City has reported one category 1 and one category 2 SSO from 2007 – 2013 to the Regional Water Quality Control Board (RWQCB). A summary of the number of SSOs by category is shown in Table 3-1, and are shown by location in Figure 2-3 in Appendix D.

Table 3-1: Number of SSOs for 2007 – 2013 by Category

Year	Category 1	Category 2	Category 3	Total SSOs	Total Spill Volume (gal)	Total Recovered (gal)	Total Volume to Reach Surface Waters
2007	-	-	2	2	47	47	-
2008	-	-	7	7	2,250	1,395	-
2009	1	-	10	11	72,743	71,546	1,197
2010	-	-	9	9	418	418	-
2011	-	1	8	9	34,337	533	-
2012	-	-	41	41	2,706	2,704	-
2013	-	-	27	27	633	633	-
Total	1	1	104	106	113,134	77,276	1,197

A summary of the SSO by cause is shown below in Table 3-2.

Table 3-2: Summary of SSOs by Cause

Cause	Number of SSOs (2007 – 2013)
Grease	14
Roots	11
Debris	68
Pump Station Failure	0
Pipe Structural Problem/Failure	4
Construction/Contractor	1
Other	8
Total	106

The cause for the Category 1 spill was a ruptured force main and the cause of the Category 2 spill was a pipe structural problem/failure on a gravity pipeline.

The main cause of the SSOs was attributed to debris. The City maintains a database with all of the service requests logged in. The database currently does not contain unique identifiers for the type of problem encountered. It is recommended that the database configuration be modified in order to accommodate more detailed information, see Section 3.2 Database Objective for further details.

An SSO Response Plan is enclosed as Appendix A of this report.

3.2 Recommendations

The following recommendation for the City's SSO Response Plan are based on an evaluation of the City's current procedures of tracking, recording and reporting of SSOs. Modify the database configuration to accommodate a variety of identifiers that would be assigned to each spill to record and analyze the causes of the spills.

3.2.1 Database Objective

The database described in Section 6.1 should be used as a basis for prevention, monitoring for compliance, improvements to be made in the system, equipment needs and crew performance.

The purpose of the database is to:

- Serve as a records retention system.
- To provide regular reports on training, maintenance, spill responses.
- Provide input into fiscal management of the sewer collection system.

Section 4: Fats, Oils and Grease Control Program

4.1 Grease Blockages History

A review of the reported SSOs was conducted to determine the number of SSOs and their locations. Of the 106 SSOs reported from 2007 – 2013, fourteen (14) were identified as being associated with grease blockage or grease buildup.

4.2 Source Control Measures

The City has an Industrial Waste Ordinance in place that has been reviewed and approved by the RWQCB, which includes Section 13.20.110 – FOG Control. The City's Industrial Waste Ordinance, Chapter 13.20 describes the City's Industrial Pretreatment Program. The purpose of the pretreatment program is to control and regulate the discharge of industrial and hazardous waste into the collection system. Chapter 13.20 contains the following pertinent subchapters to facilitate the City with the adequate mechanisms to establish pretreatment requirements for any discharger to the City's wastewater collection system:

- Authority and Responsibility,
- Standards and Limitations,
- Administration,
- Reporting Requirements,
- Inspection and Monitoring,
- Confidentiality,
- Enforcement,
- Hearings and Appeals,
- FOG Control, and
- Severability

4.3 Inspection of FOG-producing Facilities

The City ensures adequate authority to inspect the premises of any person discharging waste to the collection system through Section 13.20.030 Authority and Responsibility of the City's Municipal Code. Also, the City is anticipating the addition of an Environmental Inspector, to enforce compliance in fiscal year 2014/2015.

4.4 Legal Authority to Prohibit Discharges

The City has set forth adequate prohibitions and limitations for industrial waste discharge or discharge of concern into the collection system, which can be found in Section 13.20.040 Standards and Limitations of the Municipal Code.

4.5 Public Education Outreach Program

The City does not have a proactive public education outreach program, such as using door hangers or flyers or other methods. Currently, there does not appear to be a need for such a program as the City has experienced an average of two overflows per year in the past seven years attributed to grease.

Section 5: Legal Authority

The City's legal jurisdiction is defined by its Municipal Code; specifically Title 13 Public Services and Title 15 Buildings and Construction. The chapters in the Municipal Code that have been reviewed and which provide adequate legal authority for the City to construct, finance, own, manage, operate and maintain a wastewater collection system are:

- 13.12 – Sewer Connection Charges
- 13.14 – Sewer Capacity Charges
- 13.16 – Sewer Service Charges
- 13.20 – Industrial Waste
- 13.24 – Septic Tank Cleaning
- 13.38 – Public Facilities Implementation Program Fees
- 15.12 – Plumbing Code

These sections of the Municipal Code can be found in Appendix B. The Industrial Pretreatment Program is covered under Section 13.20

5.1 Prevent Illicit Discharges into the System

The City has set forth adequate prohibitions and limitations for illicit waste discharge into the collection system in the following City Municipal Code:

Chapter 13.20 Industrial Waste

- Section 13.20.030.A.11 – Authority and Responsibility
- Section 13.20.040.C & D – Standards and Limitations
- Section 13.20.050.B.3.e – Administration
- Section 13.20.090.A.3, A.6.a & C - Enforcement

Chapter 13.24 – Septic Tank Cleaning

- Section 13.24.050 – Permit-Suspension-Revocation

Also the City has an Industrial Pretreatment Program, which contains the Industrial User Waste Discharge Permit Template, Industrial User Inventory, Enforcement Response Guide, Pretreatment Program Resources and Organization, Adopted Industrial Waste Ordinance and Multi-jurisdictional Agreement between the City of Lathrop and the City.

5.2 Control Infiltration/Inflow

According to City maintenance staff the collection system does not experience major problems related to infiltration and inflow (I/I). I/I experienced by the City is considered to be normal resulting in increased flows to the WQCF.

Currently the City has legal authority to control I/I into its collection system in accordance with Chapter 13.20 of the City's Municipal Code. Stormwater and other illicit discharges as described

in Section 13.20.040 are also prohibited and fall under the general heading of Standards and Limitations.

5.3 Proper Design and Construction of New and Rehabilitated Sewer Connections

The City ensures proper design and construction of new and rehabilitated sewer connections through the use of City Standards and Specifications. All sewer designs are carefully reviewed by qualified City staff. Before the 100-percent submittal drawings for new development and redevelopment projects are accepted, the Public Works Director and Senior Engineer review and approve the design drawings. For new subdivisions the Senior Engineer Technician and/or Senior Engineer and the Public Works Director review and approve the design drawings. The City's formal review of proposed projects is adequate.

5.4 Proper Installation, Testing, and Inspection of New and Rehabilitated Sewers

Currently the City employs one inspector to observe construction of all City projects to ensure the proper installation, testing and inspection of new and rehabilitated sewers. The need for additional inspectors should be evaluated on an as-needed basis. For new sewer installation the mainline is cleaned, pressure tested and videotaped. Currently the City does not require testing of their laterals, unless specifically requested, which is recommended in detail in Section 5.8.

5.5 Access for Maintenance, Inspection, or Repairs for Portion of City Owned Laterals

The City ensures authority to inspect the premises of any person discharging waste to the collection system through Section 13.20.110 Authority and Responsibility of the City's Municipal Code.

5.6 Limit the Discharge of Fats, Oils and Grease and Other Debris

The City ensures authority to limit the discharge of fats, oils and grease to the collection system through Section 13.20.110

5.7 Enforcement of the City's Sewer Ordinances

The City has enforcement mechanisms and penalties available to respond to instances of noncompliance as part of Chapter 13.12 – Sewer Connection Charges, Chapter 13.20 – Industrial Waste, Section 13.20.090 Enforcement and Chapter 13.24 Septic Tank Cleaning, Section 13.24.050 Permit-Suspension-Revocation of the City's Municipal Code. The enforcement mechanisms and penalties contained in the City's sewer ordinance are adequate to regulate and provide a safe wastewater collection system.

5.8 Recommendations

The following recommendations for legal authority of the City's collection system are based on the review of the current City ordinances and as described above.

5.8.1 Inspection Services

The City should consider using developer fees to cover the cost to inspect laterals and CCTV the lines prior to the one year guarantee expiration period.

As part of the formal project review, it is recommended that the City develop inspection requirements as part of their engineering standards for the contractor to provide CCTV records of all newly constructed sewer mains and laterals within one year of their installation.

Section 6: Operations and Maintenance

6.1 Collection System Map

Comprehensive mapping of the collection system provides an important management and operations tool that is used to properly operate and maintain the collection system.

Recently, the City completed transferring collection system data from AutoCAD to Geographic Information System (GIS). The GIS mapping includes the following collection system asset information:

- Gravity and force mains with pipe material, diameter and direction of flow.
- Pump station location defined by coordinates; SCADA monitoring will continue to be used to monitor wet well operating depth.
- Manhole location including rim elevation. The City will continue to confirm invert elevations, pipe size and material as they perform cleaning and maintenance; it is estimated approximately 90 percent of pipe material has been identified.
- Drop manholes and air vacuum relief valves locations.
- Mainline cleanout location.

Lateral connection locations are not part of the GIS collection system files and currently the City does not plan to collect this information. In future SSMP Updates and/or audits; the City will continue to monitor and assess whether this information will be of value in assisting the City in meeting the objectives of the SSMP. Currently the City's collection system map (Figure 1-1 in Appendix D) shows location of gravity lines, force mains and pump stations.

An element of a well-managed collection system is the ability to track the performance of collection system assets. Each individual wastewater collection system asset should have a unique identifier. Tracking each asset provides management with the information needed to properly allocate fiscal and labor resources. Proper system asset management allows City staff to make cost effective management decisions regarding capital procurement and setting annual O&M budgets. Currently the City does not track individual assets however they have implemented a new CMMS system, which has assigned unique identifiers for each sewer asset. The CMMS is still in its infancy phase and will take some time for City staff to populate the database with the asset information. The City began using the CMMS program to generate work orders for both preventative and corrective maintenance in the third quarter of 2013. The City does plan to add more data to the system in order to generate reports on asset performance, identify hot spot locations, and add industrial pretreatment program inspector compliance findings as well. Section 6.8 provides more details regarding asset management recommendations.

Maintenance workers need up-to-date maps to operate and maintain the collection system in order to function efficiently. Currently maintenance workers use design or as-built drawings as collection system maps. When maintenance workers find a discrepancy between their drawings and field conditions, the drawings are marked up and sent to the City Engineering office. The

marked-up drawing is compared to the record map information and once the discrepancy is agreed upon the AutoCAD and GIS map line work is updated. Updated utility maps are issued twice a year or as warranted.

6.2 Resources and Budget

The City has both a sewer connection and a monthly sewer user fee rate structure with different categories to accommodate new development and existing users. City authority to levy and collect fees for connection to and use of the sewer collection system and WQCF is established in the Municipal Code specifically within Title 13, Public Services.

Chapter 13.12, 13.14 and 13.16 of the Municipal Code governs Sewer Connection Charges to residential, commercial and industrial users. This chapter also provides for the annual adjustment of connection fees to accommodate increases in construction and engineering costs. Chapter 13.12.090 covers revenue use and requires that all revenue derived from connection charges be deposited in the capital improvement fund and used for the acquisition, construction, reconstruction, reimbursement, maintenance and operation of the City's sanitary sewer and treatment system. The sewer collection system fee for new development is called the Public Facilities Implementation Plan (PFIP) sewer collection system fee.

The City conducts rate studies periodically; the last rate study was completed in 2008. As a result of the 2008 revised rate study, in 2009 the City implemented new monthly sewer service fees for existing customers. Also, the connection fees and sewer user charges can be increased annually based on construction cost index with City Council approval; however, there have not been any increases since 2010.

The City does have a Capital Improvement Plan (CIP) that provides for system repair/replacement. Projects are prioritized based on the Wastewater Collection System Master Plan Update. Priorities for rehabilitation, replacement and repair are based on the criticality of the project and funding availability. Rehabilitation projects are funded through sewer user fees. The City's existing sewer system is similar to most growing cities with the older existing infrastructure located around the town center and new building/infrastructure surrounding the older system. Therefore most of the work done within the existing system is funded through monthly sewer user rates, while the new infrastructure is usually funded through development sewer connection fees.

The current resources and budget pool appears to be sufficient to maintain the current collection system at its current level of operation. However, many maintenance and operational functions are very informal with little or no documentation or asset performance tracking. Typically, collection system management has to become more formal as the collection system grows. Specific recommendations on system management formality are presented in Section 6.8.

6.3 Prioritized Preventative Maintenance

The purpose of preventative maintenance (PM) is to ensure ongoing reliable regulatory compliant sewer collection and treatment services. A properly maintained collection system will help minimize overflows in addition to addressing other operational issues on a proactive basis. Reducing SSOs reduces mitigation costs and protects public health and the environment.

6.3.1 Scheduled Inspections and Condition Assessment

6.3.1.1 Pipeline Inspection and Maintenance

Additional City staff and equipment resources has resulted in the sewer collection system being cleaned from approximately every 5-years to approximately every 3.5-years. Based on the history of complaints and known "hot spots" at approximately 90 sites, the City visits these locations on a quarterly to semi-annual basis resulting in a significant decline in SSOs generated from these sites. There is no formal written procedure for cleaning the system. It is recommended that Formal Inspection/Cleaning Procedures be developed as described in detail in Section 6.8.

To date, the sewer system pipelines have been inspected internally using CCTV only as needed in response to a flow inconsistency or other indicators of a deviation from normal flow conditions. The anticipated procurement of improved CCTV equipment in conjunction with increased maintenance workers FTEs from 2006 to 2014 will allow for the expanded use of CCTV inspection to include general and scheduled condition assessment of the sewer collection system infrastructure. There is no formal written procedure for the pipeline CCTV inspections as this service is contracted out to local CCTV sewer inspection companies. A formal program for CCTV inspection will be in place once formal written procedures are developed and staff has been provided formal training on how to perform sewer line condition assessments.

It is recommended that the City develop and adopt a set of CCTV specifications that will be used to ensure uniform CCTV inspections.

If the condition of a pipeline is found to be compromised, the following repair, rehabilitation, and/or replacement options are considered:

1. **Spot Repair** – If the pipeline is structurally sound, the hydraulic capacity is sufficient, and the problem is isolated, the pipeline may be cleaned, open-cut repaired or replaced, grouted, or rubber sealed with stainless-steel mechanical bands.

2. **Rehabilitation** – Rehabilitation may be used to improve the hydraulic capacity and/or improve the structural integrity of the pipeline. Rehabilitation options may include use of slip-lining, cured-in-place pipe, fold-and-form lining, segmental lining or on-line replacement. The preferred rehabilitation option is selected based on economic considerations and the specific circumstances of the proposed pipeline rehabilitation.

3. **Replacement** – Pipeline replacement may be used when the integrity of the pipe is severely compromised and/or increased hydraulic capacity or relocation of the pipeline alignment is needed. The methods that may be used include open cut excavation, pipe bursting, or pipe reaming. The preferred replacement option is selected based on economic considerations and the specific circumstances that may select a specific replacement method.

6.3.1.2 Pump Station Inspection and Maintenance

The City's PM program has evolved from being relatively informal with no written procedures or checklists to one where a checklist for mechanical functionality and general conditions is now utilized for pump station inspections.

Currently the City inspects all pump stations approximately once every three months. Inspections are performed in the same manner each time. The pump stations are visited and

checked for general conditions including odors, building condition, electrical component condition, alarm and remote monitoring system condition, and evidence of leakage. A Sewer Lift Station Routine Check List and Lift Station Log are included in Appendix C. Typically the major maintenance procedure performed during pump station inspection is grease removal. Old or defective equipment is replaced on an as needed basis.

Standby power is provided at each pump station. Each pump station has an electrical connection and transfer switch that allows standby power to operate the pump station. The City has one portable generator, which is sufficient for local loss of power at the smaller pump stations. Five pump stations serving effectively as sub-regional units are equipped with permanent emergency standby power. Due to more restrictive Occupational Safety and Health Administration (OSHA) safety requirements connection of a portable generator has been restricted to persons “qualified” to perform electrical work. Consequently, all maintenance workers should be trained to connect the portable generator to the pump station through execution of new electrical safety requirements. Each pump station can be bypassed through a portable pump and existing cam lock fittings at each site without the need of a permanent generator. Each pump station piping system, is equipped with backup pumping capacity, and are monitored and controlled via wireless SCADA. If the power goes out the levels are still monitored for at least twelve hours as the controls and SCADA are on back-up battery power.

The alarm signals for each of the pump stations include:

- Motor fail to start
- Motor overload
- High water level alarm.
- Low water level alarm.
- Loss of power
- Intrusion alarms to several of the pump stations

Staff response time during off hours is forty-five minutes, which is sufficient to prevent wet well overflows, which typically prevents an SSO.

Currently no reports are written for a pump station failure, the only available documentation is the purchase orders for the parts or labor. The City has standardized the type of pumps and only uses Flygt pumps; unless otherwise warranted. The pumps are operated automatically based on wet well level. For a list of pumps, see Table 6-1.

Table 6-1: Summary of City of Manteca Wastewater Pump Stations

Wastewater Pump Station Name	Description of Approximate Location	Pump Information				
		No. of Pumps	Manufacturer	Horsepower (hp)	Design Flow (gpm)	Design Head (feet)
Union Road	Union Road and Center Street	1 2	Fairbanks Morse Worthington	25 50	3,500 7,000	19 19
Robert Estates	Airport Way and Wawona Street	2	Flygt	3	200	13
Fishback	Yosemite Avenue and Fishback Road	2	Flygt	3	100	14
Chadwick Unit 5	Airport Way and Geneva Way	2	Flygt	10	875	24
Frito Lay	Spreckels Avenue and Moffat Blvd.	2	Flygt	3	200	48
Curran Grove	Norman Drive and Dyer Avenue	2	Flygt	3	140	18
Airport/Daniels	Airport Way and Daniels Street	2	Flygt	20	600	58
Villa Ticino	Airport Way and Northgate Drive	2	Flygt	7.5	510	23
Woodward Park	Woodward Avenue and Buena Vista Drive	2	Flygt	10	550	63
Bella Vista	Woodward Avenue and Bella Terra Drive	2	Flygt	20	600	58
Eckert Cold Storage	Moffat Blvd. near South Powers Avenue	2	Flygt	20	750	51
Antigua	Pagola Avenue and Woodard Avenue	2	Flygt	10	193	53
Tara Park	McKinley Avenue and Woodward Avenue	2	Cornell	25	Not Available	Not Available
Woodbridge	Daisywood Drive and Airport Way	2	Flygt	30	1,450	50

Source: Table 3-1 City of Manteca Wastewater Collection System Master Plan Update (Nolte, 2005)

6.3.1.3 Manhole Inspection and Maintenance

The City's current manhole maintenance is typically completed during the CCTV inspection or cleaning of pipelines. Manhole maintenance typically includes inspection of the manhole structure on the interior and by visual observation. With the new CMMS system it is expected maintenance workers will document manhole inspections in the system converting to a formal procedure. Recommendations for a formal manhole inspection procedure are described in more detail under Section 6.8.

6.3.1.4 Air Release Valves Inspection and Maintenance

Currently, there are approximately 40 cast iron air release valves (ARVs) located in the collection system. Most of the ARVs are manufactured by either APCO or Crispin and have been in service since about 1998. Figure 1-1 in Appendix D shows the location of the ARVs in the collection system.

The City's current ARV maintenance typically includes cleaning, flushing, and testing the isolation valve operation. The frequency is approximately once every two years. It is recommended a more formal inspection/cleaning procedure be developed as described in detail under Section 6.8 for ARV stations.

6.3.1.5 Other Key Collection System Component Inspection and Maintenance

Currently the City has monitoring requirements based on their waste discharge permit for industrial users. The City's Municipal Code, Chapter 13.20 describes the City's Industrial Waste Ordinance (see Section 4.2 of this report for further details).The permitted industries are self-monitored and send their reports to the City on a monthly and annual basis. The consequences for not submitting a report or exceeding water quality or flow numerical limits ranges from a notice of violation to discharge shut down.

6.4 Contingency Equipment and Replacement Inventories

Adequate spare/replacement parts are kept in inventory to minimize equipment/facility downtime in the event of an unplanned failure. Replacement parts for pumps, motors, and vehicles and appropriately maintained emergency response equipment and accessories allow maintenance workers to effectively respond to incidents and efficiently perform routine maintenance. The City currently stores the following equipment:

- Two 6-inch pump and 500-feet of hose each
- One 4-inch pump and 500-feet of hose
- One 3-inch pump and 300-feet of hose
- One portable hose reel with 2,500-feet of 10-inch hose
- Two vacuum trucks
- One rodder truck with 250-feet of rod
- Miscellaneous size of pipe plugs
- Confined space entry equipment
- Spill response truck equipped to respond to SSOs

6.5 Training

Training is an essential part of the inspection and maintenance program. Topics covered in regularly scheduled staff and safety meetings include:

- Emergency response procedures
- Safety procedures
- O&M procedures
- Identification of potential problems within the system

- Data collection and record keeping
- Distinction between structural and hydraulic failures, and their remedies

The maintenance workers are trained to the same level of competency to provide the greatest level of redundancy in trained staff resources.

Not all of the training for the City is conducted at the City's facilities or by the City, some is formally structured and formal training is documented such as attendance to the California Water Environment Association (CWEA) or other webinars, workshops and conferences.

6.6 Outreach to Plumbers and Building Contractors

Currently the City has an informal reactive program of distributing copies of their sewer standards to plumbers or building contractors who have improperly repaired and/or installed sewer components. In reviewing the SSOs over the last seven years it does not appear that a more formal program is needed at this time with only one (1) SSO reported as being caused by construction/contractor.

The City does ensure that contract design engineers have access to a complete set of the sewer design standards and that the design standards are incorporated into the construction contract documents.

6.7 Corrective Maintenance

Priorities for rehabilitation, replacement and repair are established by how critical the project is and the availability of funds and other resources. The City has completed projects involving sewers that appear to be in a state of imminent failure. As discussed in the CIP Prioritization and condition assessment recommendations in Section 6.8, the City should consider adopting the programs in order to convert to a PM mode.

6.8 Recommendations

The following recommendations for O&M of the City sewer collection system are based on an assessment of the current O&M practices used by the City. The current O&M practices have frequently been described as "informal" in that there is little documentation and tracking of O&M activities. Documentation of O&M activities helps ensure that all maintenance workers perform their O&M duties uniformly and to the same standard of care and excellence, thus helping ensure uniform and consistent sewer collection service while minimizing SSOs. Tracking O&M activities provides a record of performance for both equipment and maintenance workers that should be used by the supervisor and management to correctly allocate resources, direct training, develop relevant capital budgets and develop annual operating budgets. The tracking system is a critical feedback element necessary for all functioning management systems.

6.8.1 Capital Improvement Program Projects Prioritization

Capital Improvement Program Projects (CIPPs) should be prioritized based on a set of criteria developed by the City. CIPPs should be prioritized on at least the following criteria:

- Reduced risk and minimization of liability to the City
- Available funding

- Implementation period
- Areas of high maintenance or frequent SSOs
- Areas of limited capacity
- Project cost benefit analysis

When fully implemented, CIPPs should reduce the risk and liability exposure to the City. These projects should include maintaining and improving service and reliability to City critical functions such as emergency services (fire, police, hospitals, and ambulance/emergency health care) and emergency support services such as municipal, state and federal functions. Clearly this approach requires an analysis of sewer collection services throughout the City and an assignment of relative importance to sewer collection sheds.

To determine which has the highest priority, the criteria that may be considered for prioritizing the Capital Improvement Program (CIP) may include review of maintenance activities, known extensive maintenance areas, SSO history, potential impacts to public/environment should a failure occur, capacity issues, and does the asset meet City's minimum design standards.

A CIPP implementation schedule should be developed such that the three new trunk sewers, existing sewer improvements, and increased or scheduled maintenance line items are budgeted by the following proposed schedule (the three main trunk sewers may need to be divided into phases to be designed and constructed):

- 2015 to 2019 – CIP project name
- 2019 to 2024 – CIP project name

This would better define the budget necessary to complete the CIPP each year, confirm that revenue from development connection fees and sewer user charges are adequate, and keep the City on track to make sure wastewater collection system assets are in place prior to need.

It is recommended the criteria used to prioritize the CIPP should be reviewed on a periodic basis versus the CIP. If needed, the CIPP implementation schedule may need to be adjusted. This should be done about once every year to once every two years depending on development and SSO history during that period.

6.8.2 Formal Inspection/Cleaning Procedures

Formal inspection and cleaning procedures are part of a properly operated and maintained collection system. The City should develop Standard Operating Procedures (SOPs) for inspection and cleaning in order to standardize how the system is cleaned and to document debris analysis and other observations made by the maintenance workers.

A condition assessment program should be implemented to serve as a means of determining how well O&M procedures are working. This is covered by provision 13, SSMP paragraph (x), SSMP Program Audits; see Condition Assessment Program recommendation below. With the new CMMS, the City will be able to document and track how often assets are maintained, the results of the invested maintenance, and schedule future maintenance by asset.

Pipeline – Pipeline inspection procedures should include documented regular periodic surface inspection along the sewer alignments to detect problems such as construction-related

damages and leaks or failures. See Appendix C, form C.4 for a sample inspection form. CCTV inspection is recommended as part of the Condition Assessment Program described in Section 6.8.4. It is recommended that CCTV inspection and cleaning of sewer pipelines be completed at a rate of approximately 5% and 10% per year, respectively.

Manholes – Manhole inspection procedures should include visually inspecting the frame condition and checking for offsets or misalignments, checking for evidence of surcharge and I/I, checking for evidence of corrosion damage, checking for accumulations of grease, debris, or grit, and checking flow characteristics. Manholes located in the roadway should be inspected for settlement and subsidence around the outside of the manhole. See Appendix C, form C.2 for a sample inspection form.

Manholes with noted deficiencies and corrosive damage should be inspected annually to monitor condition. Other manhole inspections should be completed as needed in response to a flow inconsistency or other indications of incipient failure in the collection system or approximately 5% of the system's manholes each year.

ARVs – Inspection of the ARV should continue to be scheduled once every two years (or more frequently should field conditions warrant additional attention) and includes visually inspecting the ARV assembly condition; verifying that the ARV is in service; and checking for evidence of leaking, for the presence of corrosion, and for accumulation of debris on the assembly. In addition, the regular periodic inspection of the pipeline alignment includes inspection of the ARV area for evidence of damage, leaks, and failures. Also the manufactures recommendation for cleaning and inspection should be followed (i.e., frequency of back flushing).See Appendix C, form C.3 for a sample inspection form.

Other inspection items should include checking the condition of, operation of, and access to valves, operators, cleanouts, and bypass assemblies. Maintenance structures are also checked for condition, evidence of leaking, and evidence of structural problems. These inspections are conducted every two years to annually and in coordination with other collection system inspections.

6.8.3 Computerized Management and Maintenance System

It is recommended that the City utilize the CMMS to schedule PM, capture preventative and reactive maintenance operations, and track performance and level of effort required to operate and maintain individual and sewer shed sewer system assets. An evaluation of the CMMS data would determine if tools, equipment, services and/or staffing is adequate to properly operate and maintain the wastewater collection system. In addition, the proper allocation of FTEs by asset would be evaluated using this tool. The steps taken to adequately operate and maintain the wastewater collection system would be either verified or new or additional steps recommended. The CMMS data would also be used to determine when a proactive rehabilitation, repair and/or replacement of deteriorating wastewater collection system asset(s) should be scheduled.

6.8.4 Condition Assessment Program

The condition assessment is an important means of determining the state of the collection system and how well O&M activities are working. Condition assessments provide information on what is working and what needs to be changed or improved. The City should develop and implement a formal Condition Assessment Program. This program will standardize inspection procedures for pipelines, manholes, ARV stations, and pump station inspection procedures, and condition assessment rating systems for pipelines, manholes, ARV stations and pump stations. Together with the inspection procedures, inspection forms should be developed so that standardized data is entered into the CMMS. The condition assessment program is an important element of the proactive management of the collection system.

The City does not use a set of standard CCTV specifications for use by CCTV contractors. A standard set of CCTV specifications would ensure uniform pre-cleaning, identification, inspection and CCTV documentation. Inspection should include the use of distance counters from known manholes, a full 360° CCTV sweep of all pipe joints and any circumferential cracks, a full longitudinal sweep or record of all longitudinal cracks, and sufficient visual documentation of all other pipe anomalies (such as root intrusion, blockages, protruding taps, cracked pipe, offset joints, collapsed pipe, etc.) to allow an engineering evaluation of remedy without re-inspection.

Section 7: Design and Construction Standards

7.1 Standards for Installation, Rehabilitation, and Repair of Sanitary Sewers

The City's standards for the design of sanitary sewer systems is covered by the City's Standard Plans and Specifications Section 71 – Sanitary Sewers, for recommendations to updating the standards see Sanitary Sewer Standards Update under Section 7.3.

7.2 Standards for Inspection and Testing for New and Rehabilitated Sanitary Sewer Facilities

Currently the City employs one inspector for all City projects as described in Section 5.4 of this report

The City's Standard Plans and Specifications outline the acceptance testing for sanitary sewer construction. The City standards include:

- Compaction testing of bedding and backfill.
- Pipelines – mandrel deflection testing and air testing.

Refer to the Inspection and Testing Standard recommendation (Section 7.3) for suggestions to modifying the current procedures.

7.3 Recommendations

The following recommendations for design and construction standards are based on the evaluation of the City's current standard plans and specifications.

7.3.1 Sanitary Sewer Standards Update

Upon review of the Standard Plans and Specifications for Sanitary Sewers there are a number of improvements to be considered for materials and methods of construction. The City should consider conducting a formal review and develop appropriate amendments to the existing City standards. The standards should be adopted by the City, distributed electronically (place on City website) and advertised to the development, contracting and engineering community of the updated standards.

7.3.2 Inspection and Testing Standards

The City's testing and inspection for new sanitary sewer system should be reviewed and updated as well as evaluated to ensure adequate inspection staff is provided. Examples of areas that should be considered for revision include:

- Require CCTV inspection of all mains and laterals 11 months after installation, just prior to the end of the one year warranty period.
- Require vacuum testing of manholes after backfilling is complete.

Section 8: Capacity Management

8.1 Capacity Assessment

The City determines the system capacity through regular master plan updates. The last wastewater collection system master plan update was completed in January 2013 with prior updates in 2005, 1993 and 1989. The wastewater collection system master plan update contains pertinent sections such as design criteria, recommended collection system strategy and recommended system improvements.

The hydraulic sewer model is used for future planning purposes to evaluate the impacts and needs to meet future development. The City uses the appropriate tools to proactively evaluate and adequately track the available collection system capacity.

8.2 System Evaluation and Capacity Assurance Plan

The system evaluation is in the form of a master plan update, which includes recommendations for sewer system rehabilitation, replacement and repair. The CIP and emergency projects are prioritized based on which are most critical (high traffic areas, temporary repair not functioning, system in jeopardy of eminent failure, etc.).

8.3 Recommendations

The following recommendation for the City's capacity management is based on the assessment of the Wastewater Collection System Master Plan Update.

8.3.1 Implementation Schedule

It is recommended that the City develop an implementation schedule for the north, south and central trunk sewer sheds. The schedule should be based on the use of a calibrated hydraulic model, the City's general plan and any specific plans that have/are or will be permitted. For further details of this recommendation see Section 6.8.1.

Section 9: Monitoring, Measurement and Program Modifications

9.1 Implementation and Effectiveness of the SSMP Elements

A brief description of how the City implements and measures the effectiveness of the major operational components of the SSMP is described below. The actual evaluation is summarized in the SSMP 2-year Program Audit found as Appendix E.

- O&M Program: Monitoring implementation of the O&M program is the responsibility of the City's Construction and Maintenance Supervisor. Effectiveness of the O&M program is measured based on the following:
    - Number of SSOs per year
    - Number of dry weather SSOs per year
    - Number of SSOs per year by cause (e.g., grease, roots, debris, etc.)
    - Length of gravity sewers cleaned annually
    - Actual versus scheduled cleaning dates for gravity sewers
    - Length of gravity sewers CCTV inspected annually
    - Record of pump station maintenance work orders completed annually
- FOG Control Program: Effectiveness of the FOG Control Program is measured based on the occurrence of SSOs caused by FOG.
- System Evaluation and Capacity Assurance Plan: Effectiveness of the capacity assurance plan is based on the occurrence of capacity related overflows and by the timely completion of identified sewer replacement projects as a sewer reaches its capacity.

These metrics are to assist the City in measuring the effectiveness of the SSMP and determine whether program changes are warranted.

9.2 Updating SSMP

The SSMP should be updated at least once every five years by the Collection System Supervisor with the contribution of the maintenance workers, the WQCF Superintendent and Senior Engineer. The review would be based on results from the two-year SSMP audits. A report should be prepared and kept on file. If warranted, addendums or modifications will be made and reviewed with Engineering, O&M Supervisors and maintenance workers once every five years. Should major changes arise, the SSMP may need to be updated and approved through the City Council.

9.3 SSMP Audits

The City will conduct an audit every two years and update the SSMP once every five years. Any major modifications to the SSMP that result from the audit will require certification by the City Council. As part of this 2014 SSMP Update an Audit Template has been developed as a guide for conducting the audits and is included in Appendix E.

Table 9-1 below provides a schedule over the next 16 years for when the City is to conduct Audits versus SSMP updates.

Table 9-1: SSMP Audit and Update Schedule

Year	SSMP Requirement
2014	SSMP Update
2015	
2016	Audit
2017	
2018	Audit
2019	SSMP Update
2020	
2021	Audit
2022	
2023	Audit
2024	SSMP Update
2025	
2026	Audit
2027	
2028	Audit
2029	SSMP Update
2030	

Section 10: Outreach Communications Program

As part of the SSMP, a public outreach communication program may be warranted for certain elements of the SSMP (e.g., FOG program, illegal and illicit connections, etc.). Refer to the recommendation below for further discussion.

10.1 Recommendations

10.1.1 Public Outreach Communication Program

The City should evaluate if an active or passive public outreach communication program is needed. Active public outreach programs include flyers, door knob hangers, advertisements and public meetings. Passive programs would include mailers and leaflets. Initially, a passive program is recommended. The effectiveness will be measured each year as described in Sections 9 and 10 of this report and any modifications recommended in the audit.

Section 11: Sewer System Management Plan – Summary of Recommendations

In evaluating the City's current O&M procedures, a largely informal system is in practice with minimal written procedures and documentation. A summary of the recommendations made in the 2006 SSMP are listed below with an update as to whether the recommendation is still warranted for this 2014 SSMP Update. For the recommendations that are still warranted they are further described throughout the report. As these changes are implemented, the City's approach to O&M of their wastewater collection system will progress to operating in a preventative mode.

Table 11-1: Summary of Recommendations

2006 Recommendation	2014 SSMP Update	SSMP Section	Schedule
Staffing Workload Evaluation	Recommendation is still warranted as staffing will need to be continually evaluated with changes in organization structure, population growth in the City and maintenance activities.	2.3.1	Ongoing
Tracking and Recording SSOs	The City is recording and tracking their SSOs; therefore, this recommendation is no longer warranted.	N/A	
Reporting	The City is currently reporting their SSOs per the SWRCB WDRs; therefore, this recommendation is no longer warranted.	N/A	
Database Objective	Recommendation is still warranted as the City is initiating the use of the CMMS; and will be populating with data in order to assist the objectives described in the recommendation.	3.2.1	Ongoing
FOG Program	The City updated and adopted the Industrial Waste Ordinance, which included FOG Control component; therefore, the recommendation has been fulfilled and no longer warranted.	N/A	
Pollutant Requirements	The City recently updated their Industrial Waste Ordinance; therefore, the recommendation is no longer warranted.	N/A	
Inspection Services	Recommendation is still warranted as the City should review and consider the CCTV and inspection of installed sewer mains and laterals prior to the one year warranty period expiring.	5.8.2	Ongoing
Ownership of Laterals	The City is in the process of clarifying ownership of laterals. For now, the current policy remains in place.	Appendix G	Ongoing
Collection System Map	The City has completed the transfer of collection system components from AutoCAD to GIS and has begun the integration process with other City owned utilities. The City is commencing the next phase of integrating the mapping with the CMMS.	N/A	

2006 Recommendation	2014 SSMP Update	SSMP Section	Schedule
Updating As-Builts	The City has a procedure in place for updating collection system mapping; therefore, this recommendation is no longer warranted.	N/A	
Wastewater Collection System Asset Identification	As part of the conversion into GIS mapping the City has assigned a unique identifier to each collection system sewer asset; therefore, this recommendation is no longer warranted.	N/A	
CIP Prioritization	Recommendation is still warranted.	6.8.1	Ongoing
Updated Rate Study	The City performed an updated rate study in 2008; therefore, this recommendation is no longer warranted.	N/A	
Formal Inspection/Cleaning Procedures	Recommendation is still warranted.	6.8.2	Ongoing
CMMS	Recommendation is still warranted.	6.8.3	Ongoing
Condition Assessment Program	Recommendation is still warranted.	6.8.4	Ongoing
Contingency Equipment and Replacement Inventories	The City keeps on hand the necessary contingency equipment and has their process in place for replacement inventories; therefore, this recommendation is no longer warranted.	N/A	
Training	The City keeps track of training attendance by date and topic covered for internal training or on the job training. Documentation is also kept on file for attendance to CWEA or other professional training. The current training program meets their needs; therefore this recommendation is no longer warranted.	N/A	
Plumbers and Contractor Outreach Program	Recommendation is no longer warranted as the number of SSOs attributed to construction/contractor is minimal.	N/A	
Sanitary Sewer Standards Update	Recommendation is still warranted.	7.3.1	Ongoing
Inspection and Testing Standards	Recommendation is still warranted.	7.3.2	Ongoing
Implementation Schedule	Recommendation is still warranted.	8.3.1	Ongoing
SSMP Monitoring	This recommendation is addressed within the SSMP Audit Template; therefore, this recommendation is no longer warranted.	N/A	
Audit Report	This recommendation is addressed within the SSMP Audit Template; therefore, this recommendation is no longer warranted.	N/A	
Public Outreach Communication Program	Recommendation is still warranted as the City will need to continually evaluate the effectiveness of its outreach program/activities.	10.1.1	Ongoing

References

Metcalf & Eddy. 2003. Wastewater Engineering Treatment and Reuse, Fourth Edition, McGraw Hill, Inc., New York.

Nolte Associates, Inc. 2005. Draft City of Manteca Wastewater Collection System Master Plan Update.

NV5. 2013. City of Manteca Wastewater Collection System Master Plan Update.

Appendix A

Sanitary Sewer Overflow Response Plan

City of Manteca
Sanitary Sewer Overflow
Response Plan

4 April 2014

Prepared for

City of Manteca
1001 W. Center Street
Manteca, CA 95337

K/J Project No. 1270003.00

CITY OF MANTECA

SANITARY SEWER OVERFLOW RESPONSE PLAN

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Engineers & Scientists

CITY OF MANTECA

SANITARY SEWER OVERFLOW RESPONSE PLAN

Introduction to Sanitary Sewer Overflow Response Plan

The City of Manteca's (City's) Sanitary Sewer Overflow Response Plan (SSORP) presents a documented procedure for:

- identifying a sanitary sewer overflow (SSO);
- responding to a SSO;
- notifying City, emergency and regulatory officials;
- notifying the public of potential environmental and health hazards, if applicable;
- documenting the SSO event and response;
- reviewing the cause and generating improvements to prevent a future SSO event; and
- developing an implementation plan to prevent a future SSO event.

This SSORP describes the need to mobilize labor, materials, tools, and equipment to correct conditions that may cause or contribute to a non-permitted discharge. The plan applies to a wide range of potential system failures that could create an overflow event. The SSO Response Plan is composed of the following sections: 1) notification, 2) response, and 3) reporting.

This SSORP is an update of the City's previous SSORP, incorporating the changes from the amended State Water Resources Control Board's (SWRCB) Monitoring and Reporting Program (MRP) (Order 2013-0058-EXEC) to ensure compliance with the Waste Discharge Requirements (WDR).

SSO Classification

Under the newly amended MRP Order No. 2013-0058-EXEC, SSOs are categorized into the following categories described below. However, regardless of the SSO category or of its volume, it does not alter the City's SSO response procedures (containment, control, and recovery) or staff's responsibility to understand and comply with notification and reporting processes.

Category 1

Discharges of untreated or partially treated wastewater of **any volume** resulting from the City's sanitary sewer system failure or flow condition that:

- Reach surface water and/or reach a drainage channel tributary to a surface water; or
- Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).

Category 2

Discharges of untreated or partially treated wastewater **greater than or equal to 1,000 gallons** resulting from the City'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.

Category 3

All other discharges of untreated or partially treated wastewater resulting from the City's sanitary sewer system failure or flow condition.

Private Lateral Sewage Discharges

Discharges of untreated or partially treated wastewater resulting from blockages or other problems **within a privately owned sewer lateral** connected to the City's sanitary sewer system or from other private sewer assets. Private Lateral Sewage Discharges (PLSDs) that the City becomes aware of may be voluntarily reported to the SWRCB California Integrated Water Quality System (CIWQS) Online SSO Database.

Section 1 – Notification to the City

Overflows may be reported by City employees, contractors or by the general public. Indications of an SSO could include "dirty" discharge, foul odor, or unusual flooding such as overflowing manholes, cleanouts or pump stations. City employees report problems directly to wastewater maintenance or City staff. Telephone calls from the public are received by plant staff at the City's Wastewater Quality Control Facility (WQCF) and/or the City's police department and routed to the WQCF staff. For the complete chain of communication for responding to SSOs refer to Figure 1, SSO Response Field and Reporting Procedures Flowchart.

After receiving notification of a possible SSO, the City records all relevant information on a Request for Service Form (Attachment I). Relevant SSO information recorded on the Request for Service Form includes:

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

Information from the Request for Service Form is used by the plant staff to dispatch the appropriate maintenance worker or crew to the area. Once arriving on the site and the maintenance worker or crew confirms that an SSO is occurring then an SSO Field Report form will be completed as shown in Attachment II.

Standard Operating Practices are followed when an SSO reaches waters of the United States (U.S.), for notification procedures refer to Figure 2, City of Manteca WQCF SSO Notification List.

Section 2 – Response by City

Any system failure within the City's service area that causes or threatens to cause an SSO will initiate an immediate response to isolate and correct the problem. Crews and equipment are available 24 hours per day. ***The maintenance worker must use discretion when assisting private property owners, occupants, or other non-City employees, as the City could face increased liability for damages inflicted to private property during such assistance.***

The following procedures have been developed for responding to SSOs. The purpose of these procedures is to ensure that all SSO responses are handled efficiently and effectively and that all regulatory requirements are met. Maintenance workers are required to know and follow these procedures. Figure 1 summarizes the chain of communication for responding to an SSO.

In order to limit public access to and contact with areas affected with SSOs, maintenance workers/supervisor will follow the following response procedures:

I. Investigate and Assess the Problem:

A. Plant staff notifies the maintenance worker of potential SSO and issues Request for Field Service for response.

B. Maintenance worker arrives on site and performs an investigation and assessment of the overflow. The maintenance worker will take immediate action to establish a perimeter and barricade the overflow in order to contain the area. Once the overflow perimeter has been established appropriate health hazard signs will be posted to protect the public from coming in contact with the overflow. The maintenance worker will determine the extent of the overflow, what additional City Operation and Maintenance (O&M) resources will be needed (spill response vehicle, vactor truck, rodder, backhoe and operator, etc.), what additional contract services may be needed (e.g., construction contractor, closed circuit television [CCTV] crew, etc.), and if notification of other agencies is required at that time. Pictures and/or video of the SSO and surrounding area will be taken to document the SSO.

C. Maintenance worker notifies City staff of recommended response. Maintenance worker will take the lead by following these procedures:

1. Locate SSO by address, cross street and point of overflow (i.e., manhole, cleanout, pump station, broken or damaged pipe, air/vacuum release valve [AVRV], flow meter structure, etc.).

2. Determine the current magnitude of the SSO.
   - Flooded structure
   - Storm water inlet or exposure to waters of the U.S.
   - Potential for public exposure
   - Potential for other environmental impacts
   - Related problems

a. Is overflow related to a street collapse?
b. Is overflow related to construction work?
c. Is overflow related to fats, oil and/or grease (FOG) or other debris?
d. Is overflow causing a traffic hazard such as displaced manhole cover or street flooding?

- Provide initial estimate of overflow rate using pictures (refer to Attachment III).
- If the SSO meets any one or all of the criteria listed below immediately contact designated City staff:
  - Discharged to surface water and/or reaches a drainage channel tributary to a surface water, or
  - Reaches a MS4.
- Estimated damage to public and private property. City staff may enter private property for the purposes of documenting structural damage, floor and wall coverings, and personal property.
- Take photographs and/or videotape of SSO event and response as necessary to document the event.

3. Sampling of receiving waters impacted by the overflow is required by regulatory agencies or at the direction of the Collection System Supervisor, particularly whenever an overflow is greater than 50,000 gallons and reaches a storm drain or surface water. Sampling at appropriate locations such as upstream, at entry point and downstream of overflow location will allow the City to establish and monitor the levels of contamination as well as to establish or compare with the natural background levels of bacteria in the receiving waters. If sampling is to be conducted, the Collection System Supervisor will communicate with the laboratory personnel to establish and complete the sampling regime. The Laboratory Analyst will notify San Joaquin County Department of Environmental Health (DEH) that sampling and monitoring is being conducted, and to verify if additional testing is required. The sampling regime is to be continued until a determination is made that contamination resulting from the overflow event no longer exists and no longer poses a health risk to the public.
   - Contact lab personnel and transport sample to laboratory for analysis along with appropriate chain of custody form (Attachment IV). The sample will at least test for Fecal Coliform as a bacterial indicator to comply with the Fourth Edition of the Water Quality Control Plan (Basin Plan) for the Sacramento River and San Joaquin River Basins.

4. Begin initial documentation by completing SSO Field Report Form (Attachment II).

II. Coordination with Hazardous Material Response:

If a suspicious substance (e.g., oil sheen, foamy residue) or odor (e.g., gasoline) is detected, the maintenance worker will contact City staff before taking further action. The City staff will contact the appropriate Hazardous Materials (HAZMAT) response team, according to City protocol, should site conditions be determined hazardous. The maintenance worker will remain at the perimeter of the area.

PLEASE NOTE: Vehicle engines, portable pumps, and open flames (e.g., cigarette lighter) may cause an explosion or fire if exposed to flammable fluids or vapors. All City personnel will keep a safe distance and observe caution until the proper authority declares the area to be safe for entry.

Cleanup of the hazardous material is supervised by the HAZMAT team. The maintenance worker(s) follows the instructions of the HAZMAT supervisor, but does not participate in the cleanup of the hazardous material. The maintenance worker proceeds with SSO response procedures only after the HAZMAT supervisor determines it is safe to enter the area.

III. Traffic Control:

Traffic control may be needed immediately to protect the public or City staff. Typically, immediate traffic control is needed if there is a street collapse or significant depression in the pavement that is related to the sewer, if the manhole is ajar, or if the overflow causes flooding of the street. Traffic control may also be needed to prevent wastewater from being further dispersed and to protect the maintenance worker(s) while containing the overflow and removing the blockage, determining the cause or repairing the problem.

A. Provide traffic control per City Standards and regulatory standards.

B. If necessary, contact City police, highway patrol and County of San Joaquin Sheriff to assist with providing proper traffic control.

IV. Contain SSO:

Containment of the overflow is the next step. Containment becomes more difficult if the overflow reaches the storm drain system or drainage way since the overflow can rapidly contaminate receiving waters such as creeks, streams, rivers, and other water bodies. Figure 3 – Existing Collection System and Storm Drainage is a guide to use by City maintenance worker(s) to contain the overflow. During dry weather, the storm drain system may be used to store the overflow if it can be plugged downstream of the overflow or if the downstream storm drain pump station can be deactivated.

A. Options for containing overflow:
    1. Overflow onto ground
        a. Rubber mats at catch basin or drain inlet.
        b. Sand bags in gutter.
        c. Dig trench in earth.
    2. Overflow into storm drainage
        a. Trace overflow in storm drainage system to downstream end point.
        b. Plug all affected storm system outlets or block the creek and channels if necessary to contain spill.
        c. If possible, turn off storm water pump station.

3. Overflow onto private and/or public property
    a. Confirm SSO not caused by the City sewer system (pump station, interceptor, trunk, main or lateral).
    b. Notify property owner or resident.
    c. Suggest private property owner or resident contact local plumber or other appropriate services such as restoration contractor.

B. Post warning signs around contaminated area

C. Required equipment for containing overflows:
1. Overflow onto ground and in buildings
    a. Rubber mats
    b. Sand bags
    c. Plastic sheets
    d. Bypass pumps and pipes/hoses
    e. Vactor truck
    f. Spill Response Truck
    g. Portable emergency generator
2. Overflow into storm drain
    a. Plugs
    b. Bypass pumps and pipes/hoses
    c. Vactor truck
    d. Spill Response Truck
    e. Portable emergency generator
3. Overflow at pump station
    a. Emergency generator
    b. Bypass pumps and pipes/hoses
    c. Vactor truck
    d. Spill Response Truck
    e. Portable emergency generator
4. Additional warning signs
    a. If public notification is determined necessary, City Management will determine the need for further public notification through printed or electronic news media or by alternative notification measures (i.e., front door hangers). During the initial investigation and assessment of the SSO the City will barricade the overflow and post the appropriate warning signs (refer to Section 2, paragraph I.B.). Table 1 below describes the procedures to follow for additional public notification:

Table 1: Sanitary Sewer Overflow Posting Decision Process

Sanitary Sewer Overflow Response Plan
City of Manteca

SSO Posting for a Confirmed Overflow	
1	Maintenance worker confirms a possible SSO to City staff
2	The maintenance worker provides detailed SSO information to City staff • Overflow history at the SSO site • Rainfall data, if wet weather related • Map identifying the SSO location, surrounding area, and surface waters that may be impacted • Maintenance worker provides input on the posting recommendation
3	City staff consults and recommends whether or not to post warning signs.
4	If posting is recommended, warning signs are posted by the maintenance worker at specified locations.
5	City staff decides when the warning signs are to be removed after notification of clean up by the maintenance worker.

5. Begin preliminary notifications:

   Refer to Figure 2 for SSO reportable procedures, and to the SSO Field Report Form, Attachment II.

V. Correct Cause

The cause of the overflow may be located a considerable distance downstream of the actual overflow in areas with flat terrain. During large storms, overflows may occur because of infiltration and inflow (I/I) of storm water into the sewer system. I/I can greatly increase the flow in the collection system and cause overflows from pipes that are only partially blocked by roots, grease, or debris. However, during very large storms I/I can cause the flow in the collection system to exceed the hydraulic capacity of the pipes or pump stations. Under these conditions, it may not be possible to stop the overflow until the flows recede.

A. Locate cause of overflow

   1. Sewer main

      a. Check flow in manholes.

      b. Blockage should be between manhole with sluggish flow or surcharging (upstream manhole) and manhole with very little flow or is dry (downstream manhole).

2. Sewer lateral

    a. Check flow in City cleanout. If cleanout does not have flow, stoppage is located on private property and is not the City's responsibility.

    b. If there is no existing City cleanout, notify property owner to clear stoppage.

3. Pump station

    a. Check alarm system for indication of problem. All alarms are telemetered by the supervisory control and data acquisition (SCADA) system to the WQCF on Yosemite Road.

    b. If power failure has occurred, determine if pump station has an emergency generator and if emergency generator is operating. If pump station has an emergency generator outlet, deliver City's portable emergency generator to the site.

    c. Observe pump station for proper operation.

B. Clear Blockage

1. Within Sewer Main

    a. Clear line from dry manhole, if possible, with high pressure cleaning or power rodding equipment and vactor truck.

    b. Determine cause of blockage (if possible) by evaluating sample of debris or material captured downstream of cleaning and/or conduct CCTV inspection.

2. Within Sewer Lateral

    a. Maintenance worker will rod from property line cleanout to eliminate stoppage in City lateral.

3. If blockage cannot be cleared:

    a. Increase containment or initiate bypass pumping.

    b. Perform CCTV inspection to determine problem.

    c. Repair broken sewer line or excavate pipe and remove section with blockage and replace with a new pipe section and couplings.

C. Pump station:

1. If pump station does not have power, connect portable emergency generator or portable bypass pump system.

2. Check fuel for emergency generator or bypass pump system.

3. If a pump is not operating properly, activate standby pump system.

4. Investigate force main for possible damage or blockage.

5. Make other repairs as necessary.

VI. Final Volume Estimate:

SSO response staff should make every effort to maintain a careful chronology of the events during an overflow event and make every attempt to conduct linear measurements of the discharge streams and flow velocities in order to effectively quantify the overflow volume. Photo documentation of the overflow event should also become a routine procedure in the overflow documentation process. The final overflow volume is estimated and based on the results additional reporting to regulatory agencies is completed. Final overflow volume will be stored in the City's records.

A. Estimate final overflow rate using tables and pictures (refer to Attachment III).

B. Overflow volume can also be estimated by multiplying the overflow duration by the overflow rate.

C. Enter overflow volume in the SSO Field Report Form.

VII. Initiate Clean-up:

Removal and replacement or disinfection of contaminated soil or drainage ways is only performed when directed by the appropriate agencies (e.g., DEH, California Department of Fish and Wildlife, etc.).

A. Storm drain or drainage way:

1. Pump or vacuum out wastewater
2. Remove debris
3. Wash concrete and contain wash water, pump or vacuum out
4. Remove contaminated soil/plants
5. Remove all plugs/dams used to contain overflow

B. Street:

1. Remove debris
2. Wash pavement and contain wash water
3. Contain and transport wastewater by pumping or vacuuming

VIII. Receiving Water Sampling – See Section 2.I.C.3.

Section 3 – Reporting Procedure

Certain overflows are required by law to be promptly reported to regulatory agencies. As described in the MRP, the timeframe for SSO reporting depends on the SSO category:

- Category 1 and Category 2 – Must be reported to the CIWQS Online SSO Database as follows:
  - Draft reports will be submitted to the SWRCB CIWQS Online SSO Database **within three (3) business days** of the City becoming aware of the SSO.

- A final report will be certified through the CIWQS Online SSO Database **within 15 calendar days** of the end date of the SSO.

> **Additional Reporting Requirements for Category 1 SSOs**
>
> The City will submit an SSO Technical Report in the CIWQS Online Database within 45 calendar days of the SSO end date for any SSO in which 50,000 gallons or greater are spilled to surface waters.

- Category 3 will be reported to the CIWQS Online SSO Database and certified within 30 calendar days after the end of the calendar month in which the SSO occurs (e.g., all Category 3 SSOs occurring in the month of February will be entered into CIWQS and certified by March 30).

- PLSDs – Reported to the CIWQS Online SSO Database upon the City's discretion.

- No Spill Certification – If there are **no SSOs** during the calendar month, the City will either:

  - Certify, within 30 calendar days after the end of each calendar month a "No Spill" certification statement in the CIWQS Online SSO Database certifying that there were no SSOs for the designated month; or

  - Certify, quarterly within 30 calendar days after the end of each quarter, "No Spill" certification statements in the CIWQS Online SSO Database certifying that there were no SSOs for each month in the quarter being reported on.

The designated staff will report as required above and continue with completing and processing the closure report as described below:

A. Review, complete and sign required reports:

   1. Reportable SSO Field Report Form (Attachment II).

B. Documentation and Data Tracking:

   1. Forward a copy of each signed report to the Collection System Supervisor for tracking and Sewer System Management Plan (SSMP) audits.

   2. Assign each SSO Field Report Form with respective CIWQS ID number.

C. Review the SWRCB MRP Statewide General WDR for Wastewater Collection System Agencies to confirm the appropriate requirements are satisfied.

D. Reports and Data Capture:

   Periodically, SSOs may occur in privately owned laterals. While the City is not legally required to respond to these SSOs, the City will use its resources to clean up the SSO if it flows onto public property. The Collection System Supervisor and City Staff decide whether or not to bill the owner for these City services.

   1. Assure that appropriate documentation has been completed.

2. For “Private Lateral SSOs” provide copies of job-sheets/time-sheets to City staff.

E. Customer Satisfaction

City staff or maintenance worker may follow up in person or by telephone with interested citizen(s) who either reported the overflow or expressed concerns about public health or the environment. Document the discussion in a memo to the file and add SSO CIQWS identification number, date, person contacted, and phone number.

F. Media Notification Procedure

If an overflow affects surface water or private property, media notification may be necessary. The City Public Works Director or City designated representative determines if media notification is necessary. If so, the City will take the following steps:

- The maintenance worker verifies the SSO and reports back to City staff, who then informs the Public Works Director;
- The Public Works Director is the "first line" of response to the media for any SSO;
- Calls received from the media at any time are referred to the Public Works Director; and
- The Public Works Director or City designated representative is the only City representative authorized to be interviewed by the media. No other personnel are authorized to speak on behalf of the City unless authorized by the City Public Works Director.

Section 4 – Required Notifications (Not to be confused with Reporting)

Effective September 9, 2013, an amendment by the SWRCB to the Monitoring and Reporting Requirements for Statewide General WDR for Sanitary Sewer Systems Order No. WQ 2013-0058-EXEC was issued. The revised WDR stipulated the following notifications requirements be included in this SSORP:

For any Category 1 SSO **greater than or equal to 1,000 gallons** that results in a discharge to a surface water, either directly or by way of a drainage channel or MS4, the City will, as soon as possible, **but not later than two (2) hours** after:

- The City has knowledge of the discharge,
- Notification is possible, and
- Notification can be provided without substantially impeding cleanup or other emergency measures,

notify the California Office of Emergency Services (OES) and obtain a notification control number.

SSO Tracking

All complaints, confirmed SSOs, and sanitary sewer system repairs will be recorded into the City's CMMS database for Request for Service.

Staff and Contractor Personnel Awareness/Training

For construction projects that involve excavation in and around existing wastewater facilities, the appropriate City Staff and contractor personnel will be made aware of and follow the SSORP procedures by:

- During the design process for sewer related projects the response plan will be part of the specifications.
- For sewer related projects a pre-construction meeting will be held to emphasize important issues related to the project. One of the key points will be review of the SSO Response Plan.
- Initial Training Program – City O&M Department for the Collection System and WQCF will review the SSO Response Plan and be trained to complete a SSO Field Report Form, notification procedure, protection procedures for City Staff, public, and environment, clean up procedures, and implementation plan to prevent future SSO events.
- Training Program – City O&M Department Staff will be trained once per year on the SSO Response Plan elements.
- New Employee Training – prior to starting work in the field for the City, each new employee will be required to review with their properly trained supervisor the SSO Response plan elements.

Key Staff

The key SSO response staff are listed in Attachment V.

Figures

Figure 1 - City of Manteca SSO Response Field and Reporting Procedures Flowchart

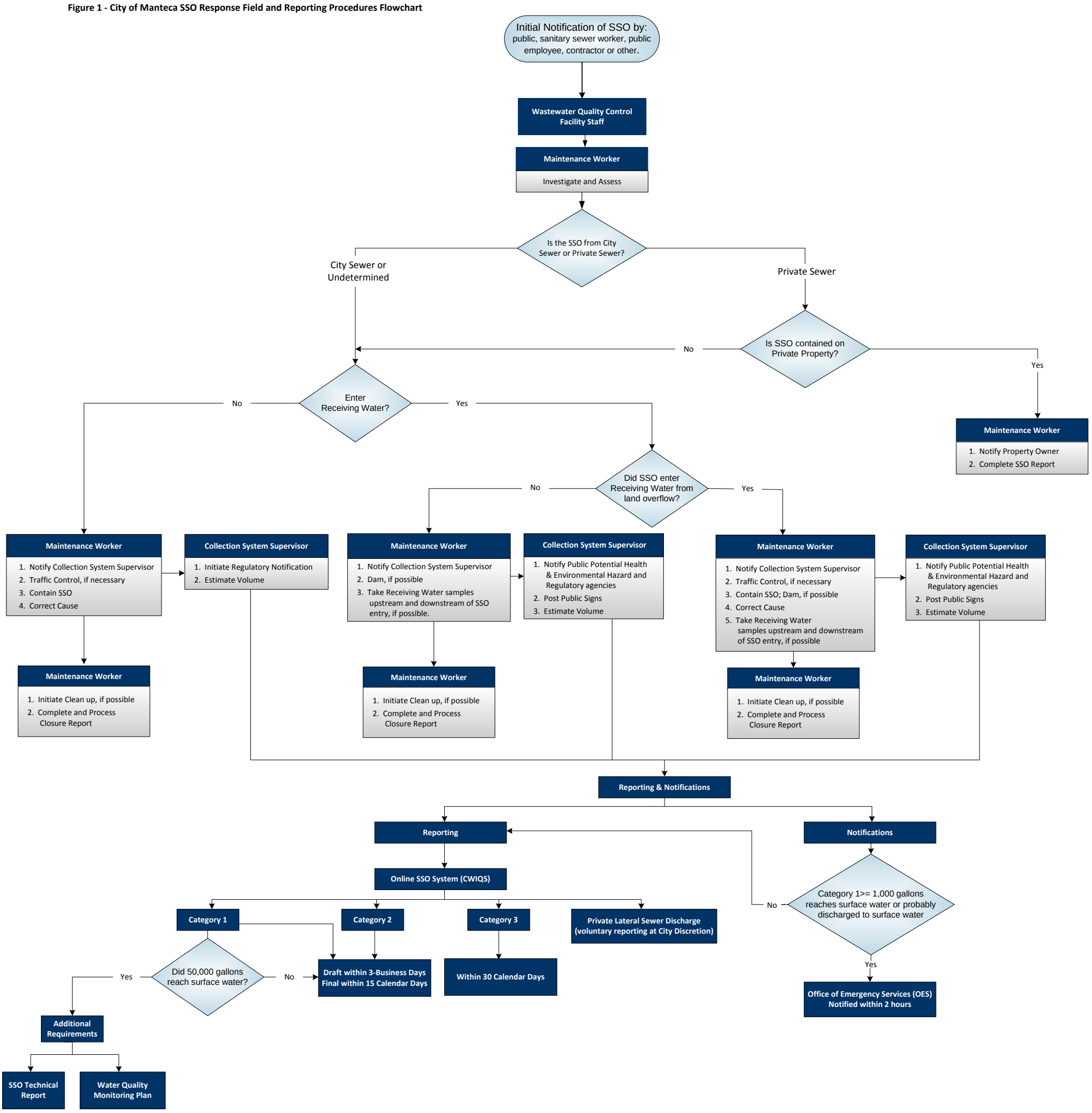


FIGURE 2

City of Manteca WQCF Sanitary Sewer Overflow Notification List
Sanitary Sewer Overflow Response Plan

1. Within two hours of becoming aware of any Category 1 sanitary sewer overflow (SSO) greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, notify the California Office of Emergency Services (OES) and obtain a notification control number. Follow direction from the OES on additional agencies that may need to be contacted. Document direction issued by OES. Follow plan for written reporting per SSO Response Plan.

2. Required Notification Contact Phone Numbers (See Item 4 below for possible information required to report to OES):

   - Office of Emergency Services (OES), State Warning Center (800) 852-7550

3. Optional/Additional Notification Contact Phone Numbers:

   - South San Joaquin Irrigation District (SSJID), Sam Bologna (209) 249-4600
   - San Joaquin County Environmental Health Department, front desk (209) 468-3400
   - California Department of Health Services (DHS), Stockton, CA (Bhupinder Sahota as of February 2014) (209) 948-7696
   - California Department of Fish and Wildlife, Rancho Cordova, CA (916) 445-0045
   - City of Manteca Police Department (209) 456-8100
   - San Joaquin County Sherriff's Department (209) 468-4400
   - State of California Highway Patrol (209) 943-8600
   - Regional Water Quality Control Board (RWQCB), (Mohammad Farhad as of February 2014) (916) 464-1181

4. Provide the requested information to OES; which may include the following information:

    - Name of person notifying OES and direct return phone number.
    - Estimated SSO volume discharged (gallons).
    - If ongoing, estimated SSO discharge rate (gallons per minute).
    - SSO Incident Description:
        - Brief narrative.
        - On-scene point of contact for additional information (name and cell phone number).
        - Date and time enrollee became aware of the SSO.
        - Name of sanitary sewer system agency causing the SSO.
        - SSO cause (if known).
    - Indication of whether the SSO has been contained.
    - Indication of whether surface water is impacted.
    - Name of surface water impacted by the SSO, if applicable.
    - Indication of whether a drinking water supply is or may be impacted by the SSO.
    - Any other known SSO impacts.
    - SSO incident location (address, city, state, and zip code).

Woodbridge Park
Northgate Park
Chadwick U5
Assieh Development
MUSD
Villa Ticino
Union Road
Fishback
Wastewater Quality Control Facility
Roberts Estates
Airport/Daniels
Tara Park
Bella Vista
Antigua
Woodward Park
Mikesell
357 Charles St
New Horizons Drive
Garden Gate
Curran Grove
Eckert
Frito Lay

Legend

- Storm Drain - Manholes
- Storm Drain - Catch Basin
- Storm Drain - Drop Inlet
- Storm Drain - Manholes Private
- Storm Drain - Catch Basin Private
- Storm Drain - Drop Inlet Private
- Stom Drain - Pump Station
- SCADA
- SCADA SENSOR
- Storm Drain - Force Main
- Storm Drain - Gravity Main
- Storm Drain - Gravity Private
- Storm Drain - Lateral
- Storm Drain SSJID
- Storm Drain Retention Basin
- Lift Station
- Lift Station - Private
- Siphon
- Sanitary Sewer - Manhole
- Sanitary Sewer - Lamp Holes
- Sanitary Sewer - Clean Outs
- Sanitary Sewer - Lamp Holes Private
- Sanitary Sewer - Clean Outs Private
- Sanitary Sewer - Force Main
- Sanitary Sewer - Gravity Main
- Sanitary Sewer - Gravity Private
- Sanitary Sewer - Gravity Abandoned
- Blind Areas

Waterbody

- Estuary
- Ice Mass
- Lake Pond
- Playa
- Reservoir
- SwampMarsh

Waterways

- ArtificialPath
- CanalDitch
- Coastline
- Connector
- Pipeline
- StreamRiver
- Underground Conduit
- City Boundary

0 1,500 3,000
Feet

Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013

Document Path: Z:\Projects\Manteca\SSMP\Events\20140214_Report\Figure3_Stormwater.mxd

Kennedy/Jenks Consultants

City of Manteca
Sewer System Management Plan

Existing Sewer Collection and Existing Stormdrain System

K/J 1270003.00
April 2014

Figure 3

Attachment I

Request for Service Form

ID: _____

Rev. 9-24-13

REQUEST FOR SERVICE

*To Be Completed By Person Answering The Phone

*Date: _____ *Time: _____ Am/Pm

*Resident's Name: _____

*Address: _____

*Cross Street: _____

*Phone: _____ Home/Work/Cell (Please Circle)

*Call Received By: _____

(Office Use Only)

Circle One

Sewer Station	Storm Station
Clean Out	Flooding
Main Line	Storm Basin
Odor	
WQCF	

Other: _____

Longitude: _____

Latitude: _____

Event ID: _____

Confirmation #: _____

*Request: _____

_____

_____

Response By: _____

Action: _____

_____

_____

Tools Used To Clear Blockage: Sand Points _____ 2.5" _____ 3.5" _____

Footage Of Cable From Top Of Clean Out To Plug: _____ Feet.

Did Sewage Spill? (Check One) Yes _____ No _____ Amount Of Gallons: _____

Did Spill Reach Storm Drain Inlet? (Check One) Yes _____ No _____

How Was Spill Cleaned Up? Vacuum: _____ Jetted: _____

How Often Have We Been There? _____

How Often Does The Resident Say We've Been There? _____

Does This Site Need To Have A Video Done? (Check One) Yes _____ No _____

Mainline: (Check One) Yes _____ No _____

Jetted From Dry Manhole At: _____

Other Notes: _____

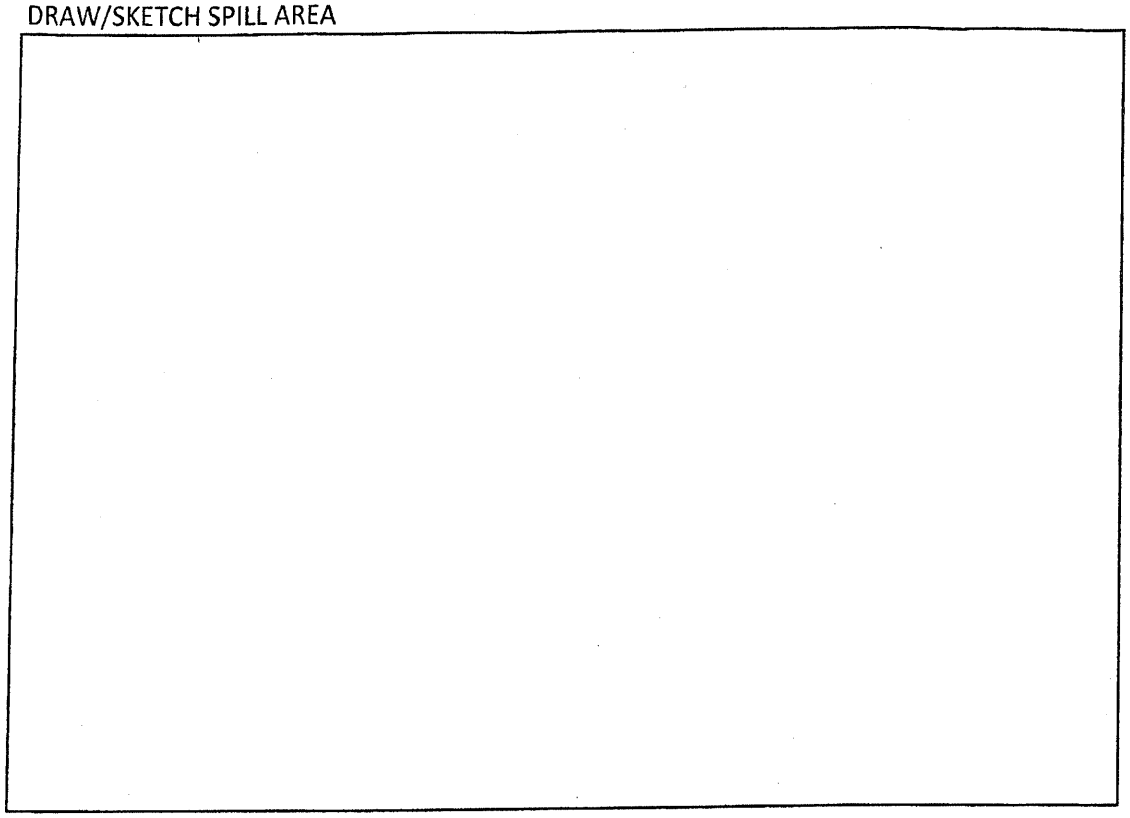
_____

_____

Arrival Time: _____ Completion Time: _____ Total: _____

SPILL ESTIMATION WORKSHEET

DRAW/SKETCH SPILL AREA



AREA OF A SQUARE/RECTANGLE IS; Length x Width x Depth = cu ft

AREA OF A CIRCLE IS: Dia x Dia x 0.785 x Depth = cu ft

AREA OF A TRIANGLE IS: Base x Height x 0.5 x Depth =cu ft

1/8" = 0.01'	3" = 0.25'
1/4" = 0.02'	4" = 0.33'
3/8" = 0.03'	5" = 0.42'
1/2" = 0.04'	6" = 0.50'
5/8" = 0.05'	7" = 0.58'
3/4" = 0.06'	8" = 0.67'
7/8" = 0.07'	9" = 0.75"
1" = 0.08'	10" = 0.83"
2" = 0.17'	12" = 1.00'

_____cu ft x 7.48 gallons = _____**Gallons spilled**

CITY OF MANTECA
REVISED 3-26-12

Attachment II

(Sample) SSO Field Report Form

(Sample) SSO Field Report Form

CITY OF MANTECA

SANITARY SEWER OVERFLOW (SSO) FIELD REPORT FORM

ALL ITEMS MUST BE COMPLETED

General Information

1. SSO Event ID No (Issued automatically by CIWQS):_____-_____-_____
1a. Customer Service Call Number:_____
2. Call Received From:_____
3. Date Received: _____/_____/_____ (MM/DD/YY)
4. Time Received: _____:_____ (24-Hour Time)
5. Report Filled Out By:_____ Phone Number (_____)_____-_____

Section A. Physical Location Details (REQUIRED FOR CATEGORIES 1, 2, & 3 SSOS)

1. Spill Location Name:_____
   (If the overflow did not occur at a street location, then use other identifiers such as intersection or manhole number)
2. Latitude:_____ deg. _____ min. _____ sec or _____ decimal degrees
3. Longitude:_____ deg. _____ min. _____ sec or _____ decimal degrees
4. Street Type: ☐ Alley, ☐ Avenue, ☐ Boulevard, ☐ Circle, ☐ Freeway, ☐ Highway, ☐ Lane, ☐ Loop, ☐ Trail, ☐ Other _____
5. Cross Street:_____
6. City:_____
7. County:_____
8. Spill Location Description:_____

   _____

   _____

   _____
9. Regional Water Quality Control Board: _____

   _____

(Sample) SSO Field Report Form

Section B. Spill Details

1. Number of Appearance Points:_____

2. Spill Appearance Point:
   - ☐ Building or Structure
   - ☐ Force Main or Pressure Sewer
   - ☐ Gravity Sewer
   - ☐ Manhole
   - ☐ Other Sewer System Structure
   - ☐ Pump Station
   - ☐ Other (specify) _____

3. Did the spill discharge to a drainage channel and/or surface water? ☐ Yes ☐ No

4. Did the spill discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system? ☐ Yes ☐ No

5. Private lateral spill? ☐ Yes ☐ No

6. Name of Responsible Party (if private lateral) _____

7. Final spill destination(check multiple if necessary):
   - ☐ Beach
   - ☐ Building or structure
   - ☐ Other paved surface
   - ☐ Storm drain
   - ☐ Street/curb and gutter
   - ☐ Surface Water
   - ☐ Unpaved surface
   - ☐ Other (specify) _____

   a. Explanation of final spill destination _____
   b. Did spill create a nuisance (e.g., traffic or pedestrian impacts, private or public property impacts, etc.)? ☐ Yes ☐ No

8. Estimated total spill volume (gallons):_____

   a. Volume that reached a separate storm drain that flows to a surface water body? _____gallons
   b. Volume that reached a drainage channel that flows to a surface water body? _____gallons
   c. Volume discharged directly to a surface water body? _____gallons
   d. Volume discharged to land (e.g., soil, grass, curb, street, etc.)? _____gallons

9. Estimated total spill volume recovered (gallons): _____

a. Volume recovered from the separate storm drain that flows to a surface water body (**Do not include wash water recovered**)? _____gallons
b. Volume recovered from a drainage channel that flows to a surface water body? _____gallons
c. Volume recovered from the surface water body? _____gallons
d. Volume recovered from the discharge to land? _____gallons

10. Estimated volume of spill that reached surface water, drainage channel, or not recovered from a storm drain (gallons): _____
11. Estimated current spill rate (gallons per minute, if applicable): _____
12. Estimated spill start Date/Time:_____/_____/____ (MM/DD/YY) _____:_____ (24:00)
    a. Explanation of volume estimation methods used: _____

       _____

       Provide diagrams and/or photographs of spill incident. Include details that will help explain how overflow volume was determined.
13. Sanitary sewer system agency was notified of or discovered spill Date/Time:

    _____/_____/_____ (MM/DD/YY) _____:_____ (24:00)
14. Estimated Operator arrival Date/Time: _____/_____/____ (MM/DD/YY) _____:_____ (24:00)
15. Estimated spill end Date/Time: _____/_____/____ (MM/DD/YY) _____:_____ (24:00)
16. Spill cause:

☐ Debris
☐ Flow exceeded capacity
☐ Grease deposition (FOG)
☐ Operator error
☐ Pipe structural problem/failure
☐ Pump station failure
☐ Rainfall exceeded design
☐ Root intrusion
☐ Vandalism

☐ Other (specify) _____

    a. Spill cause explanation _____
    b. Where did failure occur? _____
    c. Explanation of where failure occurred _____

       _____

17. If spill caused by wet weather, choose storm size:
    - ☐ 1 Year
    - ☐ 2 Year
    - ☐ 5 Year
    - ☐ 10 Year
    - ☐ 50 Year
    - ☐ 100 Year
    - ☐ >100 Year
    - ☐ Unknown
    - ☐ _____ Number of inches in time (hours or minutes)

    a. Was there measurable precipitation during the 72-hour period prior to the overflow? ☐ Yes ☐ No

18. Diameter of sewer pipe at the point of blockage or spill cause (inches, if applicable):

    _____

    _____

19. Material of sewer pipe at the point of blockage or spill cause (if applicable):

    _____

    _____

20. Estimated age of sewer pipe at the point of blockage or spill cause (if applicable):

    _____

    _____

21. Description of terrain surrounding the point of blockage or spill cause (if applicable):
    ☐ Flat ☐ Mixed ☐ Steep

QUESTIONS 22-33 FOR CATEGORY 3 NOT REQUIRED (SKIP TO SECTION C)

22. Spill response activities (check multiple if necessary):
    - ☐ Cleaned-up (mitigated spill effects)
    - ☐ Contained all or portion of spill
    - ☐ Inspected sewer using CCTV to determine cause
    - ☐ Restored flow
    - ☐ Returned all or portion of spill to sanitary sewer system
    - ☐ Other (specify) _____

    a. Explanation of spill response activities _____

    _____

23. Spill response completion Date/Time: _____/_____/____ (MM/DD/YY) _____:_____ (24:00)

24. Spill corrective action taken (check multiple if necessary):
    - ☐ Added sewer to preventive maintenance program
    - ☐ Adjusted schedule/method of preventive maintenance
    - ☐ Enforcement action against FOG source
    - ☐ Plan rehabilitation or replacement of sewer
    - ☐ Repaired sewer
    - ☐ Other(specify) _____

    a. Explanation of spill corrective action taken _____

    _____

QUESTIONS 25-33 FOR CATEGORY 2 NOT REQUIRED (SKIP TO SECTION C)

25. Visual inspection results from impacted receiving water: _____
    _____

26. Health warnings posted? ☐ Yes ☐ No

26a. If health warnings posted, list the location(s) of posting:

_____

_____

27. Did the spill result in a beach closure? ☐ Yes ☐ No
    a. Name of impacted beach(es) (if applicable): _____

28. Name of impacted surface water(s) (if applicable): _____

29. Is there an ongoing investigation? ☐ Yes ☐ No

    a. Describe Ongoing Investigations: _____

    _____

30. Were samples of the contamination receiving water obtained? ☐ Yes ☐ No

(Sample) SSO Field Report Form

30a. If samples were obtained, list the location(s) in relation to point of entry

_____

30b. If samples were obtained, who obtained the samples?_____

30c. Samples Delivered to for Testing:

_____

30d. Chain of Custody number for samples: _____

and Date: _____/_____/____ (MM/DD/YY)

31. Water quality samples analyzed for (check multiple if necessary):

☐ Dissolved oxygen

☐ Other chemical indicator(s) (specify) _____

☐ Biological indicator(s) (specify) _____

☐ No water quality samples taken

☐ Not applicable to this spill

☐ Other (specify) _____

a. Explanation of water quality samples analyzed for _____

_____

32. Water quality sample results reported to (check multiple if necessary):

☐ County Health Agency

☐ Regional Water Quality Control Board

☐ None of the above

☐ No water quality samples taken

☐ Not applicable to this spill

a. Explanation of water quality samples reported to _____

_____

33. Overall spill description: _____

_____

_____

_____

(Sample) SSO Field Report Form

Section C. Notification Details

1. California Office of Emergency Services(OES) Control Number:

   _____

2. Cal OES Called Date/Time: _____/_____/____ (MM/DD/YY) _____:_____ (24:00)
3. County health agency notified? ☐ Yes ☐ No
4. County health agency notified Date/Time: _____/_____/____ (MM/DD/YY)

   _____:_____ (24:00)

5. Regional Water Quality Control Board (RWQCB) notified? ☐ Yes ☐ No
6. RWQCB notified Date/Time: _____/_____/____ (MM/DD/YY) _____:_____ (24:00)
7. Other agency notified? ☐ Yes ☐ No If yes, Name of agency _____
8. Other agency notified Date/Time: _____/_____/____ (MM/DD/YY) _____:_____ (24:00)
9. Was any of this spill report information submitted via fax to the Regional Water Quality Control board? ☐ Yes ☐ No
10. RWQCB faxed spill report information Date/Time: _____/_____/____ (MM/DD/YY)

    _____:_____ (24:00)

Section D. Cost Recovery (FOR CITY USE ONLY)

Was the SSO from a private system or caused by an outside agency, contractor or person?
☐ Yes ☐ No (If 'Yes', continue filling in as much information as possible.)

☐ The SSO was from a private system.

☐ The SSO was caused by an activity being performed by an outside:

☐ Agency ☐ Contractor ☐ Person ☐ Other _____

(Sample) SSO Field Report Form

Name of complex, agency, contractor or person:_____

Address of complex, agency, contractor or person:_____

_____

Name of insurance company, agent's name and phone number, if known:

_____

Name of person providing information:_____

Name and phone number of any witness(es):

_____

_____

_____

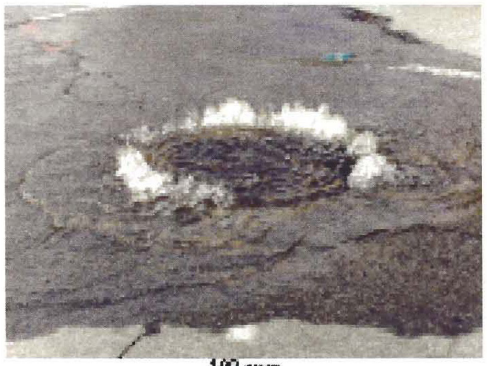
Attachment III

SSO Flow Estimation Pictures

Reference Sheet for Estimating Sewer Spills from Overflowing Sewer Manholes

All estimates are calculated in gallons per minute (gpm)

SSO Flow Estimation Pictures



Sewer Spill Estimation

EXAMPLE 1: To calculate the estimated amount of gallons in a ponded sewage spill you must determine the volume of the spill. If it is a rectangular contained area,

Volume = Length x Width x Depth x 7.48 gallons/cu. ft. = Gallons

A spill 100' x 100' x 6" x 7.48 gal/cu. ft. = 100' x 100' x 0.5' x 7.48 gal/cu. ft. = 37,400 gal

See illustration below for estimating the volume of a circular ponded area.

EXAMPLE 2: If you are dealing with a spill that has been running into a storm drain, you must estimate the gallons by the amount of time of the overflow times the number of connections on the receiving line (assume 240 gal per household per 24 hrs).

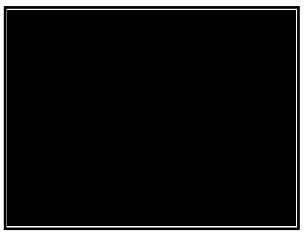
If you have a line with 6 houses on it, and it has been overflowing for 24 hrs:

6 houses x (240 gal/house) x 24 hours = 1,440 gal

EX. 1a – Rectangular:

← 100 FT →

↑ 100 FT ↓

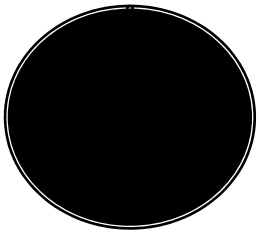


V. = 100' x 100' x 0.5' x 7.48
= 37,400 gal

EX. 1 b – Circular:

← 100 FT →

↑ 100 FT ↓



V. = 100' x 100' x 0.5' x 0.8* x 7.48
= 29,900 gals

*Factor for estimating area of a circle as a portion of the area of a square.

EXAMPLE 3a: If the overflow is less than 24 hours in duration, then the calculation must prorate the daily sewage generation rate. If you have 60 houses on a line that has been overflowing for 1 hr:

60 houses x (240 gal/day/house) x 1 hr x (1day/24hr) = 600 gal

EXAMPLE 3b: If you have 6 houses on a line that has been overflowing for 12 hours:

6 houses x (240 gal/day/house) x 12 hrs x (1day/24hr) = 720 gal

Note that the time of day of the overflow should be considered in the calculation of its volume especially if the land use of the tributary area to the overflow is predominantly residential. Over 90% of the daily sewage discharge from an average home occurs between the hours of 6 am and 12 midnight with 50-75% of the daily sewage discharge occurring between 8 am to noon and 7 pm to 11 pm ("diurnal peak hours"). This could result in a flow rate of 15 to 22.5 gal/hr during the diurnal peak hours vs. 10 gal/hr (average) over 24 hours.

If there is mixed land use tributary to an overflowing sewer, the following unit flow rates should be used in addition to the residential, as appropriate: hotel/motel – 100 gpd/room; restaurant - 55 gpd/seat; business offices - 175 gpd/1000 sq. ft.; and commercial/retail - 75 gpd/1000 sq.ft.

Wet weather conditions could further affect the per home daily sewage contribution due to infiltration and inflow (I/I) sources.

Attachment IV

City of Manteca Chain-of-Custody Record and Analysis Request

Laboratory Chain of Custody

Submission:

City of Manteca
2450 W. Yosemite Ave., Manteca, CA 95337

Client	Report Attention	Phone
Address	Project Name:	FAX
City, State, Zip	Copy to:	System #
Sampling Info	Sampled by:	Project ID

			Date	Time	Sample Description / Location	Comment or Station Code											

Signature	Print Name	Company	Date	Time
Received / Reliquished by:				
Received / Reliquished by:				
Received / Reliquished by:				
Received / Reliquished by:				
Received / Reliquished by:				

Attachment V

City of Manteca Key Personnel

City of Manteca Key Sanitary Sewer Overflow Response Staff

- Wastewater Quality Control Facility Dispatcher (209) 456-8470
- WQCF Superintendent (209) 456-8478
- Collection System Supervisor (209) 496-4991
  (209) 456-8472
- Maintenance Workers:
  - ♦ Lead Collection System Worker (209) 639-4886
  - ♦ Maintenance Worker I (209) 639-4886
  - ♦ Maintenance Worker II (209) 639-4886
  - ♦ Maintenance Worker III (209) 639-4886
  - ♦ Standby Worker (209) 639-4892

Appendix B

City Ordinance

Chapter 13.12 SEWER CONNECTION CHARGES

13.12.010 Sewer connection charges.

Sewer connection charges are established in the amounts set forth in this chapter for the privilege of connecting to the sanitary sewer system of the city. (Prior code § 14-7)

13.12.055 Additional connection charge.

A. Each residential dwelling utilizing Phase 3 wastewater treatment capacity and each commercial, industrial and institutional facility shall pay a sewer connection charge as follows:

LAND USE	CHARGE
Residential	
Very Low Density	$3,961 per unit
Low Density	$3,961 per unit
Medium Density	$3,301 per unit
High Density	$3,301 per unit
Commercial	
Office Professional	$1,493 per 1,000 sq. ft.
Neighborhood/Community Commercial	$1,640 per 1,000 sq. ft.
Business/Visitor Services	$1,640 per 1,000 sq. ft.
General Commercial	$1,640 per 1,000 sq. ft.
Commercial Recreation	$1,640 per 1,000 sq. ft.
Light Industrial	$1,692 per 1,000 sq. ft.
Heavy Industrial	$1,692 per 1,000 sq. ft.

B. The connection charges specified in subsection A shall be subject to payment in accordance with Section 13.12.070 of this chapter. Nonpayment of such charge may result in disconnection in accordance with Section 13.12.080 of this chapter. All revenue derived from the connection charges provided by this section shall be used for the Manteca wastewater quality control facility Phase 3 upgrade and expansion project. (Ord. 1518 § 2, 2013; Ord. 1294 § 2, 2005; Ord. 1244 § 2, 2003)

13.12.057 WQCF Phase 3 completion charge.

A. In addition to the sewer connection charges provided by Section 13.12.055 of this chapter, each residential dwelling utilizing WQCF Phase 3 wastewater treatment capacity and each commercial, industrial and institutional facility shall pay a sewer connection charge as follows:

Land Use	WQCF Phase 3 Completion Charge	Basis on Which Charged
Residential		
Very Low Density	$2,003	per unit
Low Density	$2,003	per unit

Medium Density	$1,802	per unit
High Density	$1,802	per unit
Commercial		
Office Professional	$815	per 1,000 sq. ft.
Neighborhood/Community Commercial	$895	per 1 000 sq. ft.
Business/Visitor Services	$895	per 1 000 sq. ft.
General Commercial	$895	per 1,000 sq. ft.
Commercial Recreation	$895	per 1 000 sq. ft.
Light Industrial	$924	per 1,000 sq. ft.
Heavy Industrial	$924	per 1,000 sq. ft.

B. The connection charge specified in subsection A of this section shall be subject to payment in accordance with Section 13.12.070 of this chapter. Nonpayment of such charge may result in disconnection in accordance with Section 13.12.080 of this chapter. All revenue derived from the connection charge provided by this section shall be used for the Manteca wastewater quality control facility Phase 3 upgrade and expansion project. (Ord. 1518 § 3, 2013; Ord. 1411 § 2, 2009)

13.12.070 Payment.

A. Except as provided in subsection C, connection charges shall be due and payable at the time building permits are obtained or, when no building permit is required, prior to actual connection to the city system. For mobile home parks, connection charges shall be paid prior to the time of first connection for the total number of mobile home spaces permitted by the terms of the use permit.

B. The charges paid shall be the charge that is applicable at the time the permit is obtained or connection is made.

C. Connection charges for residential dwellings existing and lawfully occupied as of July 1, 1991 within the city limits may be paid over a five-year period (twenty percent of the charge each year) where the dwelling is owner-occupied at the time of the application for connection and the household income for the occupants of the dwelling does not exceed the moderate income level designated by the income standards used by the county in administering community development block grant funding in effect at the time of application. In such cases, the first payment shall be made at the time of actual connection to the city system and the remaining payments shall be due annually on the anniversary date of the connection. (Ord. 905 § 1, 1991; Ord. 884 § 1, 1990; prior code § 14-7.6)

13.12.080 Disconnection for nonpayment.

The city may disconnect any facility from the sewer system if connection was made without city permission and without the payment of the appropriate connection charge. The cost to the city of disconnection shall be paid in addition to connection charges prior to reconnection. (Prior code § 14-7.8)

13.12.090 Revenue use.

All revenue derived from connection charges shall be deposited in the capital improvement fund and used for the acquisition, construction, reconstruction, reimbursement, maintenance and operation of the sanitary sewer and treatment system of the city. (Prior code § 14-7.9)

Chapter 13.14 SEWER CAPACITY CHARGES

13.14.010 Pestana Avenue sewer capacity charges.

Those property owners who are served by the Pestana Avenue sewer trunk line shall pay a sewer capacity charge in the amount set forth in the Table of Pestana Avenue Sanitary Sewer Capacity Charges adopted by the city council and on file in the department of public works. (Ord. 1008 § 2, 1994)

13.14.020 Collection of capacity charges.

Capacity charges required pursuant to Section 13.14.010 shall be due and payable at the time that a building permit is obtained for a building that will connect to the Pestana Avenue sewer. However, if no capacity charge was paid at the time that a building permit was issued for a building that will connect to the Pestana Avenue sewer, then the capacity charge will be paid prior to actual connection to the Pestana Avenue sewer. For mobile home parks, capacity charges for the total number of mobile home spaces shall be paid prior to the time of the connection of the first space to the Pestana Avenue sewer.

The capacity charge shall be paid in the amount that is in effect at the time of payment. (Ord. 1008 § 2, 1994)

13.14.030 Adjustment.

Capacity charges shall be adjusted on January 1st of each year based upon the change to the Twenty-City Engineering News-Record Construction Costs Index. The adjusted capacity charges shall be calculated by the public works director using the following formula:

$$\text{Adjusted capacity charge} = (\text{Capacity charge set forth in the Table of Pestana Avenue Sanitary Sewer Capacity Charges}) \times \frac{(\text{ENR index for January 1st})}{\text{ENR index of 5070.66 for January, 1993)}}$$

The adjusted capacity charge shall be rounded to the nearest dollar. (Ord. 1008 § 2, 1994)

Chapter 13.16 SEWER SERVICE CHARGES

13.16.010 Monthly rates.

Customers of the city's sewer collection and treatment system shall pay monthly charges as follows:

Rate Category	Jan. 1, 2009 through Dec. 31, 2009	Jan. 1, 2010 through Dec. 31, 2010	Jan. 1, 2011 through Dec. 31, 2011	Jan. 1, 2012 through Dec. 31, 2012	Jan. 1, 2013 and Thereafter	Basis on Which Rates Charged
Residential and equivalents	$39.50	$43.30	$43.30	$43.30	$43.30	per unit
Trailer park	$33.36	$36.57	$36.57	$36.57	$36.57	per 1,000 CF
Rooming houses	$25.26	$27.70	$27.70	$27.70	$27.70	per 1,000 CF
Commercial/retail	$28.24	$30.96	$30.96	$30.96	$30.96	per 1,000 CF
Hotel/motel	$30.84	$33.81	$33.81	$33.81	$33.81	per 1,000 CF
Hotel/motel w/kitchen	$56.47	$61.89	$61.89	$61.89	$61.89	per 1,000 CF
Car washes/ laundromats	$22.37	$24.53	$24.53	$24.53	$24.53	per 1,000 CF
Service stations (metered)	$31.05	$34.04	$34.04	$34.04	$34.04	per 1,000 CF
Office/light industrial	$23.12	$25.35	$25.35	$25.35	$25.35	per 1,000 CF
Restaurants	$66.09	$72.42	$72.42	$72.42	$72.42	per 1,000 CF
Markets	$68.85	$75.45	$75.45	$75.45	$75.45	per 1,000 CF
Mortuaries	$68.85	$75.45	$75.45	$75.45	$75.45	per 1,000 CF
Hospitals	$29.82	$32.69	$32.69	$32.69	$32.69	per 1,000 CF
Elementary schools	$21.94	$24.06	$24.06	$24.06	$24.06	per 1,000 CF
Secondary schools	$21.94	$24.06	$24.06	$24.06	$28.71	per 1,000 CF
Churches	$26.18	$28.71	$28.71	$28.71	$28.71	per 1,000 CF
Nonprofit	$25.37	$27.82	$27.82	$27.82	$27.82	per 1,000 CF
Commercial mixed use	$36.70	$40.23	$40.23	$40.23	$40.23	per 1,000 CF

Rate Category	Jan. 1, 2009 through Dec. 31, 2009	Jan. 1, 2010 through Dec. 31, 2010	Jan. 1, 2011 through Dec. 31, 2011	Jan. 1, 2012 through Dec. 31, 2012	Jan. 1, 2013 and Thereafter	Basis on Which Rates Charged
Industrial						
flow	$1,841.15	$2,023.24	$2,023.24	$2,023.24	$2,023.24	per MG
biochemical oxygen demand (BOD)	$0.368	$0.404	$0.404	$0.404	$0.404	per lb
suspended solids (SS)	$0.696	$0.765	$0.765	$0.765	$0.765	per lb
nitrogen (N)	$2.608	$2.866	$2.866	$2.866	$2.866	per lb
Septage	$150.76	$165.16	$165.16	$165.16	$165.16	per 1,000 gallons

City of Lathrop	per contract
Raymus Village	per contract

(Ord. 1515 § 2, 2012; Res. R2011-221; Res. R2010-268; Ord. 1410 § 2, 2008; Ord. 1242 § 1, 2003; Ord. 1155 § 1, 2000; Ord. 916 § 1, 1991; Ord. 817 § 1, 1988; Ord. 794 § 1, 1988; Ord. 788 §§ 1-3, 1988; Ord. 770 § 1, 1987; prior code § 14-8)

13.16.011 Industrial sewer service charge for Eckert Cold Storage.

A. Effective December 1, 2013, the industrial sewer service charge for Eckert shall be as provided in subsections B through D of this section.

B. The variable charge is the sum of: (1) the actual electricity costs for the Moffat Boulevard pump station, the pond pump station and the pond aerator system; (2) the actual wastewater laboratory testing costs for the industrial sewer system; and (3) the actual odor control chemical costs for the industrial sewer system. Variable charges are payable each month and are based on actual usage. For calendar year 2013, the variable charges billed on December 1, 2013, or as soon thereafter as practicable, shall be the actual variable costs for January 1, 2013 through November 30, 2013, less any actual variable costs paid by Eckert for January 1, 2013 through November 30, 2013. For December 2013 and for calendar years 2014, 2015 and thereafter, variable charges shall be billed monthly based on the previous month's actual costs.

C. The fixed charge is an annual charge that is based on estimated operations, maintenance and replacement costs. The annual fixed charge is ninety-six thousand seven hundred ten dollars for 2013, ninety-nine thousand four hundred eighty-two dollars for 2014 and one hundred two thousand three hundred thirty-five dollars for 2015 and thereafter. The total annual fixed charge for 2013 is payable on December 31, 2013. The annual fixed charge for 2014, 2015 and thereafter is payable in six equal installments on the first business day of each month, beginning in June and ending in November of each year.

D. In any calendar year in which Eckert does not discharge industrial wastewater to the industrial sewer system or the modified industrial sewer system due to acts of God, acts of a government, fires, floods, epidemics, quarantine restrictions, strikes, earthquakes, explosion or any similar catastrophic event or occurrences beyond the control of Eckert, the city shall determine the fixed charge per the following formula:

$$\text{Fixed Charge in Calendar Year of Catastrophe} = \text{Fixed Charge} \times \frac{\text{Actual days discharged in calendar year of catastrophe}}{\text{Average total days discharged in immediately preceding three consecutive calendar years}}$$

(Ord. 1534 § 2, 2013; Ord. 1469 § 1, 2010; Ord. 1439 § 2, 2009)

13.16.015 Senior citizen rebates.

A. A senior citizen shall be defined as a resident who is age sixty or older.

B. Low-income senior shall be defined as a senior citizen whose combined family income does not exceed fifty percent of the medium income for San Joaquin County, according to the income limitations for the Federal Community Development Block Grant (CDBG) and Home Investment Partnership Act (HOME) programs.

C. The amount of the rebate shall be five dollars per month per unit, which will be credited annually to the billed customers. Credits will cover the fees charged in a fiscal year. This credit becomes effective February 1, 2004.

D. In order to qualify for the rebate, the qualifying low-income senior must provide the following:

1. A copy of the most recent 1040 federal income tax form demonstrating income eligibility and/or social security annual statement;

2. A signed affidavit provided by the city ensuring that all information provided is accurate and complete;

3. In the event the low-income senior does not have a utility account established with the city because the sewer charges

are paid as part of a multi-unit meter, the property manager and/or owner

responsible for the utility account will collect the signed low-income forms from the individuals and submit them to the city finance department. This credit will be applied to the multi-unit account. The property manager and/or owner are/is responsible to pass on the credit to the eligible senior. It is unlawful and a misdemeanor for any person to violate this provision.

E. Documentation noted above shall be provided to the city no later than July 15th of each year. The city will have sixty days from this date to apply the credit to the account.

F. Customers who cancel their services prior to the July 15th deadline may request a rebate. The noted documents above need to be submitted along with their request to cancel the services. The credit will be applied to their final utility billing. This provision shall not apply to multi-unit customers. (Ord. 1256 § 1, 2004)

13.16.020 Billing—Collection.

A. The charges fixed in this chapter for any premises shall be billed and collected with the charges and rates for city utility services furnished by the city to such premises. Such charges fixed in this chapter shall be due and payable in advance at the same time that such charges for city utility services are due and payable.

B. In the event the premises to be charged for sewer service are not connected to the city water distribution system, then, and in that event, the city water department shall bill and collect for the appropriate sewer service charges.

C. All sewer service revenues collected shall be retained by the city regardless of the date of termination of sewer service and no rebates will be made for midmonth disconnection.

D. If the monthly service rate is not paid when due, on the first day of each calendar month thereafter a penalty of two percent of the amount of the delinquent rate shall be added. (Ord. 1410 § 3, 2008; Ord. 1184 § 1, 2001; prior code § 14-9)

13.16.030 Delinquent charges—Lien.

Charges for services and facilities furnished by the city shall constitute a lien against the lot or parcel of land against which such charge is imposed if such charges remain delinquent for a period of sixty days. (Prior code § 14-10)

13.16.040 Discontinuance of service.

A. In the event the owner, occupant or lessee of premises connected to the sewer system shall fail to pay the sewer service charges provided in this chapter by the fifteenth day of the month following presentation of a bill therefor, the city may in addition to all of the remedies it may have, discontinue furnishing sewer service by means of water service disconnection, and shall not resume the same until all delinquent charges and penalties under this chapter together with any service charge necessitated by the resumption of sewer service have been fully paid. However, service to delinquent customers will not be shut off until the customer is first notified of the intended shut off and given an opportunity for a hearing on the matter.

B. As an alternative to any of the other procedures provided in this chapter or given by law, the city may bring an action against the owner, occupant or lessee of the premises to whom the service was rendered for the collection of the amount of the delinquent rate and all penalties and costs of collection including a reasonable attorney’s fee. (Ord. 775 § 12(part), 1987; prior code § 14-11)

13.16.050 Privately owned water system—Charge.

In any case where rates are based on water used and the premises are not connected to the city water system, then, in such case, all unmetered water service which flows from a privately owned water system shall be estimated by the city or measured by a meter approved by the city to be furnished and installed by the user, and a sewer service charge will be applied which will be equivalent to that which would be applied if the water were being purchased from the city. (Ord. 775 § 12(part), 1987; prior code § 14-12)

Chapter 13.20 INDUSTRIAL WASTE

13.20.010 Purpose.

A. The city of Manteca does ordain that this chapter shall be known as the “City of Manteca Industrial Waste Ordinance (Waste Ordinance)” and may be so cited.

B. This chapter is adopted pursuant to provisions of California Government Code 54725 and modifications and inclusions of Senate Bill 10.24.

C. This chapter sets forth the uniform requirements for direct and indirect contributors to the Manteca water pollution control system, and enables the city of Manteca to protect its collection, treatment, pumping, and disposal systems and to comply with all state and federal laws.

D. Objectives. The objectives of this chapter are to:

1. To prevent the introduction of pollutants into the Manteca water pollution control system that will interfere with the operation of the POTW, including the land disposal facilities.

2. To prevent the introduction of pollutants into the Manteca water pollution control system that could cause pass-through into receiving waters, the atmosphere, or otherwise be incompatible with the POTW systems.

3. To regulate the acceptance of wastes to:

a. Protect the physical structures of the water pollution control system and the efficient functioning of its component parts.

b. Protect the health and safety of the personnel of the city of Manteca and its member jurisdictions, and to preserve the health and safety of the public.

c. Comply with all of the applicable and compatible local, state of California, and federal laws, rules, regulations, codes, or orders.

d. Protect the environment from threat of hazard or harm resulting from the disposal of wastes.

E. Applicability. The requirements of this chapter are applicable to all persons within the city of Manteca, and to all persons outside the city of Manteca who are, by contract, agreement or action, users of the

city of Manteca water pollution control system; including any and all new and prospective users and any and all existing users.

F. The director of public works for the city of Manteca shall administer, implement, and enforce the provisions of this chapter. (Ord. 1275 § 2 (part), 2004)

13.20.020 Definitions and abbreviations.

A. List of Definitions.

“Act” means any regulation contained in or amendment of the Clean Water Act.

“Additional inclusions” means violations of compliance schedule milestones, by ninety days or more after the schedule date; failure to provide reports within thirty days from the due date; failure to accurately report non-compliance; and any other violation or group of violations that Manteca considers to be significant.

“Administrative order” means an enforcement document which directs industrial users to implement corrective or remedial measures. Levels of enforcement include: cease and desist orders, compliance orders, and show cause orders.

“Agent” means any person designated or retained by Manteca to fulfill the sampling, monitoring, reporting, or inspection services of Manteca as required by this chapter, the industrial discharge permit and/or all applicable state, federal, or local regulations, and/or to perform the enforcement actions required by this chapter. Agents may include, but are not limited to, any of the following: the Manteca director of public works, assistant director of

public works, inspector, supervisor, and city attorneys, and any consultant retained by the city to perform such services.

“Approval authority” means the California Regional Water Quality Control Board, Central Valley Region.

“Assistant director of public works” means the assistant director of public works for the city of Manteca or his or her agent.

“Authorized representative of the industrial user” means an authorized representative of an industrial user shall be: a principal executive officer of at least the level of vice president, a general partner or proprietor of the user, or a duly authorized representative of the person holding the industrial discharge permit, if such representative is responsible for the overall operation of the industrial facilities from which the discharge originates. The authorized representative shall be identified on the Industrial Discharge Permit.

“Categorical user” means any industrial user who, on the basis of the industrial activity at the facility in question, must comply with national categorical standards.

“Cease and desist order” means an administrative order issued by Manteca requiring a discharger to halt discharge to the water pollution control system.

“Chronic violation” means a violation of significant noncompliance when sixty-six percent or more of sample measurements exceed the same daily maximum limit or the same average limit over a six-month period.

“City” or “Manteca” refers to the city of Manteca.

“Compliance order” means an administrative order directing the discharger to achieve or restore compliance by a specified date. A Compliance Order may include a compliance schedule with specific milestones for achieving steps toward compliance, for tracking progress, and for the discharger to report progress.

“Control authority” means the POTW or the city of Manteca.

“Director of public works” means director of public works for the city of Manteca or his or her agent.

“Discharger” means any person discharging industrial waste to the water pollution control system. This term specifically includes any categorical users connected to the water pollution control system, whether or not they discharge process wastewater. It also includes any facilities with a reasonable potential for discharging significant quantities of industrial waste, whether or not they are currently discharging process waste.

“Domestic waste” means any waterborne waste of the type normally resulting from flushing and washing waste products from residences and lavatories.

“Federal pretreatment regulations” means any regulations promulgated by EPA in accordance with Sections 307(B)and (C) and 402(B)(8) of the “Act” (33 U.S.C. 1317) for the implementation, administration, and enforcement of pretreatment standards.

“Illegal discharge” means any discharge of waste prohibited by state or federal law, or local limits including discharge to the wastewater treatment plant and collection system, or to the storm drain system.

“Indirect discharge” means any discharge of waste which enters or flows into the Manteca water pollution control system through a connection of a member jurisdiction (e.g. city of Lathrop collection system) or through a septic contributor.

“Industrial user or users” means any source of direct or indirect discharge of commercial or industrial waste.

“Industrial waste” means any waterborne waste, excluding domestic waste. Waterborne wastes from “commercial” activities, such as automobile repair or photo processing, are expressly included in this definition.

“Industrial discharge permit” means a control mechanism issued to a significant industrial user, or any person discharging to the water pollution control system that the director of public works determines needs a permit, to regulate its discharge of toxic, organic, or hydraulic loading to the water pollution control system.

“Interference” means any discharge which, alone or in conjunction with a discharge or discharges from other sources, 1) inhibits or disrupts the treatment processes or operations of the water pollution control system, or its sludge processes, use or disposal; and 2) therefore is a cause of a violation of any requirement of the Manteca NPDES permit, including an increase in the magnitude or duration of a violation, or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued

thereunder (or more stringent California state or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including California state regulations in any California state sludge management plan prepared pursuant to Subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research, and Sanctuaries Act.

“Manteca Pretreatment Program.” The purpose of the Manteca Pretreatment Program (MPP) is to provide a means to control and regulate the discharge of industrial and hazardous waste to the Manteca water pollution control system and the wastewater treatment plant. The program applies to all discharges to the water pollution control system and the wastewater treatment plant. The components of the MPP include the development and use of the following:

Local Limits. Specific limits on the concentration of materials and chemical constituents allowed in the industrial waste discharge.

“Enforcement Response Plan” means guidelines for Manteca’s enforcement of federal, state, and local laws related to waste discharge to the POTW, either directly or indirectly, and to waters of the state and/or United States, and enforcement of the Manteca Waste Ordinance No. 13.20; Manteca Waste Ordinance No. 13.20, which describes the authorities of the city of Manteca to enforce E.P.A. and local requirements related to waste discharge to the Manteca water pollution control system.

“Manteca industrial discharge permit” means a permit stating the conditions, prohibitions, limits, and requirements for discharges to the Manteca water pollution control system that is issued to all significant industrial users and any other users that discharge to the water pollution control system a waste, of substantial volume or of a concentration, that the director of public works deems significant and therefore requires a permit.

“Member jurisdiction” means any city or agency, such as the city of Lathrop, which owns and operates a collection system connected to the city of Manteca water pollution control system. The relation of a member jurisdiction is specified in a jurisdictional agreement.

“National pretreatment standards” means any regulations containing pollutant discharge limits promulgated by EPA in accordance with Section 307(b) and (c) of the Act (33 U.S.C. 1317) and which apply to a specific category of industrial users. These regulations are found at 40 CFR Chapter I, Subchapter N, Parts 405-47. This term includes prohibitive discharge limits established pursuant to Section 403.5.

“New source” means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commences after the publication of proposed Pretreatment Standards under section 307(c) of the Act which will be applicable to such source if such standards are thereafter promulgated in accordance with that section, provided that:

a. The building, structure, facility, or installation is constructed at a site which no other source is located; or

b. The building, structure, facility, or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

c. The production or wastewater generating processes of the building, structure, facility, or installation is substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source, should be considered.

Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility, or installation meeting the criteria of paragraph (b) or (c) above but otherwise alters, replaces, or adds to existing process or production equipment.

Construction of a new source as defined under this paragraph has commenced if the owner or operator has:

a. Begun, or caused to begin, as part of a continuous onsite construction program:

i. Any placement, assembly, or installation of facilities or equipment;

ii. Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or

b. Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.

"Noncompliance" means any violation of any part of this chapter, the industrial discharge permit, or national categorical standards.

"Notice of violation (NOV)" means an official communication from the city to the non-compliant industrial user informing the industrial user that a violation has occurred.

"Nuisance" means any nuisance defined by California statutes or known at common law or in equity jurisprudence.

"Pass-through" means a discharge which exits the Manteca's treatment works into the waters of the state or into Manteca's land disposal system in quantities or concentrations, which alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of Manteca's NPDES permit or of Manteca's RWQCB permit, including an increase in the magnitude or duration of a violation.

"Permittee" means the person to whom an industrial discharge permit has been issued pursuant hereto.

"Person" means any individual, firm, partnership, corporation, association or public agency, including the state of California and the United States of America. The singular shall include the plural.

"Pretreatment" means any operations performed on sewage prior to discharge into the water pollution control system.

"Pretreatment requirement" means any substantive or procedural requirement related to pretreatment, other than a national pretreatment standard, applicable to an industrial user.

"Premise" means the location of the process, storage, discharge, and business actions of any person discharging to the water pollution control system.

"Self-monitoring" means wastewater sampling performed by a discharger, in accordance with Manteca's Pretreatment Program. Self-monitoring requirements will be specified in the user's industrial discharge permit.

"Service area" means the geographical area served by the Manteca water pollution control system.

"Sewage" means any combination of domestic waste and industrial waste together with such ground, surface and storm waters as may be present.

"Show cause order" means an order for the industrial user to appear before the Manteca director of public works, to explain the noncompliance and why more severe enforcement actions should not be taken. Manteca may designate a hearing officer to hear testimony for the hearing.

"Significant industrial user (SIU)" includes all of the following in accordance with 40 CFR 403.3 (t). All categorical industrial users and any non-categorical industrial user which discharges an average of twenty-five thousand gallons per day or more of process wastewater, excluding sanitary, noncontact cooling, and boiler blowdown wastewater; contributes a process wastewater which makes up five percent or more of the average dry weather hydraulic or organic (BOD, TSS, TDS, ammonia, and/or phosphorus) capacity of the POTW; or has a reasonable potential, in the opinion of the director of public works or his or her agent, to adversely affect the POTW's operation or to violate a pretreatment standard or requirement.

"Significant noncompliance" includes any of the following: chronic violations, technical review criteria (TRC) violations, or any other violation or violations of an effluent limit that Manteca believes has caused, alone or in combination with other discharges, interference or pass through, or has endangered the health of the sewage treatment plant personnel or the public, or any pollutant violation that has caused imminent endangerment to human health or welfare, or to the environment and has resulted in the city's exercise of its emergency authority to halt or prevent such a discharge.

"Slug discharge" means a slug discharge is any discharge of a non-routine, episodic nature, including but not limited to a bypass of the pretreatment system, or a non-customary batch discharge. A slug discharge also includes any intentional discharge to the water pollution control system in such quantity or concentration that has the potential to cause upset to the water pollution control system.

"Technical review criteria (TRC) violation" means a violation of significant noncompliance when thirty-three percent or more of all of the measurements for each pollutant, taken during a six month period, equal or exceed

the product of the daily maximum limit or the average limit multiplied by the applicable TRC. Group I: For conventional pollutants, the TRC is 1.4. For all other pollutants, the TRC is 1.2.

"Waste ordinance" refers to this chapter and any amendments thereto.

"Water pollution control system" means all facilities of the city of Manteca and/or all facilities of any member jurisdiction for collecting, pumping, treating and disposing of sewage.

"Working day" means Monday, Tuesday, Wednesday, Thursday, or Friday, excluding federal or California state holidays.

B. List of Abbreviations.

BOD	Biochemical Oxygen Demand
CCR	California Code of Regulations
CFR	Code of Federal Regulations
City	City of Manteca
CWA	Clean Water Act
DPW	Director of Public Works of the City of Manteca
ADPW	Assistant Director of Public Works of the City of Manteca
EPA	Environmental Protection Agency of the United States
IU	Industrial User
Manteca	City of Manteca
mg/L	Milligrams per liter concentration
µg/L	Microgram per liter concentration
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
pH	A numerical value representing the relative acidity or alkalinity of the waste discharge
POTW	Public Owned Treatment Works
RWQCB	Regional Water Quality Control Board, Central Valley Region
SIU	Significant Industrial User
TSS	Total Suspended Solids
TDS	Total Dissolved Solids

(Ord. 1275 § 2 (part), 2004)

13.20.030 Authority and responsibility.

A. Authorities of the City of Manteca Public Works Department.

1. Manteca and its agent shall have the authority to inspect the premises of any person discharging waste to the Manteca water pollution control system, including but not limited to, any areas or points of sampling, discharge, process, storage, record keeping and/or any other areas as deemed reasonable and necessary by the Director of Public Works to document the person's compliance with the requirements of this chapter or the industrial discharge permit.

2. Manteca and its agent, shall have the authority to witness any sampling and sampling procedures as required of the user as part of the self-monitoring program and under the terms of this chapter and the industrial discharge permit.

3. Manteca and its agent shall have the authority to terminate service and disconnect any person from the water pollution control system who does not comply with the requirements of this chapter or the industrial discharge permit.

4. Manteca and its agent shall have the authority to obtain copies of any monitoring and sampling records as necessary to establish compliance or non-compliance with the objectives of this chapter or the industrial discharge permit, and if necessary, remove those records from the premises for copying purposes. These records include, but are not limited to, record keeping required under 40 CFR 403.12 of the Act.

5. Manteca and its agent shall have the authority to require an industrial waste discharger to install and operate pretreatment facilities as deemed reasonable and necessary by the assistant director of public works to meet the EPA categorical pretreatment standards and the local limits described in this chapter.

6. Manteca and its agent shall have the authority to specify a compliance schedule for the user to install pretreatment, monitoring, and sampling equipment, and shall have the authority to require compliance reports on meeting scheduled milestones.

7. Manteca and its agent shall have the authority to inspect the installation and operation of the pretreatment facilities.

8. Manteca and its agent shall have the authority to issue an administrative order, including a show cause order, cease and desist order, and compliance order to any person discharging to the water pollution control system.

9. Manteca and its agent shall have the authority to seek injunctive relief and pursue civil and criminal penalties for violations of this chapter as may be provided for under the act and state and federal laws.

10. Manteca and its agent shall have the authority to levy fees for additional services or to recover damage costs, which are a result of a discharge, as described in Section 13.020.050(C) of this chapter.

11. Manteca and its agent shall have the authority to halt or suspend a discharge in the event of an actual or threatened discharge which is in violation of this chapter, the industrial discharge permit, or the regulatory conditions of 40 CFR 403.8(F)(1)(f)(B), or in the event of an emergency, or a condition in which the safety of humans or the environment is threatened.

B. Authorities of the Director and/or Assistant Director of Public Works.

1. The assistant director of public works of the city of Manteca or his or her agent shall have the authority to inspect the premises of the industrial waste discharger, including but not limited to the process facilities, discharge points, sampling points, and storage facilities, and/or any other facilities as deemed reasonable and necessary by the assistant director of public works, to ensure that the user is in compliance with all provisions of the user's industrial discharge permit and of this chapter. The authority to inspect includes the authority to collect samples of any wastes either being discharged to the water pollution control system or having the potential to be discharged.

2. The assistant director of public works of the city of Manteca or his or her agent shall have the authority to require submission of all notices and self-monitoring reports from any industrial user as required by this chapter and the user's permit, and any additional reports required to demonstrate compliance with this chapter and the permit requirements, including, but not limited to, the reports required in Section 403.12, and signatory and record keeping requirements of 40 CFR 403.12(1).

3. The assistant director of public works of the city of Manteca or his or her agent shall have the authority to require industrial users to develop a compliance schedule to meet all applicable national pretreatment standards, California state regulations, Manteca local limits, and all provisions of the industrial discharge permit, and of this chapter. The assistant director of public works also shall have the authority to require any person in non-compliance to submit progress reports for meeting the goals provided under the compliance schedule.

4. The assistant director of public works of the city of Manteca or his or her agent shall have the authority to enter the premises of any person discharging industrial waste into the Manteca system, at any time, as deemed reasonable by the assistant director of public works.

5. The assistant director of public works of the city of Manteca or his or her agent shall have the authority to witness sampling and sampling procedures of any person discharging industrial waste into the Manteca water pollution control system.

C. Responsibilities of the Director of Public Works.

1. The director of public works shall be charged with the administration of the water pollution control system and the enforcement of the provisions of this chapter. For such purposes, upon presentation of proper credentials and identification, he or she or his or her agent may enter at reasonable times any premise in the service area to perform any duty imposed upon him or her by this chapter.

2. The director of public works shall be responsible for checking the quantitative or qualitative compliance with the established regulations. Such quantitative or qualitative analysis may be made either by spot checks or regularly scheduled checks of all waste material.

3. If the waste material is found to be in violation of the standards established in Section 13.020.040 of this chapter, it will be the responsibility of the director of public works or his or her agent to request compliance and compliance reports from the user on the progress of corrective measures.

4. The director of public works or his or her agent shall have the authority to invoke emergency powers as described in Section 13.020.090(C) of this chapter.

(Ord. 1275 § 2 (part), 2004)

13.20.040 Standards and limitations.

A. The city of Manteca has set forth the following prohibitions and limitations for waste discharge to the Manteca water pollution control system. Where national categorical standards are applicable, the discharger must comply with the more stringent requirement of the Manteca local limit or the applicable categorical standard for the given pollutant.

B. General Discharge Prohibitions. These general prohibitions and specific prohibitions that follow apply to each user introducing pollutants into the POTW whether or not the user is subject to other national pretreatment standards or any national, state or local pretreatment requirements.

C. No person shall contribute to or cause to be contributed to the water pollution control system any waste or any pollutant that will:

1. Interfere with, inhibit, or disrupt the operation, processes, or performance of the water pollution control system (including the collection, treatment, disposal systems, and sludge processes) or adversely affect the effluent and sludge quality, in violation of Manteca's NPDES permit or any other state or federal permit; or which cause Manteca to be in noncompliance with statutory authorities cited in 40 CFR 403.3(a)(2).

2. Damage the water pollution control system.

3. Cause pass through of the water pollution control system.

4. Obstruct Manteca's wastewater treatment or collection facilities.

5. Cause hazard to the public safety, the environment, or to Manteca personnel.

6. Singly, or in combination with waste present in the water pollution control system, exit the Manteca water pollution control system into waters of the United States and cause Manteca to violate any requirement of its NPDES permit or any other state, federal, or local permits or laws, including magnitude of the violation.

D. Other Prohibitions. No person shall discharge any pollutant(s), waste, industrial or domestic, to the water pollution control system, except through sewer connections approved by Manteca and the relevant member jurisdiction or at approved discharge locations at the Manteca treatments works. Discharge at any other location, including collection system manholes, is prohibited without prior written approval from the director of public works.

1. Storm Drainage and Groundwater Prohibition. Storm water, groundwater, street drainage, subsurface drainage, or yard drainage shall not be discharged, either directly or indirectly, to the water pollution control system. If such discharge is necessary, the city of Manteca director of public works may approve an application for temporary discharge of such substances in the event no alternate method of disposal is reasonably available. Application for discharge of storm water, groundwater, street drainage, subsurface drainage, or yard drainage shall be made to the director of public works in writing and must be approved by the director of public works prior to discharge to the water pollution control system. Such discharges shall be subject to all applicable requirements of this chapter and any applicable fees of the city of Manteca.

2. Unpolluted Water Prohibition. Unpolluted water, such as single-pass cooling water, boiler blow-down water, and swimming pool water, shall not be discharged, either directly or indirectly, to the water pollution control system. If such discharge is necessary, the city of Manteca director of public works may approve an application for temporary discharge of such substances in the event no alternate method of disposal is reasonably available. Application for discharge of unpolluted water shall be made to the director of public works in writing and must be approved by the director of public works prior to discharge to the water pollution control system. Such discharges

shall be subject to all applicable requirements of this chapter and any applicable fees of the city of Manteca.

3. Additional Prohibitions. Except as hereinafter provided, no person shall discharge, or cause to be discharged, to the water pollution control system any of the following described waters, pollutants or wastes:

a. Any solid or viscous pollutants in amounts which will cause obstruction to the flow in the collection system or the treatment works, or which will require unusual attention or expense to convey and/or treat.

b. Any discharge which creates a fire or explosion hazard in the collection system or the treatment works, including but not limited to, waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit (60 degrees Celsius) using test methods specified in 40 CFR 261.21.

c. Any heated discharges which cause the influent into the treatment works to exceed 104 degrees Fahrenheit, and any heated discharges which create a hazard to the water pollution control system personnel or inhibit biological activity in the treatment plant.

d. Any discharge which has been diluted as a partial or complete substitute for treatment to achieve compliance with this chapter, the user's industrial discharge permit, or the national categorical standards.

e. Any discharge of hazardous waste, as defined by Title 22 of the California Code of Regulations without the written approval of the director of public works.

f. Any discharge which causes noxious or malodorous gases at or near the Manteca water pollution control system facilities or the facilities of any member jurisdiction of the city of Manteca, or which otherwise creates a public nuisance.

g. Any discharge which results in the formation of toxic gases, fumes, or vapors in a quantity that endangers the health or safety of Manteca personnel or the public.

h. Any discharge of pesticides, herbicides, or polychlorinated biphenyls (PCBs) in quantities deemed significant by the director of public works.

i. Any radioactive wastes, except as allowed under the "California Radiation Control Regulations", CCR Title 23 sec 30100 et seq.

j. Any discharge of any pollutant, including oxygen demanding pollutants (BOD, etc.), released at a flow rate and/or concentration which either singly or by interaction with other pollutants will cause interference with the water pollution control system.

k. Any discharge waters having an average daily flow greater than 0.5 percent of Manteca's average dry weather flow (ADWF), without the approval of the director of public works.

l. Any discharge containing petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that, alone or in conjunction with other discharges, will cause interference or pass through.

m. Pollutants that will cause corrosive structural damage to the POTW, but in no case discharges with a pH lower than 6.0, unless the works is specifically designed to accommodate such discharges.

n. Any trucked or hauled pollutants, except at discharge points designated by the POTW.

o. Any solid material not capable of passing through a 3/8 inch mesh screen.

E. Limits. Any exceedance or violation of these limits is considered to be a violation of this chapter and is enforceable by penalties.

1. Any discharge with a pH less than 6.0 or greater than or equal to 12.5.

2. Any discharge having a closed cup flashpoint of less than 140 degrees Fahrenheit (60 degrees Celsius) using test methods specified in 40 CFR 261.21.

3. The following table lists the maximum waste discharge concentration for the listed pollutants. The director of public works may impose mass limits in addition to, or in place of the maximum concentration limits.

Pollutant	**Maximum Concentration (mg/L)**
Antimony	0.6
Arsenic	0.6
Barium	12.0

Beryllium	6.0
Boron	12.0
Cadmium	0.12
Chromium (Total)	0.6
Copper	2.4
Lead	0.6
Manganese	0.6
Mercury	0.005
Molybdenum	0.06
Nickel	4.1
Selenium	0.12
Silver	0.6
Tin	24.0
Vanadium	1.2
Zinc	1.0
Cyanide (Total)	1.2
Iron	None

F. National Categorical Standards. The national categorical standards found at 40 CFR Chapter I, Subchapter N, Parts 405-471, are hereby incorporated into this chapter and made a part thereof. All categorical users are required to comply with those national categorical standards, which are applicable to them.

G. Point of Application of Limits. Compliance with the discharge limits and standards listed in this section shall be determined at a location or locations deemed appropriate by the director of public works. Where the national categorical standards are applicable, the point of application shall be appropriate for these standards. (Ord. 1275 § 2 (part), 2004)

13.20.050 Administration.

A. Classification of Users. All users shall be classified for wastewater disposal purposes in accordance with the activities conducted upon the premises, as determined by the director of public works. The purpose of classification is to facilitate the regulation of wastewater dischargers and the recovery of equitable and appropriate fees. The classification of a user will be used to determine the Discharge Fee and Connection Fee, as described in the Manteca fee schedule.

B. Notification of Industrial Discharge. Any person contributing industrial waste to the Manteca water pollution control system is required to notify the Manteca Department of Public Works of their discharge. Any new business is required to notify the department of their intent to discharge industrial waste ninety days prior to commencing the discharge. These notification requirements are effective upon the adoption date of this chapter.

Discharge of industrial waste from any of the following sources is subject to the approval of the director of public works: new connections, added burden from increased or changed discharge by existing sources, contaminated groundwater disposal, septage disposal, and limited and temporary disposal of trucked or hauled waste.

1. Discharge Limitations. All industrial waste dischargers, users of the Manteca Water Pollution Control System, and permittees shall comply with all provisions of this chapter, the industrial discharge permit, any applicable waste ordinance or permit of a member jurisdiction; and any other applicable federal, state or local laws, regulations, or permits for all discharges to the water pollution control system.

2. Industrial Discharge Permit Requirements. Industrial discharge to the Manteca water pollution control system may be permitted by the assistant director of public works. Upon notification of an occurring or potential industrial waste discharge, the assistant director of public works or his or her agent will evaluate the waste flow, concentration, and make-up to determine if the user requires an industrial discharge permit. If a permit is required,

the user will be required to complete an application for an industrial discharge permit, to be submitted to the Manteca department of public works within ninety days of the date of the notice to apply. The submittal of an application form, application fee, or renewal form does not guarantee the granting of a permit, and the application for permit may be denied.

Industrial discharges which may require an industrial discharge permit, and the permit requirements, procedures, and industrial user classification are described in the Manteca Pretreatment Program and the Manteca Pretreatment Program requirements are hereby incorporated as part of this chapter.

3. Permit Limitations.

a. All industrial discharge permits shall be expressly subject to all provisions of this chapter and all rates and charges established by Manteca. All permits shall be issued for a specified time period, not to exceed five years. The assistant director of public works may establish renewal dates from one to sixty months.

b. No vested rights of any type whatsoever of discharge to or sewerage capacity in the sanitary sewer system is created by the issuance of an industrial discharge permit.

c. Each permit is subject to renewal upon request to Manteca. Applications for permit renewal shall be submitted to Manteca by the deadline stated in the user's waste discharge permit. Permit renewal is not guaranteed and shall be subject to capacity limitations, treatment requirements, and compliance history considerations.

d. The permitted discharge is accepted only on a capacity available basis. Such discharge is subject to reduction, modification, suspension, or termination at any time by Manteca with a phone call or written notice. Discharge shall cease immediately upon request by Manteca and shall not be continued without written permission from Manteca.

e. Any permit issued pursuant to this chapter may be revoked or suspended at any time by the director of public works for fraud, misrepresentation, or false statement contained in an application for permit, or for violation of any condition of permit, or of any provisions of this chapter.

f. Any permit issued pursuant to this chapter may be modified, at any time, by the assistant director of public works, including the term and conditions for industrial discharge, discharge quantity, and/or concentration limits authorized therein.

4. Permit Transfer. The industrial discharge permit is issued only to a specific person and for a specific location, as designated in the permit, and shall not be assignable nor transferable to any other person or any other location. Sale or relocation of a business, public agency, or person shall obligate the business, public agency, or person to obtain written approval from the assistant director of public works prior to continuing the discharge under the terms and conditions of the original permit, and to make application to obtain new industrial discharge permit ninety days before commencing the continued discharge. Permit transfer as a result of corporate or personnel reorganization, insolvency or bankruptcy shall be subject to the approval of the assistant director of public works and must be requested in writing by the user.

C. Authority to Assess and Collect Fees. All discharges to the Manteca water pollution control system shall be subject to the terms and conditions of this chapter and to the terms, conditions, fees, and fines as described below and as contained in the Manteca Fee Schedule and as set forth in Section 13.020.090 of this chapter.

Manteca shall have the authority to assess and collect fees, for cost recovery purposes. The fees are cumulative and may include, but are not limited to, the following:

1. Permit Fee. A permit fee is due when the permit application is submitted to Manteca. The purpose of this fee is to recover costs incurred by Manteca for application review, permit issuance, and administration of the permit. The permit fee shall be as below, based on the classification of the discharger by the director of public works or his or her agent. The classification will be based primarily on the amount of Manteca resources expected to be required for permit issuance and administration. Where a permit is denied, after payment of the permit fee, a portion of the fee may be refunded to the discharger, at the discretion of the director of public works.

2. Inspection Fee. The purpose of this fee is to recover Manteca costs for review and/or inspection of a user's pretreatment system design, drawings, construction and/or operations, chemical or hazardous materials storage and/or sampling facilities, and procedures used by the user, as applicable and as deemed necessary and reasonable by the assistant director of public works, to demonstrate compliance with this chapter or any directive of the

director of public works or Manteca. This fee is due when the service is rendered.

3. Sampling Fee. The purpose of this fee is to recover Manteca costs for sampling, lab fees, travel, equipment, labor or any other costs accrued by Manteca to complete sampling as required by this chapter, the industrial discharge permit, or under directive of the director of public works to demonstrate compliance. This fee is due when the service is rendered.

4. Noncompliance Fees. These are fees resulting from violations of this chapter or the industrial discharge permit. There is no upper limit for noncompliance fees which may include any or all of the following, dependent upon the severity of the violation or violations.

a. Inspection Fee. The purpose of this fee is to reimburse Manteca for any inspection costs as necessary and reasonable to demonstrate compliance with this industrial ordinance and/or the industrial discharge permit, following a violation.

b. Additional Sampling Fee. The purpose of this fee is to recover Manteca costs for sampling, lab fees, travel, equipment, labor and any other costs incurred by Manteca, to complete sampling and to demonstrate compliance with this chapter and/or the industrial discharge permit.

c. Damage Fee. The purpose of this fee is to recover costs incurred by Manteca for the protection from or repair of damage to the water pollution control system because of a harmful or hazardous discharge in violation of this chapter by any person.

d. Manteca Permit Violation Fee. The purpose of this fee is to recover costs assessed to Manteca as a result of a user discharge violation causing pass through or interference, such that Manteca is unable to meet the requirement of its NPDES Permit or any other permit requirements, including an increase in the magnitude or duration of a violation. The fee shall include the amount of any fine(s) levied against Manteca by the EPA or any other regulatory agency issuing a fine, because of a violation of Manteca's permit. The permit violation fee shall also include reimbursement of costs for sampling, travel, labor, and any other expenses incurred by Manteca as a result of the person's discharge causing Manteca to be in violation of its permit.

The fees listed and described in this section shall be payable to Manteca only and do not include any additional fees which may be levied by any member jurisdiction providing collection services.

D. Delinquent Fees. All fees as described above, are due and payable within five days of the posted mailing date of the notice. All fees not paid within thirty days of issuance will be considered delinquent and are subject to a subsequent delinquent charge amounting to ten percent of the amount of the fee in question. Failure to pay fees within ninety days of issuance shall result in enforcement action by Manteca. This enforcement action may include termination of service and/or civil action to collect all outstanding fees, and delinquent charges. All costs resulting from this enforcement action will be paid by the user. (Ord. 1275 § 2 (part), 2004)

13.20.060 Reporting requirements.

A. What to Report. Under the terms and conditions of this chapter and the industrial discharge permit, all persons discharging to the Manteca water pollution control system shall report to Manteca any and all of the following events:

1. Noncompliance. Any person required to perform self-monitoring shall report any violation to the assistant director of public works or his or her agent, within twenty-four hours of becoming aware of the violation. Notification to Manteca may be by telephone, in person, or in writing. All verbal notifications shall be followed by a written report of the violation. This reporting will coincide with, or be in addition to, any self-monitoring reports required by the industrial discharge permit. Where the discharge in violation has a reasonable potential to affect the water pollution control system, notification to Manteca will be made immediately. The authority to require such reporting is provided in the federal Clean Water Act.

Under the requirements of 40 CFR, 403.12(G), if sampling by the discharger indicates a violation of this chapter or the industrial discharge permit requirements, the discharger shall notify Manteca of the violation within twenty-four hours of becoming aware of the violation and shall repeat the sampling and analysis and submit the results of the repeat analysis to Manteca within thirty days after becoming aware of the violation.

2. Change in Process. All persons discharging industrial waste to the water pollution control system shall report in writing in their industrial, manufacturing, or operating processes that could effect the quality or quantity of their

discharge, prior to commencing the changed discharge. Notification will be to the assistant director of public works or his or her agent. Where the anticipated changes in discharge volume or content have a reasonable potential to affect the water pollution control system, notification shall be at least ninety days prior to commencing the changed discharge.

3. Storage of Materials and Waste. Within the Manteca service area, all persons storing or using materials or waste in such quantities that a spill or leakage could adversely affect the water pollution control system, shall report in writing such storage to the assistant director of public works or his or her agent. The director of public works may, as deemed necessary, require a written report including, but not limited to, any or all of the following elements. The deadline for submission of the report shall be as deemed necessary and reasonable by the director of public works.

a. Description of stored materials and waste, including description of storage and disposal practices;

b. Description of discharge practices, including non-routine "batch" discharges;

c. Procedures for immediately notifying Manteca of spills or other atypical discharges to the water pollution control system;

d. Procedures for preventing and/or mitigating spills or other atypical discharges to the water pollution control system. Procedures addressing spills to the storm drain or surface waters may also be required.

4. Slug Discharge. Any person who must make a slug discharge shall notify the assistant director of public works or his or her agent of the discharge immediately. This notification shall be by phone call or in person. The assistant director of public works may require a subsequent written report of the event.

At least once every two years, the assistant director of public works shall evaluate whether each significant industrial user needs an accidental discharge/slug control plan. The assistant director of public works may require any user to develop, submit for approval, and implement such a plan. Alternatively, the assistant director of public works may develop such a plan for any user. An accidental discharge/slug control plan shall address, at a minimum, the following:

a. Description of discharge practices, including non-routine batch discharges;

b. Description of chemicals stored;

c. Procedures for immediately notifying the assistant director of public works and the POTW and any accidental or slug discharge.

d. Procedures to prevent adverse impact from any accidental or slug discharge. Such procedures include, but are not limited to, inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operation, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants, including solvent, and/ or measures and equipment for emergency response.

5. Discharge of Hazardous Waste. All industrial users shall notify Manteca, the EPA, and the California Waste Management Board, in writing, of any discharge into the water pollution control system of any substance which, if otherwise disposed, would constitute a hazardous waste under 40 CFR 261. The information required in the notification, the time frames for reporting, and conditions under which notification does not have to be made are all as specified in 40 CFR 403.12(p). The director of public works shall make determination if routine, permitted discharges of hazardous waste of no more than fifteen kilograms per one calendar month (less than one pound per day) to the water pollution control system must be reported to the POTW. This determination shall be made on a case by case and user basis.

6. Baseline Monitoring Reports. All categorical industrial users must submit baseline monitoring reports, compliance schedule progress reports, ninety-day compliance reports, periodic reports on continued compliance, and notices of slug loading per 40 CFR 403.12 at a frequency deemed reasonable by the director of public works.

B. Types of Reports. The assistant director of public works or his or her agent may require any person discharging industrial waste to submit any or all of the following reports in addition to any reports required under Section 13.020.060(A) of this chapter.

1. Baseline monitoring reports;

2. Compliance reports;

3. Compliance schedule progress reports;

4. Any other reports as reasonable and necessary to demonstrate compliance with this chapter or the waste discharge permit.

All submitted baseline monitoring reports, compliance reports, and compliance schedule progress reports shall be signed by the industrial user or his or her authorized agent in accordance with 40 CFR 403.12(1). This person shall be the same person who signs the application for an Industrial Discharge Permit, unless an agent is designated at the time the industrial discharge permit is issued. These reports shall contain the certification statement specified in 40 CFR 403.6(A)(2)(b).

The reports which may be required by the assistant director of public works are discussed below.

1. Baseline Monitoring Report. Within either one hundred eighty days after the effective date of a categorical pretreatment standard or the final administrative decision on a category determination under 40 CFR 403.6(A)(4), whichever is later, existing categorical users currently discharging to or scheduled to discharge to the POTW shall submit to the assistant director of public works a report which contains the information listed in paragraph 2 below. New sources and sources that become categorical users subsequent to the promulgation of an applicable categorical standard shall submit, ninety days before commencement of discharge, a report that contains the information listed in paragraph 2. This report shall be in writing and be submitted to the assistant director of public works. Baseline monitoring reports for categorical users shall include all the information set forth in 40 CFR 403.12(B)(1) through (7). Baseline monitoring report information users required to submit a baseline monitoring report shall include the following information in the baseline monitoring report.

a. Identifying Information. The name and address of the facility, including the name of the operator and owner.

b. Environmental Permits. A list of any environmental control permits held by or for the facility.

c. Description of Operations. A brief description of the nature, average rate of production, and standard industrial classifications of the operation(s) carried out by such user. This description should include a schematic process diagram that indicates points of discharge to the POTW from the regulated process.

d. Flow Measurement. Information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW from regulated process streams and other streams, as necessary, to allow use of the combined waste stream formula set in 40 CFR 403.6(E).

e. Measurement of Pollutants. The categorical pretreatment standards applicable to each regulated process.

The results of sampling and analysis identifying the nature and concentration, and/or mass, required by the standard or by the city, of regulated pollutants in the discharge from each regulated process. Instantaneous, daily maximum, and long-term average concentrations, or mass, where required, shall be reported. The sample shall be representative of daily operation and shall be analyzed in accordance with procedures set out in Section 13.020.070 of this chapter. Sampling must be performed in accordance with procedures set out in Section 13.020.070 of this chapter.

f. Certification. A statement, reviewed by the user's authorized representative and certified by a qualified professional, indicating whether pretreatment standards are being met on a consistent basis, and if not, whether additional operation and maintenance and/or additional pretreatment is required to meet the pretreatment standards and requirements.

g. Compliance Schedule. If additional pretreatment and/or operation and maintenance will be required to meet the pretreatment standards, the shortest schedule by which the user will provide such additional pretreatment and/or operation and maintenance. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard. A compliance schedule pursuant to this section must meet the requirements set out in Section 13.020.060(B)(2) of this chapter.

h. Signature and Certification. All baseline monitoring reports must be signed and certified in accordance with Section 13.020.060(B) of this chapter.

2. Compliance Reports. Any person discharging industrial waste to the water pollution control system may be required to submit a report demonstrating compliance with this chapter and any applicable industrial discharge permit to the assistant director of public works. This report shall be submitted, at a minimum, semi-annually and as specified in the person's industrial discharge permit.

In cases of known or suspected noncompliance, the assistant director of public works may require additional and more frequent compliance reporting.

All categorical users shall submit a report demonstrating compliance with the applicable national categorical standards within ninety days following the date for final compliance with those standards.

a. All significant industrial users shall, at a frequency determined by the assistant director of public works, but in no case less than twice per year (in June and December), submit a report indicating the nature and concentration of pollutants in the discharge, and the measured or estimated average and maximum daily flow for the reporting period. Categorical industry compliance reports shall include pollutants regulated by the applicable pretreatment standard. Non-categorical significant industry compliance reports shall include the pollutants identified in the user's industrial discharge permit. All periodic compliance reports must be signed and certified in accordance with Section 13.020.060(B) of this chapter.

b. All wastewater samples must be representative of the user's discharge. Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean, and maintained in good working order at all times. The failure of user to keep its monitoring facility in good working order shall not be grounds for the user to claim that sample results are unrepresentative of its discharge.

c. If a user subject to the reporting requirement in this section monitors any pollutant more frequently than required by the assistant director of public works, using the procedures prescribed in Section 13.020.070 of this chapter, the results of this monitoring shall be included in the report.

3. Compliance Schedule Progress Reports. All persons found to be in violation of this chapter, the industrial discharge permit, or any state or federal regulation prohibiting or limiting waste discharge, may be required to prepare a schedule of actions to bring the discharge into compliance under the direction of the assistant director of public works.

The director of public works shall have the final authority to determine if an action is acceptable and appropriate; to set the time frame to complete compliance action; to set the frequency of required compliance reporting; to set the frequency for required sampling; to set monitoring and inspection requirements; and to determine any additional actions necessary for the user to meet the compliance schedule on a timely basis.

Any user subject to a compliance schedule shall submit to Manteca, for each compliance step in the schedule, a report stating whether or not compliance was achieved. Where a compliance schedule milestone is not met, the report must state the reasons for noncompliance, the steps being taken to comply with the compliance schedule, and the date when the compliance will be met. Each report must be submitted not later than fourteen days after the date of the compliance step, specified in the compliance schedule.

The following conditions shall apply to the compliance schedule required by Section 13.020.060(B)(2)(g) of this chapter.

a. The schedule shall contain progress increments in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable pretreatment standards (such events include, but are not limited to, hiring an engineer, completing preliminary and final plans, executing contracts for major components, commencing and completing construction, and beginning and conducting routine operations);

b. No increment referred to above shall exceed nine months;

c. The user shall submit a progress report to the assistant director of public works no later than fourteen days following each date in the schedule and the final date of compliance, including, as a minimum, whether or not the increment of progress is complied with, the reason for any delay and, if appropriate, the steps being taken by the user to return to the established schedule; and

d. In no event shall more than nine months elapse between such progress report to the assistant director of public works.

4. Categorical Pretreatment Standard Deadline Compliance Report. Within ninety days following the date for final compliance with applicable categorical pretreatment standards, or in the case of a new source following commencement of the introduction of wastewater into the POTW, any user subject to such pretreatment standards and requirements shall submit to the assistant director of public works a report containing the information described in Section 13.020.060(B)(2) of this chapter. For users subject to equivalent mass or concentration limits

established in accordance with the procedures in 40 CFR 403.6(C), this report shall contain a reasonable measure of the users long-term production rate. For all other users subject to categorical pretreatment standards expressed in terms of allowable pollutant discharge per unit of production (or another measure of operation), this report shall included the user's actual production during the appropriate sampling period. All compliance reports must be signed and certified in accordance with Section 13.020.060(B) of this chapter.

5. Changed Condition Reports. Each user must notify the assistant director of public works of any planned significant changes to the user's operations or system which might alter the nature, quality, or volume of its wastewater at least ninety days before the change. Any user increasing the volume of wastewater above its sewer allocation must apply for and receive an additional sewer allocation through the Community Development Department.

a. The assistant director of public works may require the user to submit such information as may be deemed necessary to evaluate the changed conditions, including the submission of wastewater discharge permit application under Section 13.020.050 of this chapter.

b. The assistant director of public works may issue a wastewater discharge permit under Section 13.020.050 of this chapter or modify an existing wastewater discharge permit under Section 13.020.050 of this chapter in response to changed conditions or anticipated changed conditions.

c. For the purpose of this requirement, significant changes include, but are not limited to flow increases of twenty percent or greater, flow increases greater than the user's sewer allocation, and the discharge of any previously unreported pollutants.

6. Other Reports. All industrial users shall submit to the assistant director of public works any other reports as deemed reasonable and necessary by the assistant director of public works, in addition to those described above, to demonstrate compliance with this chapter, the industrial discharge permit, or any applicable state and federal regulations. Such reports include, but are not limited to, any reports or plans required by federal, California state, or local laws or regulations.

C. Record Keeping Requirement. All persons subject to the reporting requirements of this chapter and 40 CFR 403.12 shall maintain records of all information resulting from any monitoring activities and results, and make such records available for inspection and copying by EPA officials and Manteca personnel or agents, for a minimum of three years or a period of litigation, whichever is longer. (Ord. 1275 § 2 (part), 2004)

13.20.070 Inspection and monitoring.

A. Inspection Procedure. Manteca shall inspect the premises of any user to establish compliance with the provisions of this chapter, the user's industrial discharge permit, and any applicable California state, federal, and local laws pertaining to the treatment and discharge of waste to the water pollution control system.

1. Inspections shall be made under the provisions of this chapter and/or the user's industrial waste permit. If the user refuses reasonable access to the premises for purposes of inspection and monitoring, Manteca shall notify the user that he or she is in violation of this chapter, and the assistant director of public works may issue an administrative order, mandating such access by a specified date and at all reasonable times subsequent to that date.

2. An administrative warrant may be obtained in instances where the assistant director of public works or his or her agent believes there is substantial evidence that user refusal to consent to inspection and/or monitoring is concealing criminal acts, or willful or negligent discharges in violation of this chapter or any other applicable laws or regulations.

3. Where deemed necessary to protect the water pollution control system, the environment or the public health, safety or welfare from the effects of present or imminent discharges, the director of public works or his or her agent may invoke emergency measures as described in Section 13.020.90(C) of this chapter. These measures include providing access to a premise for the director of public works or his or her agents, without the consent of the owner or user.

4. Manteca retains the right to enter the premises to inspect the premises, processes, and records of the user; to sample or monitor the discharge, and to copy all records relating to pretreatment, chemical and waste storage, and waste discharge to the Manteca water pollution control system, pursuant to 40 CFR 403.8(F)(1)(e), to verify that the waste discharge is in compliance with industrial discharge permit, with this chapter, and all applicable state,

federal, and local laws pertaining to pretreatment and waste disposal to POTWs or waters of the United States. Manteca shall also have the right to install and operate any necessary sampling and monitoring equipment on the premises of the user, at a fee cost to the user, to document compliance.

5. The user shall provide a discharge sampling point and Manteca staff shall have access to the sampling point at all reasonable times. Manteca has the right to observe any waste sampling conducted by the user.

6. In the event of an emergency or a spill on the user's premises, the user shall notify the Manteca POTW and the Fire Department that a spill has occurred or is occurring and of the type of spill, including the content, volume, location, and approximate time that the spill occurred or began. Notification to Manteca of a spill implies consent for Manteca to enter and inspect the premises. Manteca staff may enter and inspect the premises at that time, as reasonable, to abate the spill or emergency event and to determine the circumstances of the spill event.

B. Monitoring Requirements. Manteca may require users to monitor their discharge to the water pollution control system and report the results of the monitoring to Manteca periodically. These monitoring and reporting requirements are specific to the discharger, and are listed in the industrial discharge permit. The assistant director of public works may require additional monitoring and reporting to document compliance.

1. Manteca may require waste dischargers to install and operate monitoring facilities at the point of discharge to the water pollution control system, at the expense of the discharger. Manteca may also choose to install and operate monitoring facilities on the premises of the discharger to document compliance. These Manteca installed and operated facilities, if required, will be at a fee cost to the user. The monitoring facilities will be constructed, installed and operated to allow for inspection, sampling, and measurement of flow or other parameters of the regulated discharge. The monitoring facilities shall be in accordance with Manteca construction standards and specifications. The facilities also shall be maintained at all times in a safe and proper operating condition at the expense of the discharger.

2. Manteca may require the discharger to conduct sampling and analysis of the discharge at a frequency and type as specified by the assistant director of public works or as required by the federal Pretreatment Regulations to demonstrate compliance with the prescribed waste discharge limits.

C. Sampling. The user shall sample his or her discharge to the waste pollution control system at the frequency provided in the industrial discharge permit or as deemed reasonable and necessary by the assistant director of public works to demonstrate compliance. The assistant director of public works may require sampling to be conducted by nonpermitted users, at his or her discretion, or if noncompliance is suspected, in which case, nonpermitted dischargers will be subject to the same sampling and reporting requirements as permitted dischargers. The discharger shall use the sampling and test procedures prescribed in 40 CFR Part 136 "Guidelines Establishing Test Procedures for the Analysis of Pollutants," or amendments thereto, or otherwise approved by EPA. Manteca also may specify additional sampling requirements or conduct sampling as necessary and reasonable to insure compliance with this chapter and/or the industrial discharge permit.

Initial sampling equipment and methods shall be observed by the assistant director of public works or his or her agent. Before conducting initial sampling, the user shall notify Manteca three days in advance and schedule a time for Manteca staff to be present to observe the sampling procedure. All sampling required by the industrial discharge permit, this chapter, or Manteca shall be at the expense of the user. The installation of sampling equipment and/or the conducting of sampling on the user's premises is at a fee cost to the user. All discharge samples for monitoring and reporting shall be analyzed at a laboratory facility approved by the assistant director of public works.

D. Pretreatment. Persons discharging waste to the Manteca water pollution control system shall install and operate any necessary wastewater treatment facilities or equipment as required by the assistant director of public works to achieve compliance with this chapter and all national pretreatment standards, within the time limitations specified in the National Pretreatment Regulations, this chapter, or the industrial discharge permit, whichever occurs first. Any pretreatment facilities or equipment required to bring the discharge in compliance with federal regulations, the requirements of this chapter, or the industrial discharge permit shall be provided by the user at his or her expense.

Detailed plans for the construction and operation of the pretreatment facilities shall be provided to Manteca for review and approval prior to commencing construction. However, the review and approval of such plans shall in no way relieve the user of the responsibility to modify the pretreatment facilities, equipment, or operating procedures as necessary to bring the discharge to an acceptable level of treatment. Any subsequent changes to the design, installation, construction, or operation of the pretreatment facilities or equipment shall be reported to Manteca in writing and shall be acceptable

to Manteca prior initiating such changes.

Manteca may specify operational and/or recording procedures relative to routine operation of the pretreatment facilities. Such requirements may include, but are not limited to, operation and maintenance manuals, operation logbooks, operator training, and on-site storage of spare parts and reserve treatment chemicals.

E. Restaurant Grease Traps. Restaurant process drains shall be connected to a grease trap of a size and design deemed sufficient by the assistant director of public works. These will be accessible for inspection by the assistant director of public works or his or her agent at all reasonable times. The traps will be maintained as deemed sufficient by the assistant director of public works. (Ord. 1275 § 2 (part), 2004)

13.20.080 Confidentiality.

All information and data submitted by the industrial user or obtained from the user, in accordance with this chapter, shall be available to the public and/or governmental agencies without restriction, unless protected by state law. (Ord. 1275 § 2 (part), 2004)

13.20.090 Enforcement.

A. Enforcement Mechanisms. This section presents the enforcement mechanisms and penalties available to the city of Manteca to respond to instances of noncompliance. The remedies for noncompliance, enforcement mechanisms, and penalties are cumulative.

The intent of this subsection is to provide adequate mechanisms to achieve a maximum degree of compliance from all waste dischargers. The following enforcement provisions apply to all users of the Manteca water pollution control system, either directly or indirectly, to the extent that a user violates any provision of this chapter, the industrial discharge permit, or an administrative order issued by Manteca.

1. Notice of Violation (NOV). An NOV is always presented to the user in writing. An NOV may be issued by the assistant director of public works or his or her agent in response to minor violations of this chapter or the industrial discharge permit. Manteca shall issue an NOV within ten working days of a violation or notification that a violation has occurred. In an emergency, Manteca may issue a verbal NOV which will be followed by a written notice.

An NOV may also contain specific actions for the user to complete such as conducting additional sampling, monitoring, or reporting, or applying for an industrial discharge permit or permit renewal.

2. Noncompliance Fees. Manteca has the authority to assess fees for the reimbursement of costs accrued by Manteca as a result of a violation by a user.

a. Sampling and Inspection Fees. The assistant director of public works may assess fees to the user for additional sampling, inspection, monitoring, or the installation of Manteca equipment on the user’s premises to sample or monitor a discharge.

b. Damage Fee. The assistant director of public works may also assess damage fees to recover costs for damage to the water pollution control system, Manteca, or the environment as a result of a discharge violation.

c. Permit Violation Fee. The assistant director of public works may assess a permit violation fee to recover costs for fines assessed to Manteca as a result of a violation of its NPDES permit or any other federal, California state, or local permit. The assistant director of public works also may include reimbursement of costs accrued by Manteca for additional sampling, inspection, environmental clean up, lab fees, and any other costs incurred by Manteca as a result of the permit violation. These costs may be included as part of the Permit Violation Fee and Damage Fee which may be assessed to the user, if the discharge violation caused, singly or in combination with other discharges, Manteca to violate its permit. This includes an increase in the order of magnitude of the Manteca permit violation.

3. Suspend Service. Manteca has the authority to suspend service to any user found in violation of this chapter, the industrial discharge permit, California state and/or federal regulations, or the local limits.

The director of public works or his or her agent may also suspend service in instances when a user refuses

Manteca staff entry to the user's premises for inspection, monitoring, or sampling purposes or to abate a perceived illegal discharge. The suspension of service may remain in force until the user allows entry to the premises.

4. Administrative Order. Manteca has the authority to issue an administrative order to bring a user into compliance. An administrative order maybe either a cease and desist order, show cause order, or compliance order. The filing of an administrative order is under the discretion of the director and/or assistant director of public works and is considered to be an intermediate step to enforcing compliance.

5. Annual Publication of SNC Dischargers. In order to comply with federal Pretreatment Regulations, 40 CFR 403.8(F)(2)(g), and to encourage users to remain in compliance, Manteca shall annually publish a list of all users which were in significant noncompliance (SNC) at any time in the past twelve months. This public notification shall be in the largest daily newspaper published in the service area.

6. Other Noncompliance Penalties. The following enforcement measures will be used in instances of serious noncompliance, usually resulting in extreme damage to the water pollution control system, or from fraudulent practices, criminal noncompliance, violation of an administrative order, violation of a compliance schedule, or negligent or intentional discharge of waste which causes a threat to the health and/or safety of the public, Manteca personnel, or the environment.

a. Terminate Service. Waste discharge service to the water pollution control system may be terminated, by disconnection of a user's sewer connection, upon written notice by the director of public works or his or her agent for any of the following reasons:

i. Violation of an administrative order;

ii. Refusal to cooperate with Manteca staff or comply with Manteca policies;

iii. Refusal to allow Manteca staff reasonable access to a premise for purposes of inspection, monitoring, or abating an illegal discharge;

iv. Fraudulent actions relating to reporting, self-monitoring, or Manteca sampling or inspection; or

v. One or more serious violations which endanger the health and/or safety of the public or Manteca personnel or which endangers the water pollution control system and/or the environment.

b. Pursuit of Criminal Prosecution. Where Manteca or its director of public works determines that a criminal violation of this chapter has occurred, Manteca may pursue criminal prosecution, pursuant to provisions of the federal Clean Water Act and California Government Code Sections 54725 and 54739. For each violation the offender may receive thirty days in jail or a fine of one thousand dollars or both. A violation may be recorded for each instance of non-compliance and for each day the noncompliance occurred.

c. Pursuit of Civil Action. Where deemed appropriate by the director of public works and the City Attorney, Manteca will pursue civil action. Actions taken may include, but are not limited to: civil suits for damage to the water pollution control system, injunctive relief, and/or civil penalties. Civil actions may be pursued on a strict liability basis, regardless of intent, and shall include reimbursement for all costs incurred by Manteca, including costs for repair, administrative costs, and a penalty of twenty-five thousand dollars per day for each violation pursuant to California Government Code 54740.

B. Costs for Enforcement Actions. All costs accrued by Manteca to undertake enforcement actions shall be paid by the user in violation. These costs include, but are not limited to, all fees described in Section 13.020.090(A)(2) of this chapter, attorney's fees, and fees associated with termination of service. All such fees are payable to Manteca and are in addition to any costs accrued by member jurisdictions. All such fees are due and payable upon receipt of notice. Delinquent fees will result in delinquent charges and/or enforcement actions, as described in Section 13.020.050(D) of this chapter.

C. Emergency Powers. The director of public works or his or her agent shall have full power and authority to take any necessary precautions and measures to protect the water pollution control system, POTW personnel, public, and the environment from endangerment or threat of endangerment, or any condition that is likely to result in a discharge which presents an imminent hazard to the public health, safety, or welfare; or which, either singly or by interaction with other discharges, is an imminent hazard to the water pollution control system, places Manteca in violation of its NPDES permit or any other California state or federal law or permits. The available precautionary measures include suspension of wastewater treatment and collection services and/or an industrial discharge permit, issuance of a cease and desist

order, and/or any of the following: decontamination, sewer closure, packaging, diking, and transportation of materials, in order to protect life or property, or to prevent further damage to the environment of the water pollution control system. In pursuit of such precautionary measures, Manteca personnel or any agent of the city of Manteca shall have immediate access to the premises. In addition, the director of public works or his or her agent shall have the authority to prohibit approach to the scene of such an emergency any vehicle, vessel, or thing, and all persons not specifically employed in the correction of the emergency condition or the preservation of life or property in the vicinity thereof.

Any user receiving cease and desist order or requested to suspend discharge to the water pollution control system from or by Manteca shall immediately cease or suspend the discharge or contribution to the water pollution control system. In the event a user fails to voluntarily comply with the requirements of the cease and desist order or suspension of service, the director of public works shall take such steps as deemed necessary to halt the discharge or contribution; including severance of the user's connection to the water pollution control system, to prevent or minimize damage to the POTW or endangerment to the public, the POTW, or the environment.

In addition to any enforcement actions issued to the user, the user shall submit a detailed written report of the emergency condition to the director of public works within fifteen days of the occurrence. The detailed report shall describe the cause(s) of the emergency event or harmful contribution and the measures which have been taken to prevent any future or repeated occurrence.

D. Disclosure of Information. All users are responsible for notifying Manteca of known violations of this chapter and/or the industrial discharge permit when they occur. In the event of a spill, accidental discharge, bypass of the pretreatment system, or the imminent danger of same, which may endanger the health or safety of Manteca staff, the public, or the environment is present, the user must immediately notify the Manteca director of public works or his or her agent by a phone call or in person. Dischargers must also notify Manteca of any changes to their operations which may change the quantity or quality of their discharge, prior to the change. Failure to notify Manteca of a violation, spill, bypass or accidental discharge is a violation of this chapter. (Ord. 1275 § 2 (part), 2004)

13.20.100 Hearings and appeals.

A. Any user, permit applicant, or permittee, found in violation of this chapter or the industrial discharge permit, or adversely affected by a decision, action, or determination of the director of public works, his or her agent, or Manteca interpreting or implementing this chapter or in any permit enforcement action issued herein, may file a written request for reconsideration of the decision, action, or determination within ten working days of notification of said decision, action, or determination. The written request for reconsideration shall detail facts supporting the user's request, and such facts must include a statement listing all relevant facts which must be considered, including such facts that may not have been known or available to Manteca at the date of such decision, action, or determination.

B. The assistant director of public works shall render decision in writing on the request for reconsideration within ten working days of receiving such request. If the decision on the request for reconsideration still is unacceptable to the user, the user may file a request for appeal to the director of public works, within ten working days of notice of the assistant director's decision. When a written request for appeal has been received and logged with the director of public works, the director shall schedule a hearing within forty-five days from receipt of the request for appeal and the director of public works shall make a final ruling on the assistant director's decision within ninety days from receiving the request for appeal.

C. Except where deemed appropriate by the director of public works, this reconsideration and appeal process described in this section of this chapter shall not halt or delay any enforcement action taken by Manteca.

D. Manteca reserves the authority to designate a hearing officer to hear all testimony presented for a hearing or appeal. (Ord. 1275 § 2 (part), 2004)

13.20.110 Severability.

If any provision, paragraph, word, section or article of this chapter in invalidated by any court of competent jurisdiction, the remaining provision, paragraphs, words, sections and chapters shall not be affected and shall continue in full force and effect. (Ord. 1275 § 2 (part), 2004)

13.20.110 - Fats, Oils and Grease (FOG) Control.

(A) Findings. The City of Manteca finds that, in order to provide for the public health and welfare, and to comply with the laws and regulations of the State of California, State Water Resources Control Board Order No. 2006-0003-DWQ Statewide General Waste Discharge Requirements for Sanitary Sewer Systems and amendments thereto, and the United States Government, it is necessary to set uniform requirements for all users of the city's sanitary sewer system to include, but not limited to, the following:

1. To establish the appropriate authority for the city to condition or deny discharges to the city sewer system;

2. To prevent the introduction of excessive amounts of grease into the city sewer system that may cause a Sanitary Sewer Overflow (SSO) to occur;

3. To prevent the clogging or blocking of the city sewer lines due to grease buildup causing backup and flooding of streets, residences, and commercial buildings;

4. To implement a procedure to recover the costs incurred in cleaning and maintenance of sewer lines and the disposal of grease blockages;

5. To implement a procedure to recover costs for any liability incurred by the city for damage caused by grease blockages resulting in the flooding of streets, residences or commercial buildings;

6. To establish 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. Additionally, to establish enforcement procedures for violations of any part or requirement of this chapter; and

7. To establish the authority for the city to carry out routine and non-routine monitoring (sampling and inspections) of the grease traps and the Food Service Establishments.

(B) Applicability. The terms and conditions of this chapter shall apply to all Food Service Establishments (FSEs) to include restaurants, cafeterias, food preparation facilities, convenience stores preparing fast foods for sale; grocery stores providing cooked foods for sale; and other food preparation facilities.

(C) Definitions.

"City" means the city of Manteca, California, employees of the city, or an authorized agent of the city.

"Discharger" means the Food Service Establishments that is discharging gray water to the city sewer system.

"Food Service Establishments" or "FSEs" means any business which prepares and/or packages food or beverages for sale or consumption, on- or off-site, with the exception of private residences. Food service facilities shall include, but are not limited to, food courts,

food manufacturers with an average daily discharge volume of twenty-five thousand (25,000) gallons per day or less, food packagers, restaurants, grocery stores, bakeries, lounges, hospitals, hotels, nursing homes, churches, schools, and all other food service facilities not listed in this chapter.

"Garbage disposal" means a device which shreds or grinds up waste materials into smaller portions for discharge into the city's sanitary sewer system.

"Gray water" means all of the liquid contained in a grease interceptor that lies below the floating grease layer and above the food solids layer.

"Grease" means a material either liquid or solid, composed primarily of fats, oils and grease from animal or vegetable sources. The terms "fats, oils, and grease (FOG)," "oil and grease" or "oil and grease substances" shall all be included within this definition.

"Grease interceptor" means a device located underground and outside of the Food Service Establishment designed to collect, contain or remove food wastes and grease from the wastestream while allowing the balance of the liquid wastes (gray water) to discharge to the wastewater collection system by gravity. Interceptors shall have at least one inspection hatch on the top surface to facilitate inspection, cleaning and maintenance.

"Grease trap" means a device located in a Food Service Establishments or under a sink designed to collect, contain, or remove food wastes and grease from the wastestream while allowing the balance of the liquid waste (gray water) to discharge to the wastewater collection system by gravity. Traps shall have a removable lid on the top surface to facilitate inspection, cleaning and maintenance.

"Grease trap service company" means a person, or company, who provides maintenance services for grease traps and interceptors. Maintenance services to include cleaning, minor repairs, grease and solids removal from the interceptor, and transport of the removed material to an appropriate recycling or disposal facility.

"Sanitary Sewer Overflows (SSOs)" means overflows from sanitary sewer systems of domestic wastewater, as well as industrial and commercial wastewater, depending on the pattern of land uses in the area served by the sanitary sewer system. SSOs often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease and other pollutants. SSOs may cause a public nuisance, particularly when raw untreated wastewater is discharged to areas with high public exposure, such as streets or surface waters used for drinking, fishing, or body contact recreation. SSOs may pollute surface or ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters. Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system.

SSOs include:

(i) Overflows or releases of untreated or partially treated wastewater that

reach waters of the United States;

(ii) Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and

(iii) Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

“Waste grease” means fats, oils, and grease that can be collected following use and prior to discharge to the sewer or interceptor. Waste grease is collected from pans, deep fat fryers and cooking grills.

(D) Grease Interceptor/Trap Required.

1. Grease interceptors and/or traps shall be provided by the facility owner, when, in the opinion of the city, they are necessary to prevent grease in excessive amounts from entering the sanitary sewer system. All interceptors shall be of a type and capacity approved by the city building division and shall be located as to be easily and safely accessible for cleaning and inspection. All prospective grease trap users must provide manufacturer’s capacity data and an estimate of the product rate at the facility that is within the capacity of the grease trap to be approved by the building permit department.

2. Existing Facilities. For the purposes of sizing and installation of grease interceptors/traps, all food service facilities existing within the city’s sewer system service area, whether within, or without, the city limits, prior to the effective date of the ordinance codified in this chapter shall be allowed to operate and maintain existing grease interceptors/traps provided their grease interceptors or grease traps are in efficient operating conditions.

On or after the effective date of the ordinance codified in this chapter, the city may require an existing food service facility to install, operate, and maintain a new grease interceptor or trap that complies with the requirements of this chapter or to modify, repair, or replace any noncompliant interceptor or trap within ninety (90) days of written notification by the city when any one or more of the following conditions exist:

a. The facility is found to be contributing grease and oil in quantities sufficient to cause line stoppages or necessitates increased maintenance on the wastewater collection system.

b. The facility does not have a grease interceptor or trap.

c. The facility has an undersized, nonrepairable or defective grease interceptor or trap.

d. Remodeling of the food preparation or kitchen waste plumbing system is performed which requires a building permit to be issued by the city.

e. The existing facility is sold or undergoes a change of ownership.

f. The existing facility does not have plumbing connections to a grease interceptor or trap in compliance with the requirements of this chapter, or current building codes.

3. New Facilities or New Interceptor Installations. Grease interceptors or traps shall be located in the Food Service Establishment's lateral sewer line between all fixtures which may introduce grease into the sewer system and the connection to the city's wastewater collections system. If dishwashers are connected to the grease interceptor, the interceptor must be properly designed to contain and cool the dishwasher discharge to prevent the hot water from causing carry through of the grease. Garbage disposals and restrooms should not be plumbed to the grease interceptor. Automatic hood washers, floor drains in food preparation and storage areas should be plumbed to the grease interceptor. Sanitary facilities (restrooms) shall not be plumbed to the grease interceptor under any circumstance.

4. The use of a grease trap, in-place of a grease interceptor will only be authorized for those facilities that do not operate a deep fat fryer, a cooking grill and conducts minimal dishwashing.

(E) Maintenance of Grease Interceptor/Trap Required.

1. All grease interceptors and grease traps shall be continuously maintained in satisfactory and effective operational condition by the discharger at the discharger's expense. Typically maintenance consists of the removal of floatable solids and settleable solids collected in the grease interceptor/trap; and the cleaning of the walls and piping.

2. Routine Maintenance Schedules. The discharger is responsible for establishing a routine maintenance schedule that includes the routine removal of floatable and settleable solids and cleaning of the interceptors/traps. The maintenance frequency should be such that the interceptor/trap does not allow fats, grease, oils, and food solids from leaving the interceptor and entering the city sewer collection system. The amount of time between pumping and cleaning services is dependent on the volume of wastes discharged, the volume of the interceptor/trap, and the physical integrity of the interceptor/trap structures and piping. It is the discharger's responsibility that the interceptors/traps are routinely inspected and repaired as needed.

3. Record Keeping Requirements.

a. The discharger is responsible for maintaining appropriate maintenance records that documents the routine pumping, cleaning, and repairs made to interceptors and traps. Where the discharger hires a grease trap service company to clean the interceptor/trap and remove and dispose of the accumulated grease and solids, a copy of the pumping manifest or billing must be retained with the maintenance records. All maintenance records should include at a minimum the following information:

i. Name of facility;

ii. Date service performed;

iii. Total volume of the interceptor/trap;

iv. Total volume of material removed from the interceptor/trap;

v. List of all deficiencies identified from an inspection of the empty interceptor/trap;

vi. Name of the grease trap service company;

vii. Address of the grease trap service company;

viii. Name and address of final disposal site;

ix. Signature of the grease trap service company employee performing the work; and

x. Signature of the discharger's employee observing and accepting the services.

4. Record Retention. All grease interceptor/trap maintenance records shall be retained for a period of not less than three years. These records shall be retained at the Food Service Establishment and shall be made available for inspection by the city.

(F) Disposal of Wastes from Interceptors and Traps. Storage, handling, transportation and disposal of all wastes from interceptors/traps shall be performed in accordance with applicable federal, state, and local regulations that pertain to the type and/or class of waste. Materials removed from waste interceptors/traps must be disposed of at legally designated locations for those specific type wastes. Materials removed from waste interceptors/traps shall not be discharged to the city sanitary sewers or storm drains.

(G) Collection, Storage, and Disposal of Waste Grease and Solids. Dischargers are encouraged to collect excess oil and grease from deep fat fryers, pots and pans prior to washing. This waste grease and oil should be collected and stored in appropriate containers that are appropriated labeled. The collected waste grease and oil should be collected by a waste grease service company for disposal. In no case shall the discharger dispose of deep fat fryer oils and other collected waste greases and oils by discharge to the grease interceptor/trap to the city sewer system.

(H) Clean up of Spilled Grease and Oil. The discharger shall clean up all spilled grease and oil using appropriate tools, including a mop and bucket. Bucket contents may be discharged to the grease interceptor/trap, and solid greases and oils that can be manually picked up should be held in the waste grease collection containers for final disposal. In no instance shall spilled grease and oils be washed to the stormwater drains. In the event that the city is required to clean up a grease and oil spill generated by a discharger, the city is authorized to assess cost recovery fees to the discharger for all costs associated with the clean up.

(I) Use of Chemicals and Other Additives. The use of chemicals, emulsifying agents, enzymes, microorganisms, and/or other additives that are added to the grease interceptors/traps to reduce or eliminate the pumping and cleaning of the interceptor/trap is

prohibited. Dischargers currently using a chemical or other additive must halt such use immediately on the effective date of the ordinance codified in this chapter.

(J) Right of Access. The city, employees of the city, or authorized agents of the city, have the authority to enter the property of the discharger to conduct inspections of the entire facility, including the interceptors, traps, cooking and storage areas, restrooms, offices, service areas, and other areas of the facility. The city is also authorized to collect samples of any wastestream, including the discharge from the facility and the interceptors and traps. The city may obtain search warrants for inspection and sampling purposes. Failure to grant access may result in the suspension of sewer and water services provided by the city.

(K) Enforcement. Failure to comply with the provisions of this chapter is considered a misdemeanor and subject to enforcement actions under the city codes. In addition, to these misdemeanor enforcement actions the city is authorized to take the following actions to achieve compliance to the city chapter.

1. Mandatory Interceptor/Trap Service. The city may issue an order requiring the discharger to conduct interceptor/trap maintenance services within a mandatory time period. The cost of the services shall be the direct responsibility of the discharger.

2. Mandatory Interceptor/Trap Service Schedule. The city may impose a mandatory pumping and cleaning schedule to assure the proper maintenance of an interceptor not properly maintained by the discharger. The cost of the services shall be the direct responsibility of the discharger. Mandatory service schedules may cover a time period of up to three years.

3. Cost Recovery. The city may assess the discharger the amount of those expenditures made by the city to clean up or prevent sewer blockages and overflows caused by the discharge from a Food Service Establishment.

4. Administrative Fines. The city may assess fines to the discharger, not to exceed one thousand dollars ($1,000.00) per day per violation, for violations of the city chapter.

a. Unpaid charges, fines, and penalties shall, after sixty (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 per month. A lien against the user’s property will be sought for unpaid charges, fines and penalties.

b. 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.

c. Issuance of an administrative fine shall not be a bar against, or a prerequisite for, taking any other action against the user.

d. Wastewater Discharge Permit Issuance. The city may issue wastewater discharge permits to Food Service Establishments either on a case-by-case basis or as part of a general program. The authority and requirements established by this Industrial Waste Ordinance shall apply to all such wastewater discharge permits issued under this section.

4. Emergency Suspensions. The city may immediately suspend a discharge and/or water services, after informal notice to the discharger, whenever such suspension is necessary to stop an actual or threatened discharge which reasonably appears to discharge to the waters of the United States or cause an imminent or substantial endangerment to the health or welfare of persons.

13.020.110 – Severability

(a) If any provision, paragraph, word, section, or article of this Waste Ordinance in invalidated by any court of competent jurisdiction, the remaining provision, paragraphs, words, sections, and chapters shall not be affected and shall continue in full force and effect.

SECTION III: EFFECTIVE DATE:

This Ordinance shall become effective 30 days from adoption.

SECTION IV: PUBLICATION:

Within fifteen (15) days after the adoption of this Ordinance, the City Clerk shall cause a copy of this Ordinance to be published once in the Manteca Bulletin, a newspaper of general circulation, along with a notice setting forth the date of adoption and the title of this Ordinance.

DATED: September 20, 2004

AYES: Councilmembers DeBrum, Harris, Hernandez, Snyder and Weatherford

NOES: None

ABSTAIN: None

ABSENT: None

WILLIE W. WEATHERFORD
MAYOR

ATTEST:

JOANN TILTON, CMC
CITY CLERK

CERTIFICATE

I, JOANN TILTON, CITY CLERK of the City of Manteca. do hereby certify that Ordinance No. 1274 was INTRODUCED at a regular meeting of the City Council of the City of Manteca on the 7th day of September, 2004 and was PASSED AND ADOPTED at an adjourned regular meeting of said Council on the 20th day of September, 2004.

JOANN TILTON, CMC
CITY CLERK

Chapter 13.24 SEPTIC TANK CLEANING

13.24.010 Purpose.

The purpose of this chapter and of the receiving station service fees and charges prescribed under this chapter is to regulate the discharge of domestic septic tank cleanings, portable toilet wastes, leach pit and cesspool contents into the receiving station facilities at the city wastewater control facility and to derive revenue which shall be used only for the acquisition, construction, reconstruction, maintenance and operation of the city wastewater control facility receiving station and sewage treatment plant facilities. (Prior code § 14-24)

13.24.020 Permit—Required.

No person shall deliver or discharge domestic septic tank cleanings into the city wastewater control facility receiving station facilities approved for such delivery and discharge, unless such person has a valid and subsisting receiving station use permit ("permit" in this chapter) issued by the city pursuant to the provision of this chapter. (Prior code § 14-25)

13.24.030 Permit—Issuance.

A. No person shall be issued a permit under this chapter to use the receiving station facilities to deliver and discharge domestic septic tank cleanings unless such person has filed with and furnished to the city's department of public works the following:

1. An application on a form provided;
2. The cash or corporate surety bond in the sum of one thousand dollars described in Section 13.24.050;
3. The insurance policies and/or certificates required by this chapter; and
4. Evidence of current unrevoked registration with the San Joaquin local health district under Chapter 6 of Division 20 of the California Health and Safety Code authorizing such person to engage in the business of disposing of the cleanings of domestic septic tanks.

B. Upon receipt thereof, the city's public works department shall issue such permit to the applicant. (Prior code § 14-26)

13.24.040 Permit—Nontransferable.

A permit issued under this chapter is personal to the applicant to whom it is issued and is not subject to transfer or assignment. (Prior code § 14-27)

13.24.050 Permit—Suspension—Revocation.

A. The director of public works or his or her authorized deputy may, upon reasonable notice and hearing, suspend or revoke any permit issued under this chapter if he or she finds and determines that any person:

1. Has submitted a permit application that is false in any material respect; or
2. Has failed to maintain in full force and effect, the bonds or insurance required under this chapter; or
3. Has personally or through an employee or other person engaged to do so, delivered or discharged any substances other than the cleanings of domestic septic tanks, etc., into the receiving station facilities or has delivered or discharged therein any substances prohibited from discharge into the city's sanitary sewer system under the provisions of Ordinance No. 435 or this chapter; or
4. Has disposed of any sanitary sewage or waste in an unlawful manner anywhere within the service area; or
5. Has violated any state, county or city law or regulation regarding the hauling of sanitary sewage, including

liquid wastes; or

6. Has failed to maintain an unrevoked registration for disposition of septic tank cleanings under California Health and Safety Code Section 25000 et seq., where required to dispose of such cleanings under this chapter;

7. Has failed to conform to any provision of the ordinance required to be complied with by him or her; or

8. Has failed to pay, before delinquency, any fee or charge due under this chapter.

B. If the director determines by reason of emergency circumstances that the immediate preservation of the public health and safety require that such permit be suspended immediately and without prior hearing, he or she may do so; provided, however, that he or she shall make written finding as to the emergency circumstances which justify such immediate action and forthwith give to permittee written notice thereof of the time, not exceeding fifteen days, when the director will conduct a hearing to determine whether such suspension shall be continued and/or the permit shall be revoked.

C. Notice of any proceeding under this chapter shall be served personally upon the permittee or by registered mail addressed to permittee as may be known to the director of public works. (Prior code § 14-41)

13.24.060 Bond—Required.

A. No person shall deliver or discharge the cleanings of domestic septic tanks into the city wastewater control facility receiving station facilities unless such person maintains in full force and effect a cash bond or a corporate surety bond in the sum of one thousand dollars in form approved by the city attorney, conditioned upon the faithful performance by the permittee under this chapter.

B. The condition of the bond shall be that the amount thereof shall be paid to the city if the permittee does any of the following:

1. Delivers or discharges any substance other than the cleanings of domestic septic tanks, etc., into the city wastewater control facility receiving station facilities; or

2. Discharges therein any of those substances which, by Ordinance No.435 are prohibited from discharge into the city's sanitary sewer system (referred to in this chapter as "prohibited substances"); or

3. Dispose of sewage or wastes in an unlawful manner within the service area of the receiving station; or

4. Is delinquent in paying for charges and fees billed by the director of finance under this chapter; or

5. Otherwise fails to comply with the provisions of this chapter.

C. Upon payment of any sum to city under such bond, the permittee shall immediately furnish and file with the city such cash surety bonds as may again equal the total amount of the bond required under this chapter.

D. No interest shall be paid by the city or permittee on any cash bond deposited. (Prior code § 14-28)

13.24.070 Bond—Remedy not exclusive.

The remedies providing for satisfaction of this chapter are cumulative and not exclusive, and are in addition to any other remedies to which the city may be lawfully entitled. Each person shall remain personally liable for any obligation or liability incurred in operations to the extent that bond proceeds are insufficient to satisfy the same. (Prior code § 14-29)

13.24.080 Insurance.

A. No person shall deliver or discharge the cleanings of domestic septic tanks, etc., into the city wastewater control facility receiving station facilities unless such person, at his or her sole cost and expense, maintains in full force and effect the following policies:

1. Public liability and property damage insurance insuring such person against claims for personal injury and property damage, (including motor vehicle coverage) which may arise by reason of the nature of the work or from the operations conducted by such person, his or her officers, employees, and all other persons engaged to conduct such operations by this chapter.

2. A separate policy or policies naming the city and their officers and employees as sole insureds, insuring

against all operations conducted by, for or on behalf of such person, and insuring against the omissions and supervisory acts of the city, their officers and employees with respect to the operations; the policy shall provide or contain an endorsement that the coverage afforded thereby shall be primary coverage to the full extent of liability stated in the declarations, and that if the city or its officers or employees have other insurance against the loss covered by the policy, such other insurance shall be excess insurance only.

B. Each such policy shall provide coverage in the following minimum amounts: for personal injury, including death, one hundred thousand dollars per person, three hundred thousand dollars for more than one person, per occurrence; property damage fifty thousand dollars on account of any one occurrence, with an aggregate limit of not less than two hundred thousand dollars for any policy year.

C. Each such policy shall bear an endorsement precluding cancellation or reduction in coverage unless, not less than ten days prior thereto, written notice is given by the insurer to the: City Clerk, City Hall, 1001 West Center Street, Manteca, California 95336.

D. The permittee shall cause to be filed with the city clerk a certificate of insurance issued by the insurer evidencing the policy required under subdivision 1 of subsection A of this section, and the original policy required under subdivision 2 of subsection A of this section. Not less than ten days prior to the effective date of cancellation, expiration or other termination of each such policy, the permittee shall cause replacement coverage to be filed with the license collector.

E. The city clerk shall file all certificates and insurance policies received under this chapter. (Prior code § 14-30)

13.24.090 Charges—Fees.

A. The following charges and fees shall be required to be paid for the delivery and discharge of wastes as set forth in the city wastewater control facility receiving station facilities: For each load collected and delivered to the receiving station the charge is four dollars per thousand gallons or part thereof. Only wastes collected from within the county of San Joaquin shall be discharged to the receiving station.

B. Said charges and fees may be changed by city council resolution. (Prior code § 14-31)

13.24.100 Source certification.

No person shall be permitted to deliver or discharge materials at the receiving station without delivering to the director of public works or his or her representatives, prior to such delivery or discharge, written certification of the source of collection of the material on a form approved by the director of public works. The source certification form shall note the date and time of collection, the city and street address of the property from which the materials were collected, and shall bear the signature of the owner or occupant of the property. (Prior code § 14-32)

13.24.110 Improper discharge.

No person shall deliver or discharge into the receiving station any industrial waste nor any substances whose discharge into the city's sanitary sewer system is prohibited under Ordinance No. 435 notwithstanding that they may constitute the cleaning of domestic septic tanks, etc. (Prior code § 14-33)

13.24.120 Sludge and solids prohibited.

No person shall deliver or discharge into the receiving station facilities any sludge or solids of sewage treatment plants or water treatment plants from within or from outside the county of San Joaquin. (Prior code § 14-34)

13.24.130 Monitoring wastes.

A. The city shall have the right by and through its officers, employees or other persons engaged by the city to do so, to take such samples of materials delivered by any person into the receiving station facilities as the city in its sole discretion may deem appropriate to obtain a representation sample of each delivery's contents. Such sample may be taken prior to, during, or after any such delivery and discharge. Without being limited thereto, results of analysis made

of such samples at the city wastewater control facility laboratory may be used to determine permittee's conformance with the requirements of this chapter. By acceptance of the permit issued hereunder, the permittee consents and agrees that any such samples may be so taken and used.

B. In the event the city determines that any such delivery contains substances not permitted to be delivered or discharged under this chapter, the permittee shall forthwith comply with the city's order or direction that they not be so delivered or discharged. (Prior code § 14-35)

13.24.140 Records—Billing.

A record of deliveries of the cleanings of domestic septic tanks, etc. shall be made at the time of each delivery to the receiving station and shall be signed by or on behalf of the permittee. Within fifteen days after the close of each calendar month, the director of finance shall prepare and mail an invoice to each permittee for fees and charges incurred by such permittee during such calendar month. (Prior code § 14-36)

13.24.150 Payment—Delinquency.

Fees and charges for the cleanings of domestic septic tanks, etc., delivered and discharged into the receiving station facilities shall be paid by the permittee at the office of the director of finance, City Hall, Manteca, California or at such other place as the director may provide. Such fees and charges are immediately due and payable upon the deposit of an invoice therefor in the United States mail; they are delinquent if payment is not received by the director of finance on or before the fortieth day immediately following the date when due and payable. (Prior code § 14-37)

13.24.160 Rules and regulations promulgation.

The director of public works is authorized to adopt rules, regulations and procedures relating to the operation of the receiving station, to establish a schedule of service and to provide a safe, efficient and sanitary use of the receiving station facilities and to implement the provisions of this chapter. The director may deny or suspend the use of receiving station facilities to any person who fails to comply with such rules, regulations and procedures. (Prior code § 14-38)

13.24.170 Compliance.

It is unlawful for any person to not comply with any written rule, regulation or procedure adopted by the director of public works pursuant to this chapter which relates to the delivery or discharge of wastes into receiving station facilities of the city wastewater control facility. (Prior code § 14-39)

13.24.180 Hauling vehicles identification.

Access to and use of receiving station facilities shall be granted only to vehicles bearing, in four-inch-high letters on both sides of the hauling vehicle, the name and address of the holder of a permit issued under this chapter and the vehicle load capacity. A copy of the city receiving station use permit as provided by the city must accompany the truck. (Prior code § 14-40)

13.24.190 Director's decision.

After any hearing required under this chapter, the director of public works shall make a written decision setting forth his or her findings and his or her action thereon. A copy of the decision shall be served upon permittee in the manner provided for notice of hearings; the decision is final in ten days after service. (Prior code § 14-42)

Chapter 13.28 STORM WATER MANAGEMENT AND DISCHARGES

13.28.010 Purpose.

The purpose of this chapter is to establish minimum storm water management requirements and controls to protect and safeguard the general health, safety and welfare of the public residing in watersheds within the city of Manteca. This chapter seeks to meet that purpose through the following objectives:

A. Minimize increases in storm water runoff from any development in order to reduce flooding, siltation and stream bank erosion and maintain the integrity of drainage channels;

B. Minimize increases in non-point source pollution caused by storm water runoff from development that would otherwise degrade local water quality;

C. Minimize the total annual volume of surface water runoff that flows from any specific site during and following development to not exceed the pre-development hydrologic regime to the maximum extent practicable; and

D. Reduce storm water runoff rates and volumes, soil erosion and non-point source pollution wherever possible, through storm water management controls and to ensure that these management controls are properly maintained and pose no threat to public safety. (Ord. 1253 § 1, 2004)

13.28.020 Definitions.

For purposes of this chapter the following terms have the following meanings:

"Accelerated erosion" means erosion caused by development activities that exceeds the natural processes by which the surface of the land is worn away by the action of water, wind or chemical action.

"Best management practices" or "BMPs" means activities, practices, facilities and/or procedures that when implemented to their maximum efficiency will prevent or reduce pollutants in discharges and any program, technology, process, siting criteria, operational methods or measures or engineered systems that when implemented prevent, control, remove or reduce pollution. Examples of BMPs may include: public education and outreach, proper planning of development projects, proper cleaning of catch basin inlets and proper sludge or waste-handling and disposal, among others.

"Building" means any structure, either temporary or permanent, having walls and a roof, designed for the shelter of any person, animal or property and occupying more than one hundred square feet of area.

"Channel" means a natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.

"City" means the city of Manteca.

"Detention" means the temporary storage of storm runoff in a storm water management practice with the goals of controlling peak discharge rates and providing gravity settling of pollutants.

"Developer" means a person who undertakes land disturbance activities.

"Development" means any construction, rehabilitation, redevelopment or reconstruction of any public or private residential project (whether single-family, multi-unit or planned unit development); industrial, commercial, retail and other non-residential projects, including public agency projects: or mass grading for future construction. It does not include routine maintenance to maintain original line and grade, hydraulic capacity or original purposes of facility, nor does it include emergency construction activities required to immediately protect public health and safety.

"Director" means the director of the city of Manteca's department of public works.

"Erosion and sediment control plan" means a plan that is designed to minimize the accelerated erosion and sediment runoff at a site during construction activities.

"Hazardous material" means any material that, because of its quantity, concentration or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.

"Hazardous waste" means any hazardous waste having the characteristics identified under or listed pursuant to Section 6921 of Title 42 of the United States Code, but not including any waste the regulation of which has been suspended under the Solid Waste Disposal Act (42 U.S.C. Sec. 6901 et seq.) by act of Congress.

"Illegal discharges" means any discharge to the MS4 system that is prohibited under local, state or federal statutes, chapters, codes or regulations. This includes all non-storm water discharges except discharges pursuant to a separate NPDES permit and discharges that are exempted or conditionally exempted in accordance with State Water Resources Control Board Water Quality Order No. 2003-0005-DWD, National Pollution Discharge Elimination System (NPDES) General Permit No. CAS 000004, Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (General Permit).

"Illicit connections" means any human-made conveyance that is connected to the MS4 system without a permit, excluding roof drains and other similar types of connections. Examples include channels, pipelines, conduits, inlets or outlets that are connected directly to the MS4 system.

"Infiltration" means the process of percolating storm water into the subsoil.

"Maintenance agreement" means a legally recorded document that acts as a property deed restriction and which provides for long-term maintenance of storm water management practices.

"Material" means any substance including but not limited to: garbage and debris; lawn clippings, leaves and other vegetation; biological and fecal waste; sediment and sludge; oil and grease; gasoline; paints, solvents, cleaners and any fluid or solid containing chemicals.

"Municipal separate storm sewer system" or "MS4" means streets, gutters, conduits, natural or artificial drains, channels and watercourses or other facilities that are owned, operated, maintained or controlled by the city and used for the purpose of collecting, storing, transporting or disposing of storm water.

"Non-point source pollution" means pollution from any source other than from any discernible, confined and discrete conveyances and includes but is not limited to pollutants from agricultural, mining, construction, subsurface disposal and urban runoff sources.

"NPDES permit" means a National Pollutant Discharge Elimination System (NPDES) Permit administered by the State of California, through its various regional water quality control boards.

"Person" means any natural person, corporation, association, partnership or other entity.

"Pollutant" means those "pollutants" defined in Section 502(6) of the Federal Clean Water Act (33 U.S.C. § 1362(6)) or incorporated into California Water Code § 13373. Examples of pollutants include but are not limited to the following:

1. Commercial and industrial waste such as fuels, solvents, detergents, plastic pellets, hazardous substances, fertilizers, pesticides, slag, ash and sludge;

2. Metals such as cadmium, lead, zinc, copper, silver, nickel and chromium and non-metals such as phosphorus and arsenic;

3. Petroleum hydrocarbons such as fuels, lubricants, surfactants, waste oils, solvents, coolants and grease);

4. Excessive eroded soils, sediment and particulate materials in amounts which may adversely affect the beneficial use of the receiving waters, flora or fauna of the state;

5. Animal wastes such as discharge from confinement facilities, kennels, pens, recreational facilities, stables and show facilities; and

6. Substances having characteristics such as pH less than six or greater than nine or unusual coloration or turbidity or excessive levels of fecal coliform, fecal streptococcus or enterococcus.

The term "pollutant" shall not include uncontaminated storm water, potable water or reclaimed water generated by a lawfully permitted water treatment facility.

The term "pollutant" also shall not include any substance identified in this definition if, through compliance with the best management practices ("BMPs") available, the discharge of such substance has been reduced or eliminated to the maximum extent practicable. In an enforcement action, the burden shall be on the person who is the subject of such action to establish the reduction or elimination of the discharge to the maximum extent practicable through compliance with the available BMPs.

"Redevelopment" means any land disturbing activity occurring on existing developed property.

"SSJID shared facilities" means facilities owned by the South San Joaquin Irrigation District (SSJID) that are also used by the city of Manteca for storm drainage.

"Spill" means to cause, allow or permit the flowing, running or falling, especially in an accidental manner, of any liquid, semi-liquid or solid substance or material.

"Storm water management" means the use of structural or non-structural practices that are designed to reduce storm water runoff pollutant loads, discharge volumes and/or peak flow discharge rates.

"Storm water runoff" means water flow on the surface of the ground as the result of precipitation.

"Urban runoff" means any flow of water originating from urban areas including but not limited to rain, irrigation, wash water and air conditioning condensate.

"Watercourse" means a permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water. (Ord. 1253 § 1, 2004)

13.28.030 Prohibition of illegal discharges.

No person shall discharge, permit to be discharged or cause to be discharged any materials including but not limited to pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards into either any part of the MS4 or any part of a water course.

A. It is prohibited to throw, deposit, place, leave, maintain, keep or permit to be thrown, deposited, placed, left, maintained or kept any refuse, rubbish, garbage or any other discarded or abandoned objects, articles or accumulations in or upon any street, alley, sidewalk, storm drain, inlet, catch basin conduit or drainage structure, business place or upon any public or private plot of land in the city, so that the same might be or become a pollutant. No person shall throw or deposit litter in any fountain, pond, lake, stream or other body of water within the city. This subsection shall not apply to refuse, rubbish or garbage deposited in containers, bags or other appropriate receptacles which are placed in designated locations for regular solid waste pick up and disposal.

B. It is prohibited to intentionally dispose of leaves, dirt or other landscape debris into the MS4.

C. No person shall discharge or allow the discharge of any of the following types of non-storm water discharges into the MS4, unless done pursuant to the terms and conditions of a separate NPDES permit or pursuant to an exemption issued by either the Central Valley Regional Water Quality Control Board ("regional board") or the State Water Resources Control Board:

1. The discharge of untreated wash waters when gas stations, auto repair garages or other type of automotive service facilities are cleaned;

2. The discharge of untreated waste water from mobile auto washing, steam cleaning, mobile carpet cleaning and other such mobile commercial and industrial operations;

3. To the maximum extent practicable, discharges from areas where repair of machinery and equipment, including motor vehicles, which are visibly leaking oil, fluid or antifreeze, is undertaken;

4. Discharges of untreated runoff from storage areas of materials containing grease, oil or other hazardous substances and uncovered receptacles containing hazardous materials;

5. Discharges of commercial/municipal swimming pool filter backwash;

6. Discharges of untreated runoff from the washing of toxic materials from paved or unpaved areas; provided, however, that non-industrial and non-commercial activities which incidentally generate urban runoff, such as the hosing of sidewalks and the non-commercial hand-washing of cars, shall be excluded from this prohibition;

7. To the maximum extent practicable, discharges from washing impervious surfaces in industrial/commercial areas which results in a discharge of untreated runoff, unless specifically required by state's, city's or San Joaquin County's health and safety codes or permitted under a separate NPDES permit;

8. Discharges from the washing out of concrete trucks;

9. Discharges of any pesticide, fungicide or herbicide banned by the United States Environmental Protection Agency ("USEPA") or the California Department of Pesticide Regulation; or

10. The disposal of hazardous wastes into trash containers used for municipal trash disposal, where such disposal causes or threatens to cause a direct or indirect discharge to the MS4.

(Ord. 1253 § 1, 2004)

13.28.035 Exceptions to discharge prohibitions.

The following discharges are excepted from the prohibitions set forth under Section 12.28.030:

A. Discharges from the following activities will not be considered a source of pollutants to the MS4 system and to waters of the United States when properly managed to ensure that no potential pollutants are present and therefore they shall not be considered illegal discharges unless determined to cause a violation of the provisions of the Porter-Cologne Act, Clean Water Act or this chapter: water line flushing, landscape irrigation, diverted stream flows, rising groundwater, uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(20)) to the MS4 system, uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges and discharges or flows from fire fighting activities.

B. The prohibition shall not apply to any non-storm water discharge permitted under an NPDES permit, waiver or waste discharge order issued to the discharger and administered by the State of California under the authority of the USEPA, provided that the discharger is in full compliance with all requirements of the permit, waiver or order and other applicable laws and regulations and provided that written approval has been granted by the city for any discharge to the MS4.

C. The prohibition shall not apply to irrigation and drainage waters under control of the South San Joaquin Irrigation District (SSJID) that are being transported by SSJID shared facilities.

D. With written concurrence of the Regional Board, the city may exempt in writing other non-storm water discharges which are neither a source of pollutants to the MS4 system nor waters of the United States. (Ord. 1253 § 1, 2004)

13.28.040 Prohibition of illicit connections.

A. The construction, use, maintenance or continued existence of illicit connections to the MS4 system is prohibited.

B. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection. (Ord. 1253 § 1, 2004)

13.28.050 Waste disposal prohibitions.

No person shall throw, deposit, leave, maintain, keep or permit to be thrown, deposited, left or maintained in or upon any public or private property, driveway, parking area, street, alley, sidewalk, component of the MS4 system or water of the United States any refuse, rubbish, garbage, litter or other discarded or abandoned objects, articles and accumulations, so that the same may cause or contribute to pollution. Wastes deposited in streets in proper waste receptacles for the purposes of collection are exempted from this prohibition. (Ord. 1253 § 1, 2004)

13.28.060 Discharges in violation of industrial or construction activity NPDES storm water discharge permit.

A. Any person subject to an industrial NPDES storm water discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the director upon inspection of the facility, during any enforcement proceeding or action or for any other reasonable cause.

B. Any person subject to a construction activity NPDES storm water discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the director prior to or as a condition of a subdivision map, site plan, building permit or development or improvement plan; upon inspection of the facility; during any enforcement proceeding or action; or for any other reasonable cause. Prior to issuance of a construction permit a copy of the Notice of Intent (NOI) and the Storm Water Pollution Prevention Plan (SWPPP) shall be submitted to the city. (Ord. 1253 § 1, 2004)

13.28.070 Requirement to prevent, control and reduce storm water pollutants.

A. Authorization to Adopt and Impose Best Management Practices (BMP). The city will adopt requirements identifying best management practices for any activity, operation or facility which may cause or contribute to pollution or contamination of storm water, the MS4 system or waters of the United States as a separate BMP Guidance Series. Where best management practice requirements are promulgated by the city or any federal, state of California or regional agency for any activity, operation or facility which would otherwise cause the discharge of pollutants to the MS4 system or water of the United States, every person undertaking such activity or operation or owning or operating such facility shall comply with such requirements.

B. New Development and Redevelopment. The city may adopt requirements identifying appropriate design standards and best management practices to control the volume, rate and potential pollutant load of storm water runoff from new development and redevelopment projects as may be appropriate to minimize the generation, transport and discharge of pollutants. The city shall incorporate such requirements in any land use entitlement and construction or building-related permit to be issued relative to such development or redevelopment. The owner and developer shall comply with the terms, provisions and conditions of such land use entitlements and building permits as required in this chapter.

C. Responsibility to Implement Best Management Practices. Notwithstanding the presence or absence of requirements promulgated pursuant to subsections A and B, any person engaged in activities or operations or owning facilities or property which will or may result in pollutants entering storm water. The MS4 system or waters of the United States shall implement best management practices to the extent they are technologically achievable to prevent and reduce such pollutants. The owner or operator of a commercial or industrial establishment shall provide reasonable protection from accidental discharge of prohibited materials or other wastes into the MS4 or watercourses. facilities to prevent accidental discharge of prohibited materials or other wastes shall be provided and maintained at the owner or operator's expense. Best management practices required by the city can be obtained from the public works department by requesting the BMP manual appropriate to a commercial or industrial activity from the BMP Guidance Series.

D. Maintenance Agreements. All structural and non-structural permanent storm water BMPs not in the control of the city shall have an enforceable maintenance agreement to ensure the system functions as designed. The agreement shall include any and all maintenance easements required to access and inspect the storm water BMPs and to perform routine maintenance as required. Such agreements shall specify the parties responsible for the proper maintenance of all storm water BMPs. (Ord. 1253 § 1, 2004)

13.28.080 Landscaping and stabilization requirements.

Any area of land, not covered by an impervious surface, from which the natural vegetative cover has been either partially or wholly cleared or removed by development activities shall be landscaped within ten days from the substantial completion of such clearing and construction. No person shall use or otherwise employ impervious material, such as plastic, placed under decorative rock, bark or other landscape covers in meeting the landscaping requirements under this section. Backyards of residential single-family dwellings which would otherwise be covered by this section are exempt where storm water is contained on the property. (Ord. 1253 § 1, 2004)

13.28.090 Requirement to monitor and analyze.

The director may require by written notice that any person engaged in any activity and/or owning or operating any facility which may cause or contribute to storm water pollution, illegal discharges and/or non-storm water discharges to the MS4 or to the waters of the United States is to undertake at said person's expense such monitoring and analyses and to furnish such reports to the city as the director shall deem necessary for determining that person's compliance with this chapter. (Ord. 1253 § 1, 2004)

13.28.100 Spill prevention and response plan.

Any person subject to an Industrial NPDES storm water discharge permit shall maintain a spill prevention and response plan as part of their Storm Water Pollution Prevention Plan (SWPPP). The methods, procedures, mechanisms and facilities established and utilized for the purpose of preventing accidental discharges or spills of materials with pollution potential shall be provided and maintained at the owner's or user's own cost and expense. The SWPPP shall outline the user's spill

prevention and response procedure, describe the nature and location of any chemicals stored on the user's premises and shall contain procedures for immediately notifying the city and preventing adverse impacts of any discharge of chemicals, substances or materials. (Ord. 1253 § 1, 2004)

13.28.110 Prohibition of spills.

No person shall allow a spill to discharge into the MS4 or any watercourse. (Ord. 1253 § 1, 2004)

13.28.120 Notification of spills.

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into storm water, the MS4 or water of the United States from said facility, said person shall take all necessary steps to ensure the discovery, containment and cleanup of such release. In the event that a responsible person becomes aware of a release of hazardous materials, they shall immediately notify emergency response officials of the release via emergency dispatch services (i.e., by calling 911). In the event of a release of non-hazardous materials, the responsible person shall notify the city's public works department in person, by phone or facsimile not later than five p.m. of the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the city's public works department within three business days of the phone notice, lithe discharge of hazardous materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years. (Ord. 1253 § 1, 2004)

13.28.130 Authority to inspect.

Whenever necessary to make an inspection to enforce any provision of this chapter or whenever the director has cause to believe that there exists or potentially exists, in or upon any premises within the city, any condition which constitutes a violation of this chapter, the director is authorized to enter such premises at all reasonable times for the purpose of inspecting said premises. The director is further authorized to inspect and copy all records at a facility which are related to storm water compliance. In the event that the owner or occupant of the premises refuses to allow either the director or persons authorized by the director to enter said premises for the purposes of conducting an inspection authorized by this chapter after the director or a person authorized by the director has asked the owner or occupant of said property to enter thereon for the purposes authorized by this chapter, the city may seek the assistance of a court of competent jurisdiction in order to facilitate the purposes of this section. (Ord. 1253 § 1, 2004)

13.28.140 Authority to sample, establish sampling devices, test and photograph.

During any inspection as provided herein, the director may take any samples, perform any testing deemed necessary and take photographs to aid in the pursuit of the inquiry or to record site activities. (Ord. 1253 § 1, 2004)

13.28.150 Notice of violation.

Whenever the director finds that a person has violated or otherwise failed to meet a requirement of this chapter, the director may order a person to comply with this chapter by either personally serving that person with a written notice or by sending written notice to that person by certified mail. Such notice may require without limitation:

A. The performance of monitoring, analyses and reporting;

B. The elimination of illicit connections or discharges;

C. That violating discharges, practices or operations shall cease and desist;

D. The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property;

E. Payment of a fine to cover administrative and remediation costs; and/or

F. The implementation of source control or treatment BMPs.

If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline by which such remediation or restoration shall be completed. Said notice shall further advise that, if the violator fails to complete the remediation or restoration described in the written notice provided for under Section 13.28.150 within the time provided for therein, the city or a contractor designated by the director shall complete the work specified in the notice, and the city shall charge all expenses related to the city or contractor's performance of said work to the responsible person as provided for under Section 13.28.180. (Ord. 1253 § 1, 2004)

13.28.160 Appeal.

Notwithstanding the provisions of Section 13.28.190, any person receiving a notice of violation under Section 13.28.150 may appeal the director's determination to the city manager. The notice of appeal must be received by the city manager within five days from the date of the notice of violation. Hearing on the appeal before the city manager or his or her designee shall take place within fifteen days from the date of city's receipt of the notice of appeal. The decision of the city manager or designee shall be final. (Ord. 1253 § 1, 2004)

13.28.170 Abatement by city.

If the violation has not been corrected pursuant to the requirements set forth in the notice of violation or, in the event of an appeal under Section 13.28.160, within ten days of the decision of the city manager upholding the decision of the director, then the city or a contractor designated by the director shall enter upon the subject private property and is authorized to take any and all measures necessary to abate the violation and/or restore the property. It is unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the city or designated contractor to enter upon the premises for the purposes set forth above. (Ord. 1253 § 1, 2004)

13.28.180 Charging cost of abatement/liens.

Within thirty days after abatement of the nuisance by city, the director shall notify the property owner of the property of the cost of abatement, including administrative costs. The property owner may file a written protest objecting to the amount of the assessment with the city clerk within fifteen days. The city clerk shall set the matter for public hearing by the city council. The decision of the city council shall be set forth by resolution and shall be final.

If the amount due is not paid within ten days of the decision of the city council or the expiration of the time in which to file an appeal under this section, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment. A copy of the resolution shall be turned over to the county auditor so that the auditor may enter the amounts of the assessment against the parcel as it appears on the current assessment roll, and the tax collector shall include the amount of the assessment on the bill for taxes levied against the parcel of land. (Ord. 1253 § 1, 2004)

13.28.190 Urgency abatement.

The director is authorized to require the immediate abatement of any violation of this chapter that constitutes an immediate threat to the health, safety or well-being of the public. If any such violation is not abated immediately as directed by the director, the city is authorized to enter onto private property and to take any and all measures required to remediate the violation. Any expense related to such remediation undertaken by the city shall be fully reimbursed by the property owner and/or responsible party. Any relief obtained under this section shall not prevent city from seeking other and further relief authorized under this chapter. (Ord. 1253 § 1, 2004)

13.28.200 Violations.

It is unlawful for any person to violate any provision or fail to comply with any of the requirements of this chapter. A violation of or failure to comply with any of the requirements of this chapter shall constitute a misdemeanor and shall be punishable as set forth in California Penal Code Section 19. (Ord. 1253 § 1, 2004)

13.28.205 Strict liability.

By securing a permit from the city of Manteca for development, encroachment, or the construction of a work improvement the permittee shall be strictly liable, in any criminal proceeding, for allowing or failing to prevent a violation of this chapter by the permittee, its employees, subcontractors or material men.

In any prosecution for a violation of this chapter against a permittee based on the act or omissions of an employee, subcontractor, or material men it shall only be required that it be shown that the permittee was issued a development, encroachment, or construction permit and that a violation of this chapter occurred at the site for which a permit was issued. (Ord. 1293 § I, 2005)

13.28.210 Compensatory action.

In lieu of enforcement proceedings, penalties and remedies authorized by this chapter, the director may impose upon a violator alternative compensatory action, such as storm drain stenciling, attendance at compliance workshops, creek cleanup, etc. (Ord. 1253 § 1, 2004)

13.28.220 Violations deemed a public nuisance.

In addition to the enforcement processes and penalties herein before provided, any condition caused or permitted to exist in violation of any of the provisions of this chapter is a threat to public health, safety and welfare, is declared and deemed a nuisance and may be summarily abated or restored by the city at the violator’s expense, and/or a civil action to abate, enjoin or otherwise compel the cessation of such nuisance may be taken by the city. (Ord. 1253 § 1, 2004)

13.28.230 Acts potentially resulting in violation of Clean Water Act and/or California Porter-Cologne Act.

Any person who violates any provision of this chapter or any provision of any requirement issued pursuant to this chapter, may also be in violation of the Clean Water Act and/or the Porter-Cologne Act and may be subject to the sanctions of those acts, including civil and criminal penalties. Any enforcement action authorized under this chapter shall also include written notice to the violator of such potential liability. (Ord. 1253 § 1, 2004)

Chapter 15.12 PLUMBING CODE

15.12.010 Adoption.

That certain document, one copy of which is on file in the office of the city clerk of the city of Manteca, being marked and designated as the 2013 California Plumbing Code, California Code of Regulations, Title 24, Part 5, as published by the International Association of Plumbing and Mechanical Officials, as now existing, or hereafter amended, regulating and governing the conditions of all properties, buildings, and structures; by providing the standards for facilities and other physical things and conditions essential to ensure that structures are safe, sanitary, and fit for occupancy and use; and the condemnation of such structures; providing for the issuance of permits and collection of fees therefor; and providing penalties for the violation thereof; and each and all of the regulations, provisions, penalties, conditions, and terms of said 2013 California Plumbing Code on file in office of the city clerk of the city of Manteca is hereby referred to, adopted as the plumbing code of the city of Manteca. (Ord. 1525 § 2, 2013)

15.12.020 Enforcement.

California Code of Regulations, Title 24, Part 5, and all other applicable codes shall be enforced by the building official. The building official may appoint inspectors, plans examiners, technicians, officers and other employees. The building official may deputize such employees of the building department or other employees of the city of Manteca as necessary and these employees shall have the duties and powers as delegated by the building official to carry out the functions of the enforcement agency in accordance with California Code of Regulations, Title 24, Part 2, Section 103. The building official shall have the power to render interpretations of this code and to adopt and enforce rules and regulations supplemental to this code as may be deemed necessary in order to clarify the application of the provisions of this code. Such interpretations, rules, regulations, and policies shall be in conformity with the intent and purpose of this code. The building official may authorize the San Joaquin County health department as the city designated enforcement authority. See Section 15.04.020 for definitions of “building official” and “deputize.” (Ord. 1525 § 2, 2013)

15.12.030 Dangerous and insanitary construction—Nuisance.

A. Any portion of a plumbing system found by the administrative authority to be insanitary as defined in the California Plumbing Code is declared to be a nuisance.

B. 1. Whenever brought to the attention of the department having jurisdiction that any insanitary conditions exist or that any construction or work regulated by this code is dangerous, unsafe, insanitary, a nuisance or a menace to life, health or property or otherwise in violation of this code, the department may request an investigation by the administrative authority who, upon determining such information to be fact, shall order any person, firm or corporation using or maintaining any such condition or responsible for the use of maintenance thereof to discontinue the use or maintenance thereof or to repair, alter, change, remove or demolish same for the proper protection of life, health or property and in the case of any gas piping or gas appliance may order any person, firm or corporation supplying gas to such piping or appliance to discontinue supplying gas thereto until such piping or appliance is made safe to life, health or property.

2. Every such order shall be in writing, addressed to the owner, agent or person responsible for the premises in which such condition exists and shall specify the date or time for compliance with such order.

C. Refusal, failure or neglect to comply with any such notice or order shall be considered a violation of this code.

D. When any plumbing system is maintained in violation of this code and in violation of any notice issued pursuant to the provisions of this section or where a nuisance exists in any building or on a lot on which a building is situated, the administrative authority may institute any appropriate action or proceeding in any court of competent jurisdiction to prevent, restrain, correct or abate the violation or nuisance. (Ord. 1525 § 2, 2013)

15.12.040 Appendix Chapter 1, Section 103.4.1.

Section 103.4.1 Fees is amended to read as follows:

Permit fees for each permit shall be paid as set forth in Resolution No. R2010-149 or by a determination by the Building Official of the estimated reasonable cost of service.

(Ord. 1525 § 2, 2013)

15.12.050 Board of appeals.

Whenever the building official shall disapprove an application or refuse to grant a permit applied for, or when it is claimed that the provisions of the code do not apply or that the true intent and meaning of the code have been misconstrued and wrongly interpreted, the applicant or any person directly and adversely affected thereby, or the authorized agent of either of said parties, may appeal from the decision of the building official to the building board of appeals of the city of Manteca within thirty days from the date of said decision, and the said board of appeals may, after a hearing, affirm, reverse, or modify said decision of the building official.

The building board of appeals shall have no authority relative to the interpretation of the administrative provisions of the California Plumbing Code nor shall the board be empowered to waive any requirements of the California Plumbing Code.

The appeal shall be made in writing and the appellant or his or her representative may appeal in person and may introduce evidence to support his or her claim(s). (Ord. 1525 § 2, 2013)

15.12.060 Appendix Chapter 1, Section 102.4.

Chapter 1, Section 102.4 of the California Plumbing Code is amended to read as follows:

Section 102.4 Violations and Penalties.

A. It is unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy or maintain any building or structure or cause or permit the same to be done in violation of this code.

Any person who shall violate any of the provisions of the code hereby adopted or fail to comply therewith, or who shall violate or fail to comply with any order made thereunder, or who shall build in violation of any detailed statement of specifications or plans submitted and approved thereunder, or any certificates or permit issued thereunder, and from which no appeal has been taken, or who shall fail to comply with such an order as affirmed or modified by the City Council, Building Board of Appeals or a court of competent jurisdiction, within the time fixed herein, shall severally for each and every violation and noncompliance respectively, be guilty of a misdemeanor, punishable by a fine of not more than $1,000.00 or by imprisonment in the City Jail of the City of Manteca, or the County Jail of the County of San Joaquin for not more than six months or by both such fine and imprisonment. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue, and all such persons shall be required to correct or remedy such violations or defects within a reasonable time, and when not otherwise specified, each ten days that prohibited conditions are maintained shall constitute a separate offense.

B. The issuance or granting of a permit or approval of plans and specifications shall not be deemed to be a permit for, or an approval of, any violation of any of the provisions of this code, or any applicable provision of state law. No permit presuming to give authority to violate or cancel the provisions of this code shall be valid, except insofar as work or use which it authorizes is lawful.

C. The issuance of a permit upon plans and specifications shall not prevent the City Building Official from thereafter requiring the correction of errors in the plans and specifications or from preventing construction operations being carried on thereunder when in violation of this code, or any other applicable provision of state law.

(Ord. 1525 § 2, 2013)

Appendix C

Sample Documentation

LIFT STATION LOG

DATE	WORK PERFORMED	INITIALS

Week: _____

SEWER LIFT STATION ROUTINE CHECK LIST

	Hrs: Pump 1	Hrs: Pump 2	Hrs: Pump 3	Wet Pit Cond ?	Exercise Gate valves	Check - Valves	Pumps greased	Lights working	Air Filters Changed	Sump Pumps Working	Date:	Initials
Airport/Daniels												
Antigua												
Bella Vista												
Chadwick U5												
Curran Grove												
Eckert												
Fishback												
Frito Lay												
Roberts Estates												
Tara Park												
Union Rd												
Villa Ticino												
Woodbridge												
Woodward Park												

GC-good cond.	Y-yes
HG-heavy grease	N-no
MG-medium grease	N/A-not applicable
LG-light grease	

City of Manteca, WQCF

Manhole - Routine Inspection Checklist

MANHOLE ID _____ LOCATION _____ MONTH _____ YEAR _____

SERVICE REQUIRED	DATE	INITIAL	RESULT / COMMENTS
CHECK CONDITION OF THE FRAME			
CHECK FOR EVIDENCE OF SURCHARGE			
CHECK FOR OFFSET OR MISALIGNMENTS			
CHECK FOR EVIDENCE OF INFILTRATION AND/OR INFLOW			
CHECK FOR PRESENCE OF CORROSION			
CHECK FOR ACCUMULATIONS OF GREASE, DEBRIS, OR GRIT			
CHECK WASTEWATER FLOW CHARACTERISTICS (FLOWING FREELY OR BACKED UP)			

IS REPAIR OF THE MANHOLE NECESSARY? ☐YES ☐NO

COMMENTS:

IS CLEANING OF THE MANHOLE NECESSARY? ☐YES ☐NO

COMMENTS:

ADDITIONAL COMMENTS:

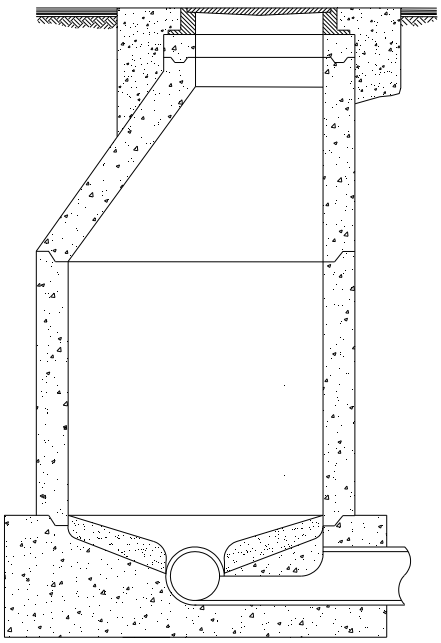
City of Manteca, WQCF

Manhole - Routine Inspection Checklist

MANHOLE ID _____

PHOTO OF MANHOLE:

MANHOLE DEFECTS: (MARK LOCATIONS AND DEGREE OF CRACKS, MISALIGNMENTS, I&I, CORROSION, ETC.)



C.3

City of Manteca, WQCF

Air Release Valve - Routine Inspection Checklist

ARV ID _____ LOCATION _____ MONTH _____ YEAR _____

SERVICE REQUIRED	DATE	INITIAL	RESULT / COMMENTS
CHECK CONDITION OF THE ARV ASSEMBLY			
CHECK FOR EVIDENCE OF LEAKING			
VERIFY THAT VALVE BETWEEN ARV AND THE PIPE IS OPEN			
CHECK FOR PRESENCE OF CORROSION			
CHECK FOR ACCUMULATIONS OF DEBRIS ON ARV ASSEMBLY			
DATE THE ARV BACK-FLUSHED			

IS REPAIR OF THE AIR RELEASE VALVE ASSEMBLY NECESSARY? ☐YES ☐NO

COMMENTS:

IS REPLACEMENT OF THE AIR RELEASE VALVE NECESSARY? ☐YES ☐NO

COMMENTS:

ADDITIONAL COMMENTS:

City of Manteca, WQCF

Pipeline - Routine Inspection Checklist

PIPELINE ID _____ LOCATION _____ MONTH _____ YEAR _____

SERVICE REQUIRED	DATE	INITIAL	RESULT / COMMENTS
CHECK CONDITION OF THE PIPE			
CHECK FOR EVIDENCE OF LEAKING			
CHECK FOR OFFSET OR MISALIGNMENTS			
CHECK FOR EVIDENCE OF INFILTRATION AND/OR INFLOW			
CHECK FOR PRESENCE OF CORROSION			
CHECK FOR ACCUMULATIONS OF GREASE, DEBRIS, OR GRIT			
CHECK WASTEWATER FLOW CHARACTERISTICS (FLOWING FREELY OR BACKED UP)			

IS REPAIR OF THE PIPELINE NECESSARY? ☐YES ☐NO

COMMENTS:

IS CLEANING OF THE PIPELINE NECESSARY? ☐YES ☐NO

COMMENTS:

ADDITIONAL COMMENTS:

Appendix D

Figures

Woodbridge Park
Northgate Park
Chadwick U5
Assieh Development
MUSD
Villa Ticino
962 Alameda St
357 Charles St
Union Road
Fishback
Garden Gate
Curran Grove
Eckert
Frito Lay
Wastewater Quality Control Facility
Roberts Estates
Airport/Daniels
Tara Park
Bella Vista
Antigua
Woodward Park

Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013

Document Path: Z:\Projects\MantecaSSMP\Events\20140214_Report\Figure1_01_ExistingCollectionSystem.mxd

Legend

- Lift Station
- Lift Station - Private
- Siphon
- Sanitary Sewer - Air Release Valve
- Sanitary Sewer - Manhole
- Sanitary Sewer - Lamp Holes
- Sanitary Sewer - Clean Outs
- Sanitary Sewer - Lamp Holes Private
- Sanitary Sewer - Clean Outs Private
- Sanitary Sewer - Force Main
- Sanitary Sewer - Gravity Main
- Sanitary Sewer - Gravity Private
- Sanitary Sewer - Gravity Abandoned
- Blind Areas
- North Manteca Sewer Shed
- Central Manteca Sewer Shed
- South Manteca Sewer Shed
- City Boundary

N

0 1,500 3,000
Feet

Kennedy/Jenks Consultants

City of Manteca
Sewer System Management Plan

Existing Sewer Collection System

K/J 1270003.00
April 2014

Figure 1-1

Woodbridge Park
Northgate Park
Chadwick U5
Assieh Development
MUSD
Villa Ticino
962 Alameda St
357 Charles St
Union Road
Fishback
Garden Gate
Curran Grove
Eckert
Frito Lay
Wastewater Quality Control Facility
Roberts Estates
Airport/Daniels
Tara Park
Bella Vista
Antigua
Woodward Park

Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013

Legend

Sewer Spill Location

- Category 1
- Category 2
- Category 3
- Lift Station
- Lift Station - Private
- Siphon
- Manhole
- Sanitary Sewer - Force Main
- Sanitary Sewer - Gravity Main
- Sanitary Sewer - Gravity Private
- Sanitary Sewer - Gravity Abandoned
- Blind Areas
- North Manteca Sewer Shed
- Central Manteca Sewer Shed
- South Manteca Sewer Shed
- City Boundary

N

0 1,500 3,000
Feet

Kennedy/Jenks Consultants

City of Manteca
Sewer System Management Plan

Sewer Overflows By Location

K/J 1270003.00
April 2014

Figure 2-1

Document Path: Z:\Projects\MantecaSSMP\Events\20140214_Report\Figure2_01_Overflow.mxd

Appendix E

Program Audit

Manteca SSMP Program Audit

Date: mm/dd/yyyy
Date of last SSMP Program Audit: mm/dd/yyyy

Audit Team:

1. Public Works Deputy Director - Engineering – INSERT NAME
2. WQCF Superintendent– INSERT NAME
3. Collection System Supervisor – INSERT NAME
4. Maintenance Supervisor – INSERT NAME
5. Other(s) – INSERT NAME

Summary

The purpose of this Audit is to document the identified areas of strength and deficiencies in the management, operation and maintenance of the sewer collection system for YYYY – YYYY. This review is separated into two sections: Section 1 - Monitoring and Measurement, and Section 2 - SSMP Compliance and Effectiveness. This review is completed as part of the monitoring measurement, program modifications and audit process as described in SSMP Sections 9 and 10, respectively.

Section 1 – Monitoring and Measurement

This section includes collecting and summarizing the necessary data to evaluate the performance of the collection system based on the key performance indicators presented in Section 9 of the SSMP and listed below:

- Number of SSOs
    i. Per year
    ii. Dry weather
    iii. Per year by cause
- Annual miles of sewer flushing/cleaning
- Actual versus scheduled cleaning
- Annual miles of CCTV inspection
- System rehabilitation and repairs made
- Annual record of pump station maintenance work orders

1.1 Number of SSOs

The City's SSOs are summarized in Tables 1, 2, and 3 and Figures A1 and A2 for years YYYY to YYYY and are illustrated in the corresponding Figure 2-1 in Appendix D.

Table 1: Sanitary Sewer Overflow (SSO) Description and Corrective Action Taken

SSO ID # CIWQS	Category	Year	Appearance Point	Spill Volume (gal)	Spill Volume Recovered (gal)	Spill Volume to Reach Surface Water	Cause of SSO	Corrective Action Taken

Table 2: Number of SSOs and Spill Volumes for YYYY-YYYY

Year	Category 1	Category 2	Category 3	Total SSOs	Dry Weather SSO	Total Spill Volume (gal)	Total Recovered (gal)	Total Volume to Reach Surface Waters

Note:

(a) Dry weather months are July, August and September

Figure A1: Number of SSOs by Year

[Please Note: Figure A1 will be developed based on the data populated in Table 2 above. An example is provided below based on the 2007-2013 data.]

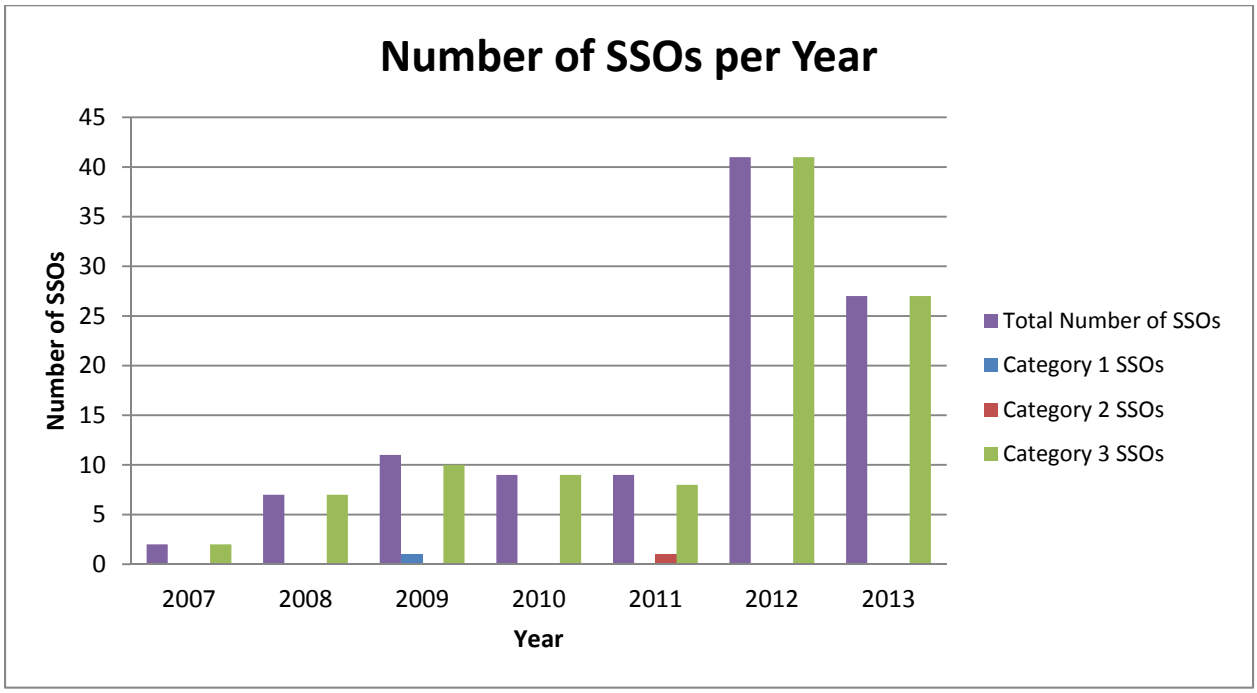
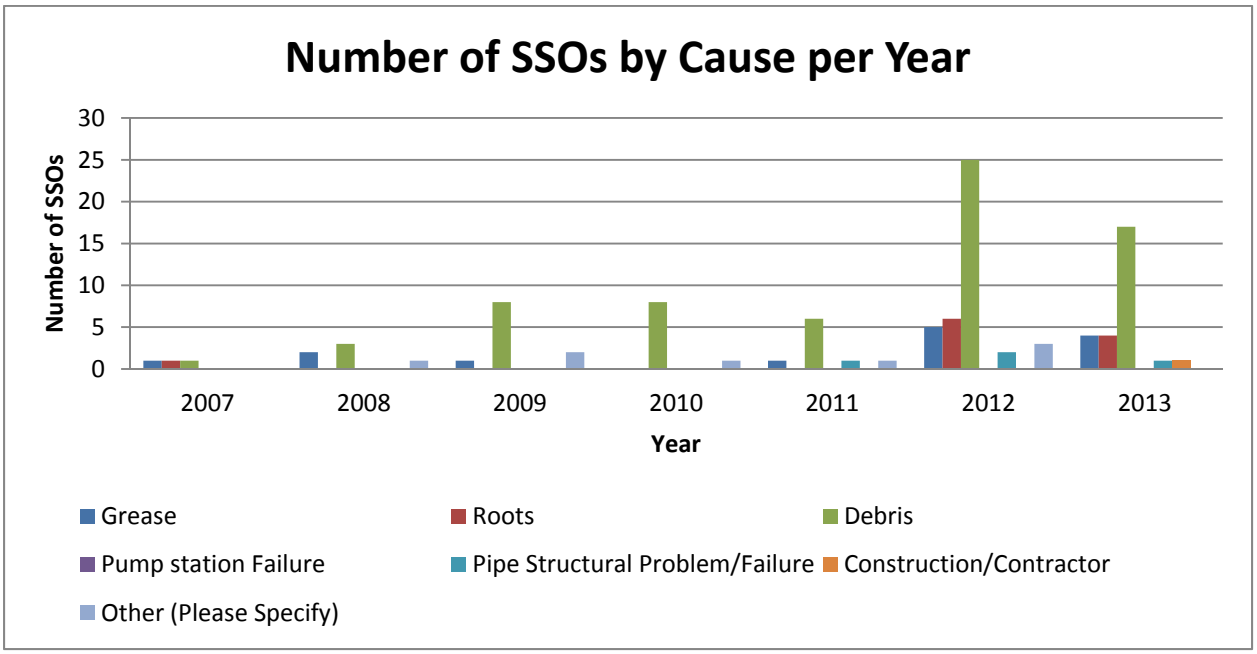


Table 3: Summary of SSOs by Cause for YYYY-YYYY

Cause	Year	SSO Category				Total SSOs
		1	2	3	PSLD	
Grease						
Roots						
Debris						
Pump station Failure						
Pipe Structural Problem/Failure						
Construction/Contractor						
Other (Please Specify)						

Figure A2: Number of SSOs by Cause per Year

[Please Note: Figure A2 will be developed based on the data populated in Table 3 above. An example is provided below based on the 2007-2013 data.]



Another metric for the City is to evaluate the locations of the SSOs. Figure 2-1 found in Appendix D shows the historical SSOs by location including by category.

1.2 Summary of Preventative Maintenance

Tables 4 and 5 provides a summary of the City's preventative maintenance activities with respect to the sewer system.

Table 4: Annual Summary Sewer Flushing and CCTV and Manhole Inspections

Year	Linear Feet of Collection System Flushed/Cleaned	Linear Feet of Collection System CCTV	Number of Manholes Inspected

Table 5: Lift Station Inspections

Lift Station Name	Number of Times Inspected YYYY	YYYY	YYYY	YYYY	Number of SSOs Caused by Pump Station Failure for YYYY - YYYY

Provide narrative explanation with respect to sewer flushing and CCTV maintenance program, manhole and lift station inspections. Is the City maintenance goals; what were actual vs. scheduled? Is the City seeing any correlation with reduction in SSOs? Provide explanation for trends (i.e. reduction in linear feet of CCTV due to reduction in staffing, equipment failure or out to maintenance, etc.).

1.3 Sewer System Repairs

Provide a description of additions and improvements made to the sanitary sewer collection system; also a narrative explanation as to how these were discovered (during preventative maintenance, SSO, complaint, etc.) or if they were planned CIP projects. This will be beneficial for SSMP effectiveness evaluation.

1.3.1 Pipeline

Table 6: Annual Summary of Pipeline Repairs

Year	Total Number of Repairs	Number of Preventative Maintenance Repairs	Brief Description of Repairs Made

1.3.2 Manholes

Table 7: Annual Summary of Manhole Rehabilitation and Repairs

Year	Number of Manholes Rehabilitations	Number of Manhole Repairs	Number of Preventative Repairs

1.3.3 Pump station Maintenance Work Orders

Table 8: Annual Summary of Pump Station Maintenance Repairs

Year	Total Number of Repairs	Number of Preventative Maintenance Repairs	Brief Description of Repairs Made

1.3.4 Sewer System additions and Improvements for years YYYY - YYYY

Description of additions and improvements planned for the upcoming reporting year.

1.4 FOG Program

Year	Number of Inspections	Number of Violations	Number of SSOs Caused by FOG	Education Outreach Activities Implemented

Section 2 – SSMP Compliance and Effectiveness

SSMP Element	SSMP Compliance (In compliance, Not in Compliance, N/A provide justification)	How SSMP element is being implemented? (narrative explanation)	Effectiveness of implementing SSMP element (i.e. what is working well, what needs improvement)	Identified Deficiencies, issues that may lead to non-compliance, areas of non-compliance	Corrective Actions for identified deficiencies (smaller incremental steps that can be implemented before next audit)
Goal/Organization					
Legal Authority					
Operation and Maintenance Program					
Design and Performance Provisions					
Overflow Emergency Response Plan					
System Evaluation and Capacity Assurance Plan					
Monitoring, Measurement, and Program Modifications					
SSMP Internal Program Audits					
Communication Program					

Questions to address if applicable in table:

1. Corrective actions planned before your next SSMP Internal Program Audit to address the top 10 SSO causes experienced since your last SSMP Internal Program Audit

2. Describe top three challenges the City faces and corresponding initiative(s) to be implemented before your next SSMP Internal Program Audit to better operate, maintain and manage the sanitary sewer system

3. Describe challenges and the plan's effectiveness at communication with the public on development, implementation and performance of its SSMP.

Appendix F

Glossary of Terms

APPENDIX F

GLOSSARY OF TERMS

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

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

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

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

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

CIWQS – The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities. CIWQS also allows online submittal of information by Permittees within certain programs and makes data available to the public through reports.

Enrollee – A public entity that owns or operates a sanitary sewer system and has submitted a complete and approved application for coverage under Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (WQO No. 2006-0003-DWQ)

Event ID – A unique identifier assigned by the CIWQS SSO Database to each reported SSO or private lateral sewage discharge.

Lateral (Service Lateral) – The segment of pipe which connects a private home, building, or development to the publicly owned sewer main. The responsibility for maintaining a lateral can be solely that of the sewerage agency or private property owner; or it can be shared between the two parties. Local communities and land ownership dictate lateral responsibility and the basis for a shared arrangement, if it applies. See Lower Lateral and Upper Lateral for more detailed definitions.

Lower Lateral – That portion of a lateral usually from the property line or easement line to the sewer main. Sewer agencies are typically not be responsible for maintenance of this portion of the lateral. The lower lateral is typically owned and maintained by the property owner of the property it serves.

Miles of Private Laterals – Amount of private laterals tributary to an Enrollee's sanitary sewer system, which private property owners are responsible for maintaining, expressed in miles.

Nuisance – California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements:

a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.

b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.

c. Occurs during, or as a result of, the treatment or disposal of wastes.

Percent Reached Surface Water – Volume of sewage discharged from an SSO or PLSD that reached surface water divided by the total volume of the SSO or PLSD.

Percent Recovered – Volume of the SSO or PLSD that was captured and returned to the sanitary sewer system or private lateral divided by the total volume of the SSO or PLSD.

Private Lateral – Privately owned lateral.

Private Lateral Sewage Discharge (PLSD) – Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be voluntarily reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

Sanitary Sewer Overflow (SSO) – Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

i. Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;

ii. Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and

iii. Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

Sanitary Sewer System – For the purposes of the SSS WDRs, any system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant head works which is comprised of more than one mile of pipes and sewer lines, used to collect and convey wastewater to a publicly owned treatment facility.

Satellite Collection System – The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility to which the sanitary sewer system is tributary.

Service Lateral – See Lateral definition.

Spill – Generic term referring to any sewage discharge (i.e., SSO or private lateral sewage discharge) resulting from a failure in a sanitary sewer system or privately owned lateral or other private sewer system asset.

SSO Database (SSO Reporting System or CIWQS) – Online reporting system developed, hosted, and maintained by the State Water Resources Control Board for compliance with the Monitoring and Reporting Program contained in the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (WQO No. 2006-0003-DWQ).

Total Volume Reached Surface Water – Amount of sewage discharged from a sanitary sewer system or private lateral or other private sewer system asset that reaches a surface water.

Total Volume Recovered – Amount of sewage discharged that was captured and returned to the sanitary sewer system or private sewer system asset.

Untreated or Partially Treated Wastewater – Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.

Upper Lateral – Portion of a lateral usually from the building foundation to the property line or easement line where it is connected to the Lower Lateral. Sewer agencies usually do not own and maintain this portion of a Lateral. That responsibility is usually with the owner of the property the lateral serves.

WDID – Waste Discharge Identification number which is a unique identifier assigned by the State Water Resources Control Board to each Enrollee for regulatory record and data management purposes.

Appendix G

City Policy Regarding Ownership of Sewer Laterals

The City is currently in the process of clarifying ownership of laterals. Policy clarification will be added upon completion and approval by December 2014 by the City of Manteca City Council.