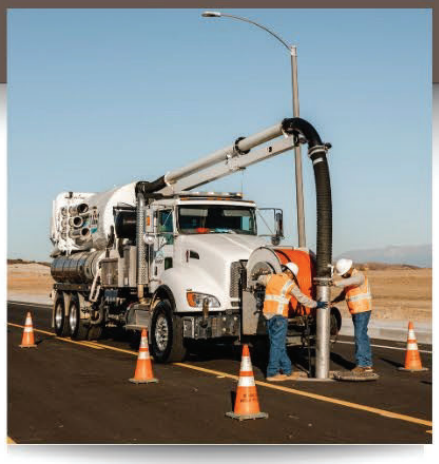
BEAUMONT
CALIFORNIA

2022



SEWER SYSTEM MANAGEMENT PLAN

PREPARED BY: FISCHER COMPLIANCE LLC
PRACTICES THAT COMPLY

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List of Abbreviations

Cal-OSHA ..... California Office of Occupational Safety and Health Administration
CIP ..... Capital Improvement Project
CIWQS ..... California Integrated Water Quality System
FOG ..... Fats, Oil and Grease
LRO ..... Legally Responsible Official
MGD ..... Million gallons per day
SERP ..... Spill Emergency Response Plan
OES ..... State Office of Emergency Services
RWQCB ..... Regional Water Quality Control Board, Santa Ana Regional
SVCW ..... Silicon Valley Clean Water
SSMP ..... Sewer System Management Plan
Spill ..... Sanitary Sewer Overflow or Overflow
SSS WDRs ..... Sanitary Sewer Spill Waste Discharge Requirements
SWRCB ..... State Water Resources Control Board
WDR ..... Waste Discharge Requirements
WWTP ..... Wastewater Treatment Plant

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INTRODUCTION

Background

To provide a consistent, statewide regulatory approach to reduce Sanitary Sewer Spills (SSS, overflow, or spill, hereafter "spill"), the State Water Resources Control Board (State Water Board) adopted Statewide General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems, Water Quality Order No. 2022-0103-DWQ (Sanitary Sewer Systems WDRs or SSS WDRs) on December 6, 2022. The SSS WDR requires public agencies that own or operate sanitary sewer systems (consisting of one mile or more of system pipelines) to develop and implement Sewer System Management Plans (SSMPs) to reduce/eliminate spills. The SSS WDRs also require agencies to report spills to the State Water Board's online spill database (CIWQS)[1]. On September 9, 2013, the State Water Board issued and Amended Monitoring and Reporting Program (Amended MRP), Water Quality Order No. WQO 2013-0058-EXEC, updating the original MRP adopted in 2006 requiring new record keeping, notification/reporting information and other requirements for sewer agencies in the state.

The purpose of this document is to ensure that the City is taking all feasible steps to reduce or eliminate spills to protect public health and the environment. This is accomplished by implementing the SSMP to ensure proper funding, operation, maintenance, expansion, and renewal of the City's sewer collection system.

SSMP Organization

This SSMP is organized into the elements and requirements that are outlined in the SSS WDRs. Each of the sections of the SSMP reviews the requirement of the SSS WDRs, identifies the responsible person for that SSMP element, provides a discussion of the plan to meet the intent of the requirement and lists potential performance indicators for measuring the effectiveness of the City's efforts related to that SSMP element.

SSMP Certification and Re-Certification Schedule

This document represents the City's first Sewer System Management Plan. The SSMP is required to be updated every five (5) years and approved by the City's governing board and re-certified by the Legally Responsible Official (LRO). In addition, when significant updates to the SSMP are made re-certification is required.

[1] California Integrated Water Quality System (CIWQS), available publicly at: https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportspillServlet?reportAction=criteria&reportId=sso_main

1.0 GOALS

1.1 Requirement

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

1.2 Responsible Person

General Manager of Utilities

1.3 Compliance

The City's spill reduction goals are:

i. Reduce the likelihood of a spill through effective management, planning and maintenance programs.
ii. Effectively respond to spill events.
iii. Mitigate the effects of spills on the environment and public health.
iv. Provide adequate capacity to convey peak flows.
v. Provide notifications and reports to all required regulatory agencies in a timely manner.
vi. Provide public education to increase awareness of FOG issues and how they can impact the collection system.

These goals are accomplished by implementing the measures included in the City's SSMP.

1.0 Goals - Key Performance Indicators (KPIs)		
KPI 1.1	Are Work Plans being Implemented and effective?	*Measured by annual review of Work Plans to ensure goals are met and intended outcomes are achieved.*
KPI 1.2	Are spill Reduction Goals being met?	*Measured by annual review spill Data for number of spills and Volume of spills*
KPI 1.3	Are spill reporting and notifications requirements being met?	*Measured by annual review of CIWQS data.*

1.0 Goals - Key Performance Indicators (KPIs)		
KPI 1.4	Are spill event responses effective?	*Measured by review of spill Event Debriefing forms to evaluate outcomes and ensure adherence to the Spill Emergency ResponsePlan (SERP)*

2.0 ORGANIZATION

Implementation of the City's SSMP requires the efforts of many individuals serving in a multitude of roles. This section describes the organization of the City of Beaumont.

2.1 Authorized Representative

2.1.1 Requirement

The name of the agency's responsible or authorized representative.

2.1.2 Responsible Person

General Manager of Utilities

2.1.3 Compliance

The City's principal executive officer is the General Manager of Utilities, who serves as Legally Responsible Official (LRO.) The Wastewater Plant Supervisor and Collection System Supervisor are also designated as LRO and are fully authorized by the General Manager of Utilities to sign and certify applications, reports, or information submitted to the SWRCB.

2.2 Organizational Chart

2.2.1 Requirement

Identify 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.

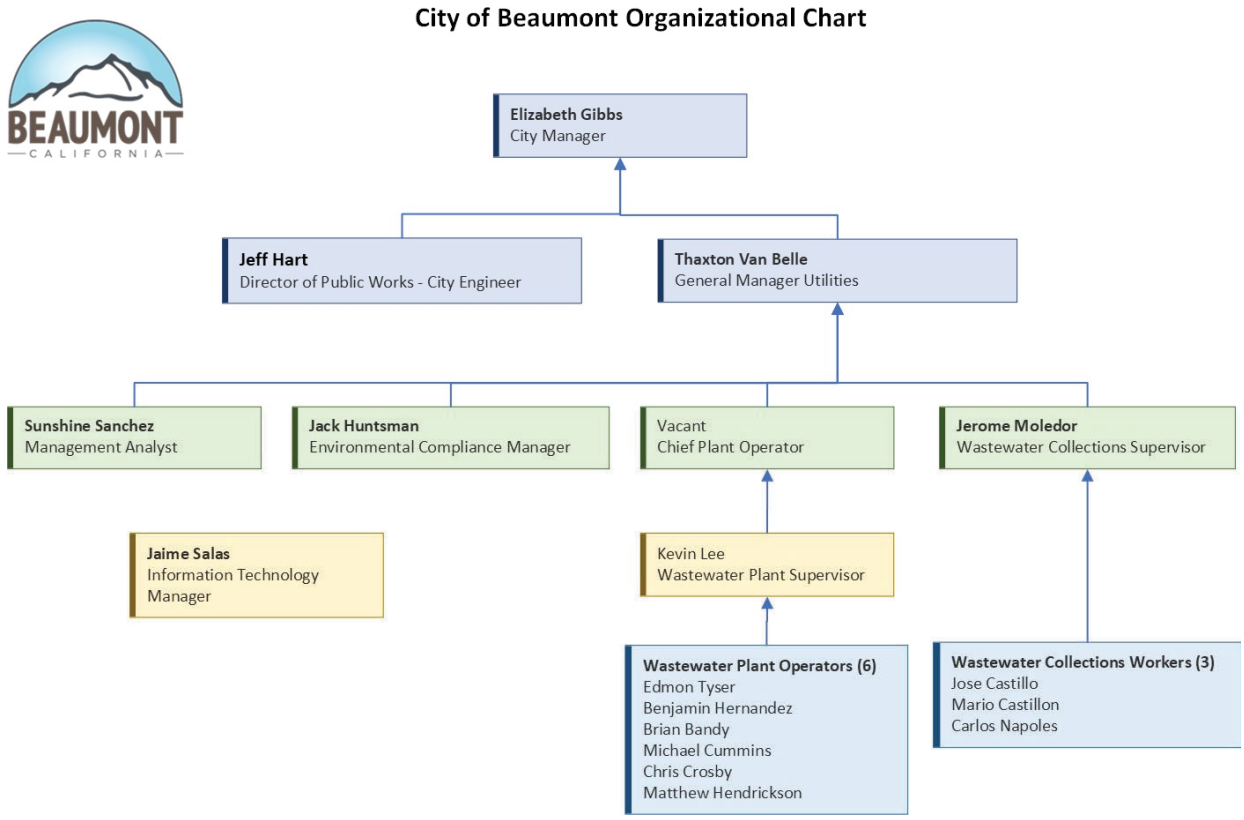
2.2.2 Responsible Person

General Manager of Utilities

2.2.3 Compliance

The current City Organizational chart is shown in Figure 2-1, below.

Figure 2-1: City of Beaumont Organizational Chart



Responsible Persons List

Director of Public Works – City Engineer

Under administrative direction, plans, oversees and directs the activities and operations of the Public Works Department, including engineering, street services, wastewater, land developments, traffic engineering, capital improvement programs, traffic planning and engineering, special projects, control staffing levels and department budget, coordinates activities with other departments and outside agencies, provide responsible/complex administrative support to the City Manager.

General Manager of Utilities

Under the general direction of the City Manager, directs, coordinates and supervises the activities and operations of the Wastewater Utilities Division which includes coordinating divisional activities with other utilities divisions, departments and outside agencies or organizations, establishes division goals, objectives, policies and procedures in accordance with the department and City's mission statement and goals and providing professional, administrative and technical support to the City Manager in the area of wastewater/stormwater management. The Wastewater Division consists of four subdivisions, which

include Treatment Plant Operations and Maintenance, the Pre-treatment Program, Collection Systems Operations and Maintenance and Stormwater Operations and Maintenance. Serves as LRO.

Environmental Compliance Manager

Under general supervision, to perform sampling and inspection work related to the administration of the City's Pre-treatment Program; to ensure compliance with the National Pollutant Discharge Elimination System (NPDES) Permit for the Municipal Separate Storm Sewer System (M4) and the Water Quality Management Plant (WQMP) for the Santa Ana region; to enforce the City's Industrial Waste Ordinances, storm water program, sewer collection system; and perform related work as required. Major responsibilities include performing industrial user inspections, producing accurate, legible, and legally defensible documentation of findings; analyzing data; reviewing new and tenant improvement plans and conditioning same to comply with approved standards for pre-treatment monitoring; database management and input of industrial user information; preparing written documents and regulatory reports; delivering presentations; and other related duties as directed.

Wastewater Plant Supervisor

Under general supervision of the Chief Plant Operator or designee, to perform skilled and supervisory work in the operational control of wastewater treatment processes for effective and efficient operations; to ensure that the wastewater is processed and discharged according to health and environmental regulations; and perform related work as required. Serves as LRO.

Wastewater Collections Supervisor

Under general supervision of the General Manager, assists in all areas of the Wastewater Department, oversees all aspects of wastewater conveyance system operations and maintenance; supervises and directs assigned staff; is responsible for managing the daily operations of the collection and conveyance system, maintenance on infrastructure such as cleaning of gravity lines, operation and maintenance of pump stations, inspection and testing of air valve assemblies; manage the productivity of the operations and maintenance department performs other related duties as required. Serves as LRO.

Table 2-1: Responsible Persons List

Responsible Persons List		
Title	**Name**	**Phone**
Director of Public Works – City Engineer	Jeff Hart	(951) 769-8520 Ext. 588
General Manager of Utilities	Thaxton Van Belle	(951) 769-8520 Ext. 583
Environmental Compliance Mgr.	Jack Huntsman	(951) 769-8520 Ext. 349
Wastewater Plant Supervisor	Kevin Lee	(951) 769-8520 Ext. 311
Wastewater Collections Supervisor	Jerome Moledor	(951) 489-6622
Information Technology Manager	Jamie Salas	

Table 2-2 Element Description and Responsible Party

Element Description and Responsible Party		
Element	**Element Description**	**Responsible Party**
1.0 Goal	The goal of the SSMP is to provide a plan and schedule to properly manage, operate and maintain all parts of the sanitary sewer system. This will help reduce and prevent spills, as well as mitigate any spills that occur.	General Manager of Utilities
2.0 Organization	A) The name of the agency's responsible or authorized representative.	General Manager of Utilities
	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	General Manager of Utilities

Element Description and Responsible Party		
Element	**Element Description**	**Responsible Party**
	C) The chain of communication for reporting spills, from receipt of a complaint or other information, including the person responsible for reporting spills 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 (OES).	General Manager of Utilities
3.0 Legal Authority	A) Prevent illicit discharges into its sanitary sewer system, including I/I from satellite wastewater collection systems and laterals, storm water, unauthorized debris, etc.;	General Manager of Utilities
	B) Require proper design and construction of sewers and connections;	General Manager of Utilities
	C) Ensure access for maintenance, inspection, and repairs to publicly owned portions of laterals;	General Manager of Utilities
	D) Limit the discharge of FOG and other debris that may cause blockages; and	General Manager of Utilities
	E) Enforce violations of its sewer TBD (Ordinance)s.	General Manager of Utilities
4.0 O/M	Operations and Maintenance A) Each wastewater collection system agency shall maintain up-to- date maps of its wastewater collection system facilities, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water pumping and piping facilities;	Information Technology Manager

Element Description and Responsible Party		
Element	**Element Description**	**Responsible Party**
	B) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventive Maintenance (PM) program should have a system to document scheduled and conducted activities, such as works orders;	Wastewater Collections Supervisor
	C) should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;	Director of Public Works – City Engineer
	D) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and	Wastewater Collections Supervisor
	E) Provide equipment and replacement part inventories, including identification of critical replacement parts.	Wastewater Collections Supervisor
5.0 Design and Performance Provisions	A) Design and Construction Standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sanitary sewer system; and	Director of Public Works – City Engineer
	B) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.	Director of Public Works – City Engineer

Element Description and Responsible Party		
Element	**Element Description**	**Responsible Party**
6.0 SERP	Spill Emergency Response Plan A) Proper notification procedures so that the primary responders and regulatory agencies are informed of all spills in a timely manner;	Wastewater Collections Supervisor
	B) A program to ensure an appropriate response to all Spills;	Wastewater Collections Supervisor
	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 spills that potentially affect public health or reach the waters of the State in accordance with the MRP. All spills 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.	Wastewater Collections Supervisor
	D) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;	Wastewater Collections Supervisor
	E) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and	Wastewater Collections Supervisor

Element Description and Responsible Party		
Element	**Element Description**	**Responsible Party**
	F) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the spills, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge	Wastewater Collections Supervisor
7.0 FOG	FOG Control Program A) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;	Environmental Compliance Mgr.
	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;	Wastewater Collections Supervisor
	C) The legal authority to prohibit discharges to the system and identify measures to prevent spills and blockages caused by FOG;	General Manager of Utilities
	D) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;	General Manager of Utilities
	E) Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;	Environmental Compliance Mgr.

Element Description and Responsible Party		
Element	**Element Description**	**Responsible Party**
	F) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and	Wastewater Collections Supervisor
	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.	Wastewater Collections Supervisor
8.0 SECAP	System Evaluation and Capacity Assurance Plan A) Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to a spill discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from spills that escape from the system) associated with conditions similar to those causing spill events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and major sources that contribute to the peak flows associated with overflow events;	Director of Public Works – City Engineer
	B) Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (A) above to establish appropriate design criteria;	Director of Public Works – City Engineer

Element Description and Responsible Party		
Element	**Element Description**	**Responsible Party**
	C) Capacity Enhance 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, inflow, and infiltration (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; and	Director of Public Works – City Engineer
	D) Schedule: The City shall develop a schedule of completion dates for all portions of the capital improvement program developed in (A), (C) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14 0f the GWDR.	Director of Public Works – City Engineer
9.0 Monitoring	Monitoring, Measurement and Program Modifications A. Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;	Wastewater Collections Supervisor
	B. Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;	General Manager of Utilities
	C. Assess the success of the preventative maintenance program;	Wastewater Collections Supervisor
	D. Update program elements, as appropriate, based on monitoring or performance evaluations; and	General Manager of Utilities
	E. Identify and illustrate spill trends, including frequency, location, and volume.	Wastewater Collections Supervisor

Element Description and Responsible Party		
Element	**Element Description**	**Responsible Party**
10.0 SSMP Audits	SSMP Program Audits Conduct periodic internal audits and maintain audit reports.	General Manager of Utilities
11.0 Communication Program	Communication Program Communicate, on a regular basis, with the public on development, implementation, and performance of SSMP.	General Manager of Utilities

2.3 Spill Reporting Chain of Communication

2.3.1 Requirement

Identify the chain of communication for reporting spills, from receipt of a complaint or other information, including the person responsible for reporting spills 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)).

2.3.2 Responsible Person

General Manager of Utilities

2.3.3 Compliance

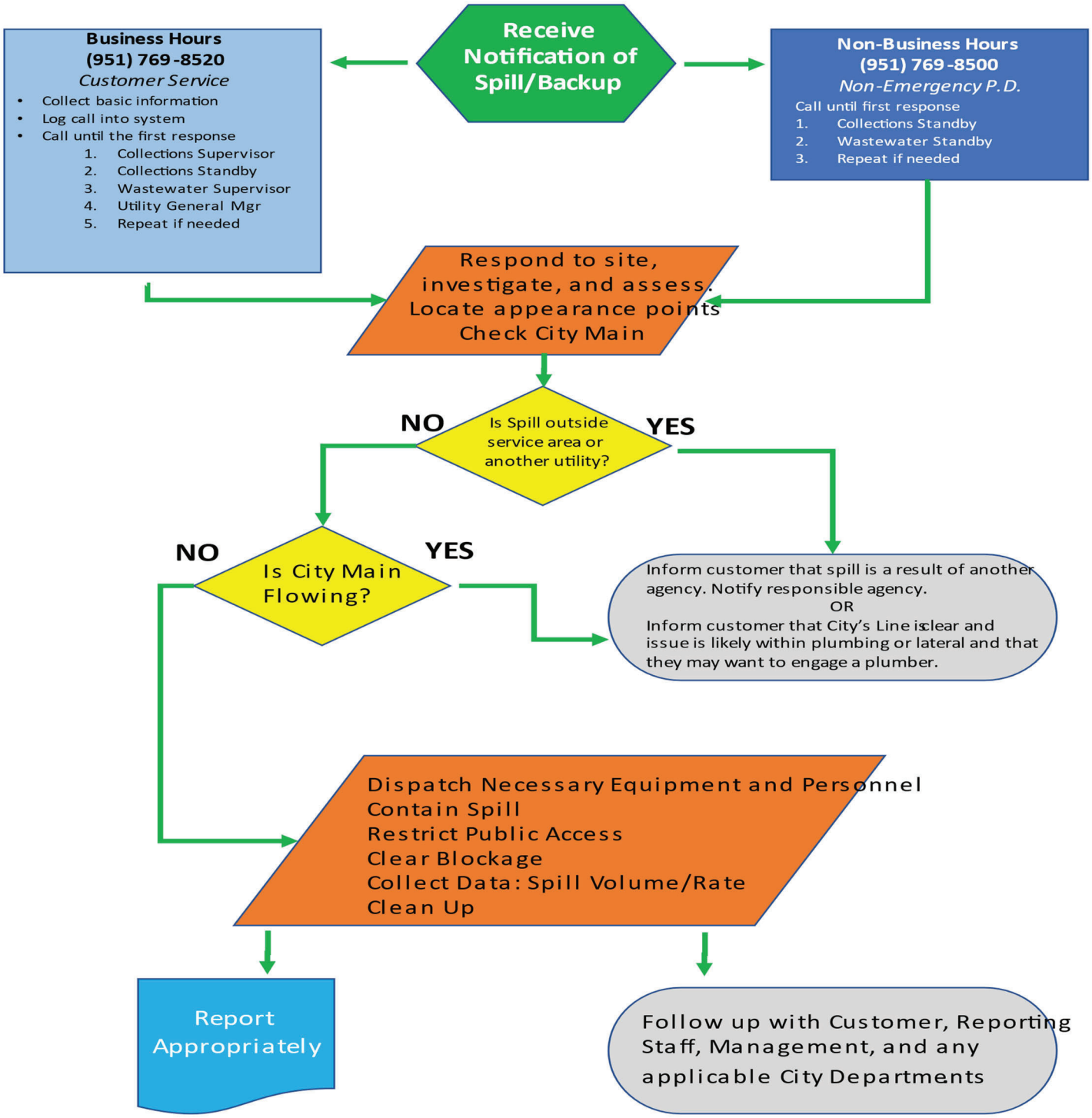
i. Customers served by the City can contact Customer Service for any Service Calls during business hours and the Police Department during non-business hours.
ii. Once a call is received, the information is forwarded to either the Wastewater Plant Supervisor or the Wastewater Collections Supervisor, who contact Response personnel.
iii. The Wastewater Collections Supervisor and three (3) Wastewater Collections Workers serve as first responders.
iv. During working hours there is one (1) dedicated person who responds to customer service calls, in addition to other duties. This person responds and performs an initial assessment to determine responsibility (public or private) and resources needed. Other personnel are called to assist as needed.

v. During non-business hours (1) person performs Stand By/On-Call Duty for a period of seven (7) days. This person responds to all customer service calls in the same manner as business hour calls.

vi. The City's twelve (12) Lift Stations are equipped with SCADA that provide call outs for alarm conditions. These alarm calls are redundant and continue until the call is acknowledged by Response personnel. SCADA calls are sent directly to Standby/On call personnel.

2.0 Organization - Key Performance Indicators (KPIs)		
KPI 2.1	Are SSMP responsibilities properly assigned?	*Measured by Annual Review of Table 2.1 and 2.2*
KPI 2.2	Is Chain of Communication effective?	*Measured by:* *a. Review spill Event Debriefing forms to evaluate outcomes and ensure adherence to Overflow Emergency Response Plan (OERP).* *b. Review of CIWQS database to ensure Reporting and Notifications requirements being met?*

Figure 2-2: Chain of Communication



3.0 LEGAL AUTHORITY

Agencies must have the proper legal authority to conduct its critical functions, prohibit actions detrimental to the performance of the system, and to enforce any and all violations of its laws. This section describes the City's legal authority in the various required areas outlined in the SSS WDRs

3.1 Authority to Prevent Illicit Discharges

3.1.1 Requirement

Possess the necessary legal authority to prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.)

3.1.2 Responsible Person

General Manager of Utilities

3.1.3 Compliance

City Municipal Code 13.04.020 - Unlawful discharges.

i. No person shall discharge or cause to be discharged any stormwater, surface water, groundwater, roof runoff, subsurface drainage, polluted cooling water or polluted industrial process waters to any sanitary sewer.

ii. Stormwater and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as combined sewers or storm sewers, or to a natural outlet approved by the inspector. Unpolluted commercial and industrial cooling water or unpolluted process waters may be discharged, upon approval of the inspector and after receiving waste discharge requirements from State of California Regional Water Control Board No. 8 to a storm sewer, combined sewer, natural outlet or sanitary sewer.

iii. Except as provided in this chapter, no person shall discharge any of the following described waters or wastes to any public sewer:

1. Any liquid or vapor having a temperature higher than 150 degrees Fahrenheit;
2. Any gasoline, benzene, naphtha, fuel oil, or other inflammable or explosive liquid, solid or gas;
3. Any garbage that has not been properly shredded;
4. Any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feather, tar, plastics, wood, paunch manure or any other solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewage works;

5. Any waters or wastes having a pH lower than 6.0 or higher than 9.0 or having any other corrosive property capable of causing damage or hazard to structures, equipment, and personnel of the sewage works;
6. Any waters or wastes containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, or create any hazard in the receiving waters of the sewage treatment plant;
7. Any waters or wastes containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewage treatment plant;
8. Any noxious or malodorous gas or substance capable of creating a public nuisance.

iv. The admission into the public sewers of any waters or wastes having:

1. A five-day biochemical oxygen demand greater than 300 parts per million by weight; or
2. Containing more than 300 parts per million by weight of suspended solids; or
3. Containing any quantity of substances having the characteristics described in Section 13.04.020 having an average daily flow greater than two percent of the average daily sewage flow of the City, shall be subject to the review and approval of the inspector.
4. Where necessary, in the opinion of the inspector, the owner shall provide, at his expense, such preliminary treatment as may be necessary to:

    a. Reduce the biochemical oxygen demand to 300 parts per million and the suspended solids to 300 parts per million by weight: or

    b. Reduce objectionable characteristics or constituents to within the maximum limits provided for in Section 13.04.020, or

    c. Control the quantities and rates of discharge of such waters or wastes. Plans, specifications, and any other pertinent information relating to proposed preliminary treatment facilities shall be submitted for the approval of the inspector and of the Water Pollution Control Commission of the state, and no construction of such facilities shall be commenced until the approvals are obtained in writing.

(Ord. 329 §2, 1961; Ord. 522 §1, 1981; Ord. 958; 10/20/09)

3.2 Authority to Properly Design and Construct Sewers

3.2.1 Requirement

Possess the necessary legal authority to require that sewers and connections be properly designed and constructed.

3.2.2 Responsible Person

Director of Public Works - City Engineer

3.2.3 Compliance

City Municipal Code 13.08.400 - Construction standards for private sewerage facilities.

All sewage facilities constructed in the City on private property and not connected to a public sewerage system shall be constructed to comply with, at a minimum, and notwithstanding all other requirements of the City, with the most recent editions of the California Plumbing and Building Codes.

City Municipal Code 13.08.500 - General policy.

The approval by the City Manager of plans for construction of sewers by private developers shall be based upon good engineering practice and upon the standards set forth in this Article.

City Municipal Code 15.16.010 Adoption of California 2019 Plumbing Code.

Except as otherwise provided in this Chapter, the California Plumbing Code, Title 24, California Code of Regulations, Part 5, including any and all amendments set forth in this Chapter, and including any and all amendments thereto that may hereafter be made and adopted by the State of California, is hereby adopted as the Plumbing Code of the City.

(Ord. No. 1119, § 13, 12-3-2019)

3.3 Authority to Ensure Access

3.3.1 Requirement

Possess the necessary legal authority to ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency

3.3.2 Responsible Person

General Manager of Utilities

3.3.3 Compliance

The City does not own any portion of the sewer lateral and therefore is not responsible for performing maintenance, inspections, or repairs.

Private property owners are required to obtain a permit from the City for work related to the privately-owned sewer lateral, which would allow for City access to inspect newly installed or repaired facilities.

BMC 13.08.110 Maintenance of Sewer Laterals

3.4 The owner shall be responsible for maintenance and/or repair of the service lateral. The service lateral is the owners responsibility from the house/building/apartment etc… up to and including the connection to the City main line. If there is a failure of a service lateral not remediable by use of rodding tools, it shall be the responsibility of the owner to call this to the attention of the City. If the owner fails to make the necessary repairs the general manager of utilities may perform such work. The cost of same shall be a lien on the property upon which such service line was repaired.

3.5 Authority to Limit FOG

3.5.1 Requirement

Possess the necessary legal authority to limit the discharge of fats, oils, grease, and other debris that may cause blockages.

3.5.2 Responsible Person

General Manager of Utilities

3.5.3 Compliance

City Municipal Code 13.09.030, 13.09.080, 13.20.100 and SAWPA No. 8 201.0

13.09.030 The discharge of fats, oils, greases, and other solids ("F.O.G.") in concentrations from food services establishments and other commercial and other industrial facilities to the City sewer systems that may adversely affect the normal function of these systems or result in blockages and/or public nuisance is prohibited.

13.09.080 Sampling and inspection of food service establishments may be conducted in the time, place, manner, and frequency as determined by City Manager or his or her designee.

Chapter 13.20 ADOPTION OF SAWPA ORDINANCE1

13.20.100 **SAWPA Ordinance Number 8.**

Santa Ana Watershed Project Authority Ordinance No. 8, as further amended and restated or replaced by any successor ordinance of the Santa Ana Watershed Project Authority is hereby adopted by the City of Beaumont.

(Ord. No. 1116, § 1, 12-3-2019) **Santa Ana Watershed Project Authority Ordinance No.8**

201.0, O. Any Material or quantity of material(s), including but not limited to fats, oils and grease (FOG), which will cause abnormal sulfide generation, obstruct flows within the collection system, or contributes to or causes a sanitary sewer overflow.

3.6 Authority to Enforce Any Violation

3.6.1 Requirement

Possess the necessary legal authority to enforce any violation of its sewer ordinances.

3.6.2 Responsible Person

General Manager of Utilities

3.6.3 Compliance

City Municipal Code 13.24.130 governs the use of public sewer and states that any person violating the provisions of the Sewer Code shall be subject to any and all existing criminal and civil penalties provided for under the laws of the State of California, and in addition thereto, shall be responsible to the City for any and all damages caused to the City by such violations.

3.0 Legal Authority - Key Performance Indicators (KPIs)		
KPI 3.1	Are Codes and Ordinances adequate to meet the requirements of the SSMP?	*Measured by periodic review of work orders, customer complaints, and encounters by staff for any circumstances where municipal code was inadequate.*

4.0 OPERATION AND MAINTENANCE PROGRAM

An effective operation and maintenance program is essential to a high-performing sewer collection system and the reduction of spills. This section outlines current and planned components of the City's operation and maintenance programs.

4.1 Maintain an Up-To-Date System Map

4.1.1 Requirement

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

4.1.2 Responsible Person

Wastewater Collections Supervisor

4.1.3 Compliance

Mapping of the facilities that make up the City sewer collection system plays a critical role in the effective management of the system. The City operates and maintains a Geographic Information System (GIS) mapping system that includes information for its wastewater collection system assets. The GIS mapping and associated attribute information is available to all staff through the City's website and paper maps are available for use in the field. The City is continuously upgrading and improving their mapping system.

These maps currently include:

- City Boundaries
- Streets
- Gravity Sewer Pipes
- Sewer Manholes
- Lift Stations Sites
- Force Mains

Items below are available via sources other than the GIS system:

- Air Release Valve Locations – 2021 Master Plan
- Sewer Easements
- Sewer Easement Roads
- FOG Facilities (Grease Interceptors)

Map corrections are noted by field crews, submitted to Collection System Supervisor for corrections to the paper maps, until GIS mapping is fully implemented.

4.2 Routine Preventative O&M Activities

4.2.1 Requirement

Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The preventative maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders.

4.2.2 Responsible Person

Wastewater Collections Supervisor

4.2.3 Compliance

The City currently does not have a Computerized Maintenance Management System (CMMS). The Collection System Supervisor plans and directs maintenance activities and maintains paper records. The City currently does not utilize a work order system for planning and documenting maintenance activities but is investigating CMMS programs for this purpose.

Gravity Mainline Cleaning Program

The objective of the Gravity Mainline Cleaning Program is to clean the entire system once every three years. The City has one dedicated cleaning crew and owns one Combination Hydro-Jetter/Vacuum Unit and one Hydro-Jetter unit. A systematic approach to cleaning the system is applied. Cleaning begins at the furthest upstream portions of the system with work progressing downstream. A master (paper) map is maintained to keep track of line segments cleaned. At the end of each working day, cleaning crews highlight the line segments cleaned that day. A different highlight color is used for each year.

The City has identified high frequency line segments that require cleaning on an accelerated schedule. These are cleaned Quarterly. Level sensors (Smart Covers) are utilized to monitor problem lines to help reduce the amount of cleaning required to maintain flows.

Gravity CCTV Inspection Program

The objective of the CCTV inspection program is to inspect pipes on an as-needed basis. The City uses an on-call services agreement to contract for CCTV inspections. This service is utilized for the following:

- City cleaning crews become aware of a defect through their gravity pipe cleaning process (excessive grease, roots, debris, etc.)
- Field staff discovers evidence of surcharging in a manhole.

- Compliance staff has concerns of excessive grease downstream of a Food Service Establishment (FSE)
- Locate a buried manhole or verify a pipe alignment.
- Investigate the Cause of a spill if not able to determine otherwise.
- QA/QC Root Control Program

Manhole Inspection Program

The objective of the manhole inspection program is to maintain the integrity of the access points to the collection system so preventative maintenance and emergency response procedures can occur to prevent blockages and spills. Manholes are inspected each time one is opened for maintenance purposes. Field staff perform visual inspections and note defects, which are reported to the Collection System Supervisor.

Root Control Program

The objective of the chemical root treatment program is to mitigate the risk of blockages and spills caused by roots. The City has identified gravity pipe segments with significant root intrusion and uses contracted services to apply a chemical (Razo Rooter) to control the roots. Each line segment is treated once every two years. As more line segments are discovered, they are added to the program.

Infiltration and Inflow (I&I) Reduction Program

The objective of the I&I reduction program is to help ensure adequate system capacity. This is accomplished by the following:

- Installing plugs in manhole lid vents/pick holes to prevent inflow during rain events.
- Monitor trunk sewer (x8) performance using level sensing devices (Smart Covers).
- Monitor flow trends at twelve (12) lift stations equipped with force main flow meters.

The City's 2021 Master Plan includes a project to replace flow meters at nine (9) lift stations.

Lift Station Maintenance and Inspection Program

The objective of the Lift Station Maintenance and Inspection Program is to maintain the reliability of the lift stations to effectively convey wastewater and prevent spills. The City inspects each of its twelve (12) lift stations every day, Monday through Friday. Pump runtime and flow meter data is maintained on log sheets to identify trends. Pumps are serviced as needed, based on performance (monitored by SCADA), and excessive noise and/or vibration observed by field staff.

The SCADA backup floats are periodically tested to ensure emergency alarms will be sent. One wet well is cleaned each week.

All stations are equipped with standby generators. These generators are tested twice per month and serviced by outside services annually.

Pipe Repair Program

The objective of the pipe repair program is to address issues that could potentially cause blockages and/or spills in a timely manner. The City uses an on-call service agreement with contractors to perform repairs on an emergency basis.

4.3 Prioritization Program

4.3.1 Requirement

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

4.3.2 Responsible Person

Public Works Director

4.3.3 Compliance

The City's 2021 Master Plan has identified Capital Improvement projects and has a plan and schedule in place.

The City's 2021 Master Plan developed a Rehabilitation and Replacement for lift stations.

The City currently does not have a Rehabilitation and Replacement Program in place to address gravity pipes and manholes. The City does not routinely inspect CCTV pipes and is not able to perform condition assessment.

4.4 Training

4.4.1 Requirement

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

4.4.2 Responsible Person

Wastewater Collections Supervisor

4.4.3 Compliance

The objective of the Training Program is to develop competent and confident staff for the safe performance of maintenance operations. Safety compliance training is provided to field staff on a regular basis.

Training for equipment operations and maintenance procedures is accomplished by on-the-job training. Typically, the trainee is paired with an experienced employee for this purpose. Once the employee is trained, has had the opportunity to practice, and gain confidence, they are paired with the Collection System Supervisor who ultimately qualifies the trainee as competent.

The Wastewater Collections Supervisor is required, by job description, to hold a Collection System Maintenance Grade 4 certificate. All other field positions are greatly encouraged to obtain certification.

Collection system staff periodically attend CWEA Training and Conferences.

4.5 Identify Equipment and Critical Replacement Parts

4.5.1 Requirement

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

4.5.2 Responsible Person

Wastewater Collections Supervisor

4.5.3 Compliance

The Wastewater department collection has two vehicles for the care and maintenance of the sewer system. Two high-pressure hydro trucks have sewer line cleaning capabilities.

The Wastewater department maintains some of the expendable parts for the combination trucks. These parts include nozzles, and root cutters. Some light preventive maintenance is performed by City staff (see Section 6 for more information including spare part lists).

4.0 Operations and Maintenance - Key Performance Indicators (KPIs)		
KPI 4.1	Are maps up-to-date and accurate?	*Measured by:* *a. Periodic review to ensure maps have been updated per change requests submitted by field staff.* *b. Periodic review to ensure assets from new development projects added.*
KPI 4.2	Are work plans effective?	*Measured by:* *a. Annual review of work plans to ensure implementation as prescribed.* *b. Annual review of work plans to ensure goals are achieving intended outcomes.*
KPI 4.3	Are system defects being identified and is a plan and schedule for repair being implemented?	*Measured by:* *a. Measured By: CCTV inspection outcomes.* *b. Review of CCTV inspection data to identify and prioritize defects.* *c. Review of gravity pipe cleaning findings* *d. Review of CIP and annual Budgets to ensure proper funding. the R&R plan*
KPI 4.4	Is the City Training Program effective?	*Measured by:* *a. Are Staff being effectively trained on spill response procedures?* *b. Review of spill Debriefing forms for adherence to SERP.* *c. Review of spill Debriefing forms for intended outcomes.* *d. Review of submitted documentation citing contractor training.*
KPI 4.5	Is Replacement/Critical parts inventory up to date?	*Measured by:* *a. Annual audit of inventory list* *b. Annual review of work orders and spill Debriefing forms to ensure adequacy.*

5.0 DESIGN AND PERFORMANCE PROVISIONS

5.1 Design and Construction Standards and Specifications

5.1.1 Requirement

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.

5.1.2 Responsible Person

Director of Public Works

5.1.3 Compliance

The City's adopted Eastern Municipal Water District's Standard Specifications for Capital Projects and New Development Projects, which specifically address the requirements of this SSMP Program Element. (BMC 12.08.010.) The Standards are organized into sections covering:

- Bidding Requirements,
- General Conditions,
- Special Conditions,
- Standard Drawings,
- Detailed Provisions, and
- Approved Materials

These standards can be found at Sewer Standard Drawings - Eastern Municipal Water District (emwd.org)

Private facilities are addressed through: Beaumont Municipal Code 15.16.010 - Adoption of California 2019 Plumbing Code. Except as otherwise provided in this Chapter, the California Plumbing Code, Title 24, California Code of Regulations, Part 5, including all amendments set forth in this Chapter, and including all amendments thereto that may hereafter be made and adopted by the State of California, is hereby adopted as the Plumbing Code of the City.

(Ord. No. 1119, § 13, 12-3-2019)

The design and construction phase of the lifecycle of sewer facilities is critical to achieve a high level of service. If portions of the sewer system are designed and/or constructed incorrectly, they likely will not function properly regardless of the operation and maintenance program efforts or will require reallocation resources that would negatively impact the overall operations and maintenance program. This element of the SSMP is crucial reducing and preventing spills.

5.0 Design and Performance - Key Performance Indicators (KPIs)		
KPI 5.1	Are design standards and inspection processes adequate and effective?	*Measured by annual review of project warranty CCTV inspection data to evaluate system performance and inspection methods.*

6.0 SANITARY SEWER SPILL EMERGENCY RESPONSE PLAN (SERP)

6.1 Purpose

The purpose of the City of Beaumont's Spill Emergency Response Plan (SERP) is to support an orderly and effective response to Sanitary Sewer Spills (Overflows). The SERP provides guidelines for City personnel to follow in responding to, cleaning up, and reporting spills that may occur within the City's service area. Provision D.13vi of State Water Resources Control Board Order No. 2022-0103-DWQ requires wastewater collection agencies to have an Spill Emergency Response Plan (SERP). This SERP satisfies the requirement.

6.2 Policy

The City's employees are required to report all wastewater spills found and to take the appropriate action to secure the wastewater spill area, properly report to the appropriate regulatory agencies, relieve the cause of the spill, and ensure that the affected area is cleaned as soon as possible to minimize health hazards to the public and protect the environment. The City's goal is to respond to sewer system spill as soon as possible following notification.

6.3 Definitions as used in this SERP

CALIFORNIA INTEGRATED WATER QUALITY SYSTEM (CIWQS): Refers to the State Water Resources Control Board on-line electronic reporting system that is used to report spills, certify completion of the SSMP, and provide information on the sanitary sewer system.

FIRST RESPONDER: City Wastewater Collection System staff that responds to an active spill.

FOG – FATS, OILS, AND GREASE: FOG refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

LEGALLY RESPONSIBLE OFFICIAL (LRO): Refers to an individual who has the authority to certify reports and other actions that are submitted through CIWQS.

MAINLINE SEWER: Refers to City wastewater collection system piping that is not a private lateral connection to a user.

MAINTENANCE HOLE OR MANHOLE: Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection.

NOTIFICATION OF A SPILL : Refers to the time at which the City becomes aware of a spill event through observation or notification by the public or other source.

NUISANCE: California Water Code section 13050, subdivision (m), defines nuisance as anything that meets all of the following requirements:

1. 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.
2. 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.
3. Occurs during, or as a result of, the treatment or disposal of wastes.

PREVENTATIVE MAINTENANCE: Refers to maintenance activities intended to prevent failures of the wastewater collection system facilities (e.g., cleaning, CCTV, inspection).

PRIVATE LATERAL SEWAGE DISCHARGES – Sewage discharges that are caused by blockages or other problems within a privately owned lateral.

SANITARY SEWER SPILL (Overflow) - Any spill, overflow, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. spills include:

1. Spills or releases of untreated or partially treated wastewater that reach waters of the United States.
2. Spills or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
3. 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.

Spills that include multiple appearance points resulting from a single cause will be considered one spill for documentation and reporting purposes in CIWQS.

NOTE: Wastewater *backups into buildings caused by a blockage or other malfunction of a building lateral that is privately owned are not spills.*

Table 6-1: Spill Category Descriptions

Spill Category	Description
Category 1	A Category 1 spill is a spill of any volume of sewage from or caused by a sanitary sewer system regulated under this General Order that results in a discharge to: o A surface water, including a surface water body that contains no flow or volume of water; or o A drainage conveyance system that discharges to surface waters when the sewage is not fully captured and returned to the sanitary sewer system or disposed of properly. Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water, unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility. A spill from an Enrollee-owned and/or operated lateral that discharges to a surface water is a Category 1 spill; the Enrollee shall report all Category 1 spills per section 3.1 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.
Category 2	A Category 2 spill is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.
Category 3	A Category 3 spill is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.
Category 4	A Category 4 spill is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

SANITARY SEWER SYSTEM: Any publicly owned system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not considered to be spills.

SENSITIVE AREA: Refers to areas where a spill could result in a fish kill or pose an imminent or substantial danger to human health (e.g., parks, aquatic habitats, etc.).

SEWER SERVICE LATERAL: Refers to the piping that conveys sewage from the building to the City's wastewater collection system.

UNTREATED OR PARTIALLY TREATED WASTEWATER: Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.

WATERS OF THE STATE*:* Waters of the State are surface waters or groundwater within boundaries of the state as defined in Water Code section 13050(e), in which the State and Regional Water Boards have authority to protect beneficial uses. Waters of the State include, but are not limited to, groundwater aquifers, surface waters, saline waters, natural washes and pools, wetlands, sloughs, and estuaries, regardless of flow or whether water exists during dry conditions. Waters of the State include waters of the United States.

Work Order: An internally generated task that is scheduled or assigned to City staff as a result of a complaint or equipment maintenance program (see Electronic Service Request).

6.4 Regulatory Requirements for SERP Element of SSMP

State Water Resources Control Board Order No. 2022-0103-DWQ outlines requirements for an Spill Emergency Response Plan that is a mandatory element of the SSMP. The collection system agency shall develop and implement an spill emergency response plan that identifiesmeasures to protect public health and the environment.

At a minimum, this plan must include the following:

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

6.5 Goals

The City's goals with respect to responding to spills are as follows:

1. Work safely.
2. Respond quickly to minimize the volume of the spill.
3. Eliminate the cause of the spill in a timely manner.
4. Prevent spill's from entering the storm drain system or receiving waters to the maximum extent practicable.
5. Contain the spill to the extent feasible; Minimize public contact with the spill.
6. Meet the regulatory reporting requirements.
7. Evaluate the causes of failure related to spills.

6.6 Proper Notification Procedures

6.6.1 Requirement

The spill ERP must include proper notification procedures so that the primary responders and regulatory agencies are informed of all spills in a timely manner.

6.6.2 Responsible Person

Wastewater Collection System Supervisor

6.6.3 Compliance

The ways in which the City is notified of a spill or potential spill include observation by the public, receipt of an alarm from remote site, or observation by City staff during the normal course of their work.

Public Observation

Public observation is the most common way that the City is notified of blockages and spills.

- During normal working hours, spills can be reported to: **Customer Service line (951) 769-8520.**
- During Non-Business Hours, spills can be reported to: **Non-Emergency Police Department line, (951) 769-8500.**

Normal Work Hours

If the problem is within the City's service area, Customer Service collects the caller's information and location of the event and relays this information to response personnel. The Wastewater Collection System Supervisor, or designee, will dispatch a collection system crew as appropriate. The Wastewater Collection System Crew will verify the problem is with the City's sewer system. They will assess and respond accordingly and document their findings and response on the Daily Work Log.

After Hours

After hours, the Standby Employee is contacted directly by the Police Dispatch and will respond to the callout and/or alarm. A second employee is contacted for assistance, if warranted. Standby Employee will log findings and actions taken.

When calls are received, either during normal work hours or after hours, the response personnel will contact the caller to collect the following information:

- Time and date of call
- Date and Time the caller first noticed the spill.
- Narrative Description of the complaint, including location of spill and whether or not the caller is aware if the spill has reached surface waters, drainage channel or storm drains.
- Caller's name and telephone number
- Specific location of potential problem
- Nature of call
- In case of spill, estimated start time of the spill.

City Staff Observation

Through the course of routine work activities, City staff may discover surcharging/spilling facilities or other problems. When this occurs, problems found are reported to the appropriate City staff and an immediate response is initiated.

Alarm Calls

The City operates twelve (12) wastewater lift stations. In the event of a pump failure a high-level sensor activates the SCADA alarm system, and the City of Beaumont Wastewater Collections staff is contacted, who, in turn, respond.

6.7 Appropriate Spill Response Procedures

6.7.1 Requirement

The spill ERP must include a program to ensure an appropriate response to all spills.

6.7.2 Responsible Party

Wastewater Collection System Supervisor

6.7.3 Compliance

The City will respond to spills as soon as practicable following notification of an spill/backup or unauthorized discharge.

First Responder Priorities

The first responder's priorities are:

- To follow safe work practices. Special safety precautions must be observed when performing sewer work.
- To respond promptly with the appropriate and necessary equipment.
- To contain the spill wherever feasible.
- To restore the flow as soon as practicable.
- To minimize public access to and/or contact with the spilled sewage.
- To promptly notify the Wastewater Collection System Supervisor or designee in event of major spill.
- Notification to Regulatory Compliance officer is required in the event of a major spill.
- To return the spill to the sewer system.
- To restore the area to its original condition (or as close as possible); and
- To photograph and document affected and unaffected areas from a spill, making note of relevant times.

Initial Response

The first responder must respond to the problem site and visually check for potential sewer stoppages or spills. The first responder will:

- Note arrival time at the site of the spill/backup.
- Verify the existence of a public sewer system spill or backup.
- Determine if the spill or blockage is from a public or private sewer.
- Identify and assess the affected area and extent of spill.
- Make necessary notifications to Wastewater Collection System Supervisor.
- If the spill is large or in a sensitive area, document conditions upon arrival with photographs.

  • Decide whether to proceed with clearing the blockage to restore the flow or to initiate containment measures. The guidance for this decision is:

    - Small spills (i.e., spills that are easily contained) – proceed with clearing the blockage.

- Moderate or large spill where containment is anticipated to be simple proceed with the containment measures.
- Moderate or large spills where containment is anticipated to be difficult proceed with clearing the blockage; however, whenever deemed necessary, call for additional assistance and implement containment measures.

Restore Flow

Using the appropriate cleaning equipment, set up downstream of the blockage and hydro-clean upstream from a clear manhole. Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not reoccur downstream. If the blockage cannot be cleared within a reasonable time from arrival, or sewer requires construction repairs to restore flow, then initiate containment and/or bypass pumping. If assistance is required, immediately contact other employees, contractors, and equipment suppliers (Appendix F.)

6.8 Prompt Notification and Reporting

6.8.1 Requirement

The spill ERP must include 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 spills that potentially affect public health or reach the waters of the State in accordance with the MRP. All spills shall be reported in accordance with the 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.

6.8.2 Responsible Party

Wastewater Collection System Supervisor

6.8.3 Compliance

The following personnel are authorized to prepare data for regulatory reporting. The City's Legally Responsible Official (LRO) is authorized to electronically sign and certify spill reports in CIWQS.

6.9 Prompt Notification and Reporting

6.9.1 Requirement

The spill ERP must include 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 spills that potentially affect public health or reach the waters of the

State in accordance with the MRP. All spills shall be reported in accordance with the 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.

6.9.2 *Responsible Party*

Wastewater Collection System Supervisor

6.9.3 *Compliance*

The following personnel are authorized to prepare data for regulatory reporting. The City's Legally Responsible Official (LRO) is authorized to electronically sign and certify spill reports in CIWQS.

Title	Name	Contact	Check if LRO
Wastewater Plant Supervisor	Kevin Lee	(951) 769-8520 ext 311	X
General Manager of Utilities	Thaxton Van Belle	(951) 572-3195	X
Wastewater Collection System Supervisor	Jerome Moledor	(951) 489-6622	X

Record Keeping

In accordance with the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (GWDR), the City of Beaumont maintains records for each sanitary sewer spills. Records include:

- Documentation of response steps and/or remedial actions.
- Photographic evidence to document the extent of the spill, field crew response operations, and site conditions after field crew spill response operations have been completed. The date, time, location, and direction of photographs taken will be documented; and
- Documentation of how any estimations of the volume discharged and/or volume recovered were calculated including all assumptions made.
- For reporting purposes, if one spill event of whatever category results in multiple appearance points in a sewer system, a single spill report is required in CIWQS that

includes the GPS coordinates for the location of the spill appearance point closest to the failure point, blockage or location of the flow condition that caused the spill, and descriptions of the locations of all other discharge points associated with the single spill event.

Reporting and notification will be in accordance with Table 10.1

Table 6-2: Regulator Required Notifications

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION	Within two hours of becoming aware of any Category 1 spill 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, the City will notify the California Office of Emergency Services (CalOES) and obtain a notification control number.	Call Cal OES at: **(800) 852-7550**
REPORTING	• **Category 1 spill:** The City will submit draft report within 3 business days of becoming aware of the spill and certify within 15 calendar days of spill end date. • **Category 2 spill:** The City will submit draft report within 3 business days of becoming aware of the spill and certify within 15 calendar days of the spill end date. • **Category 3 spill:** The City will submit certified report within 30 calendar days of the end of month in which spill the occurred. • **Category 4 spill:** The City will report and certify the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, within 30 calendar days	Enter data into the CIWQS Online spill Database (http://ciwqs.waterboards.ca.gov/) certified by the Legally Responsible Official(s) All information required by CIWQS will be captured in the Sanitary Sewer Overflow Report. Certified spill reports may be updated by amending the report or adding an attachment to the spill report within 120 calendar days after the spill end date. After 120 days, the State spill Program Manager must be contacted to request to amend a spill report along with a justification for why the additional information was not available prior to the end of the 120 days.

ELEMENT	REQUIREMENT	METHOD
	after the end of the month in which the spills occurred. • **Spill Technical Report:** The City will submit within 45 calendar days after theend date of any Category 1 spill in which 50,000 gallons or greater are spilled to surface waters. • **"No spill" Certification:** The City will certify that no spills occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no spills occurred. • **Collection System Questionnaire:** The City will update and certify every 12 months	
WATER QUALITY MONITORING	The City will conduct water quality sampling within 18 hours after initial spill notification for Category 1 spills in which 50,000 gallons or greater are spilled to surface waters.	Water quality results will be uploaded into CIWQS for Category 1 spills in which 50,000 gallons or greater are spilled to surface waters.
RECORD KEEPING	The City will maintain the following records: • spill event records. • Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. • Records to document Water Quality Monitoring for spills of 50,000 gallons or greater spilled to surface waters. • Collection system telemetry records if relied upon to document and/or estimate spill Volume.	Self-maintained records shall be available during inspections or upon request.

Complaint Records

The City maintains records of all complaints received whether or not they result in sanitary sewer overflows. These complaint records include:

- Date, time, and method of notification;
- Date and time the complainant or informant first noticed the spill;
- Narrative description describing the complaint;
- A statement from the complainant or informant, if they know, of whether or not the potential spill may have reached waters of the state;
- Name, address, and contact telephone number of the complainant or informant reporting the potential spill (if not reported anonymously);
- Follow-up return contact information for each complaint received (if not reported anonymously).
- Final resolution of the complaint; and
- Work orders used to document all feasible and remedial actions taken.

All documentation tied to the Complaint Record will be maintained for a minimum of five years whether or not they resulted in a spill. Completed files are stored in hard copy in the Wastewater Collections System Supervisor's office and electronically on the City's (M) drive.

6.10 SERP Distribution and Training

6.10.1 Requirement

The spill ERP must include procedures to ensure that appropriate staff and contractor personnel are made aware of proper procedures and are appropriately trained.

6.10.2 Responsible Party

Wastewater Collection System Supervisor

6.10.3 Compliance

This section provides information on the training that is required to support this Spill Emergency Response Plan. The Wastewater Collection System Supervisor is responsible for its implementation and maintaining records.

Initial and Annual Refresher Training

All City personnel who may have a role in responding to, reporting, and/or mitigating a sewer system spill will receive training on the contents of this SERP. All new employees will receive training before they are placed in a position where they may have to respond. Current employees will receive annual refresher training on this plan and the procedures to be followed. The City will document all training.

Affected employees will receive annual training on the following topics by knowledgeable trainers:

- The City's Spill Emergency Response Plan and Sanitary Sewer Management Plan.
- Spill volume estimation techniques;
- SWRCB employee knowledge expectations;
- Researching and documenting spill start times; and
- Water Quality Sampling Plan

The City will verify that annual safety training requirements are current for each employee, and that employees are competent in the performance of all core competencies. This will be verified through testing, interviews, and observations. The City will address, through additional training/instruction, any identified gaps in required core competencies.

Through SWRCB Employee Knowledge Expectations training the employee will be able to answer the following:

1. Describe name and job title.
2. Approximately when they started in this field and how long they have worked for the agency.
3. Expand on current position duties and role in responding in the field to any spill complaints.
4. Describe SOPs used to respond/mitigate spills when they occur.
5. Describe any training agency provides or contracts for conducting spill volume estimates
6. Historically, before any recent changes, walk through how they would typically receive and respond to any spill complaints in the field?
7. Who is responsible for estimating spill volumes discharged? If it is them, describe how you go about estimating the spill volume that you record on the work order/service request forms?
8. What other information collected or recorded other than what is written on the work order form?
9. Describe if and when they ever talk with people that call in spills (either onsite or via telephone) to further check out when the spill might have occurred based on what they or others know? If they do this, can they tell regulators where this information is recorded?
10. Understanding they may be instructed to take pictures of some sewer spills/backups into structures. Other than during those times, when else would they typically take any pictures of a spill?
11. Walk us through anything else they would like to add to help better understand how field crews respond and mitigate spill complaints.

Spill Response Drills

Periodic training drills or field exercises will be held to ensure that employees are up to date on these procedures, equipment is in working order, and the required materials are readily available. The training drills will cover scenarios typically observed during sewer related emergencies (e.g., mainline blockage, mainline failure, and lateral blockage). The results and the observations during the drills will be recorded and action items will be tracked to ensure completion.

Spill Training Record Keeping

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

6.11 Emergency Operations

6.11.1 Requirement

The spill ERP must include procedures to address emergency operations, such as traffic and crowd control and other necessary response activities.

6.11.2 Responsible Party

Wastewater Collection System Supervisor

6.11.3 Compliance

The City is committed to providing a safe work environment and training all staff on safe work practices. In the event a spill occurs that has significant impact on the ability of City response staff to safely and effectively respond to the spill due to excessive traffic and large crowds, the response will do one or more of the following:

1. Contact and coordinate with staff from other City departments to assist.
2. Contact and coordinate with police or fire department staff to assist.
3. Request Mutual Aid assistant from established mutual aid partners.

6.12 Containment/Prevention and/or Minimization/Correction of Spills

6.12.1 Requirement

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

6.12.2 *Responsible Party*

Wastewater Collection System Supervisor

6.12.3 *Compliance*

Initiate Spill Containment Measures

The first responder will attempt to contain as much of the spilled sewage as possible using the following steps:

1. Determine the immediate destination of the spilled sewage.
2. Plug storm drains using sandbags, and/or plastic mats to contain the spill, whenever appropriate. If the spill has made contact with the storm drainage system, attempt to contain the spill by blocking downstream storm drainage facilities or initiate vacuum system.
3. Contain/direct the spilled sewage using dike/dam or sandbags; and Pump around the blockage/pipe failure.

Recovery and Cleanup

The recovery and cleanup phase begin immediately after the flow has been restored and the spill has been contained to the extent possible. The spill recovery and cleanup procedures are as follows:

1. Estimate the Volume of Spilled Sewage

   Use the methods outlined in the Sanitary Sewer Spill/Backup Response Packet (Appendix G) and/or the SMART Field Guide to estimate the volume of the spilled sewage. Wherever possible, document the estimate using photos and/or video of the spill site before and during the recovery operation.

2. Recovery of spilled Sewage

   Vacuum up and/or pump the spilled sewage and rinse water and discharge it back into the sanitary sewer system.

3. Clean-up

   Implement clean up procedures to reduce the potential for human health issues and adverse environmental impacts that are associated with a spill event. The procedures described are for dry weather conditions and will be modified as required for wet weather conditions. In the event that an spill occurs at night, the location will be inspected first thing the following day. The field crew will look for any signs of sewage solids and sewage-related materials that may warrant additional cleanup activities. Where cleanup of public property is beyond the capabilities of City staff, a cleanup contractor will be used.

4. Hard Surface Areas

   Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water and take reasonable steps to contain and vacuum up the wastewater. Allow area to dry. Repeat the process if additional cleaning is required.

5. Landscaped and Unimproved Natural Vegetation

   Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash-down the affected area with clean water until the water runs clear. Either contain or vacuum up the wash water so that none is released. Allow the area to dry and repeat the process if necessary.

6. Natural Water Ways

   The Department of Fish and Wildlife will be notified by Cal-OES for spills greater than or equal to 1,000 gallons.

7. Wet Weather Modifications

   Omit flushing and sampling during heavy storm events (i.e., sheet of rainwater across paved surfaces) with heavy runoff where flushing is not required, and sampling would not provide meaningful results.

Water Quality Sampling and Testing

Water quality sampling and testing will be performed as appropriate to determine the extent and impact of the spill when spilled sewage enters a water body. The water quality sampling procedures will be implemented within 18 hours and include the following:

1. The first responders will consider the need to sample surface waters the spill may have reached. If preliminary volume estimates of the spill are 50,000 gallons or greater, the first responders will begin collecting as soon as possible but no later than 18 hours after becoming aware of the spill.
2. The water quality samples will be collected from upstream of the spill, from the spill area, and downstream of the spill in flowing water (e.g., creeks). The water quality samples will be collected near the point of entry of the spilled sewage.
3. The samples will then be taken to an ELAP accredited laboratory for testing.

Waters of the State

The following Waters of the State are in the City of Beaumont's service area:

1. Santa Ana River via area tributaries.

Post Spill Event Debriefing

Every spill event is an opportunity to evaluate the City response and reporting procedures. Each overflow event is unique, with its own elements and challenges including volume, cause, location, terrain, climate, and other parameters.

As soon as possible after Category 1 and Category 2 spill events, all the participants, from the person who received the call to the last person to leave the site, will meet to review the procedures used and to discuss what worked and where improvements could be made in preventing or responding to and mitigating future spill events. The results of the debriefing will be documented and tracked to ensure the action items are completed as scheduled. The Regulatory Compliance Officer will coordinate and document the meeting.

6.0 OERP - Key Performance Indicators (KPIs)		
KPI 6.1	Are responses to spill events effective?	*Measured by:* a. *Review of spill Debriefing forms for adherence and to ensure intended outcomes are achieved* b. *Measured By: Review of spill Response training records to evaluate demonstrated ability of staff.*

LIST OF OERP ATTACHMENTS

SERP Attachment A – City Spill Response Field Data Collection Form

Sanitary Sewer Spill Report Form

GENERAL INFORMATION		
Names of Person Completing this Report:		Date:
Incident Street Address/Site:		
GPS Coordinates: Longitude -_____Deg_____Min____Sec Latitude -_____Deg_____Min_____Sec		
City:	County:	Zip Code:
Spill Occurred in: ☐ Private Facility ☐ Beaumont Facility		Weather Conditions ☐ Dry ☐ Raining

SPILL DETAILS		
Date of Spill:	Time Reported:	Crew Arrival Time:
Date Spill Ended:	Time Spill Ended:	Spill Duration (Days/Hours/Min):
Spill Rate (Gal/Min):	Estimated Spill Volume Recovered (Gal):	Estimated Spill Volume (Gal):
How was Spill Rate Estimated? How was Spill Volume Recovered Estimated? How was Spill Volume Estimated?		

SPILL CLASSIFICATION

Sanitary Sewer Spill Category: ☐Cat. 1 ☐Cat. 2 ☐Cat. 3 ☐Cat. 4 ☐ PLSD

~ Category 1 any Spill that reaches a drainage channel, surface water, or Storm Drain (and not fully recovered).

~ Category 2 any Spill 1,000 gallons or greater that does not reach a drainage channel, surface water or Storm Drain (and not fully recovered)

~ Category 3 any Spill equal to or greater than 50 gallons and less than 1,000 gallons, that does not discharge to a surface water. A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.

~Category 4 any Spill of less than 50 gallons, that does not discharge to a surface water. A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

~ Private Lateral Sewer Discharge (PLSD) is a discharge caused by blockage or other problems within a privately owned lateral.

***For Category 1 spills of 1000 gallons or greater, notify CAL-OES w/in 2 hours of knowledge if notification is possible & notification doesn't impede response efforts)**

Suspected Cause of Spill: (check box if additional sheets attached):

☐ Roots ☐ Grease ☐ Line Break ☐ Infiltration ☐ Rocks ☐ Blockage ☐ Vandalism ☐ Debris

☐ Power Failure ☐ Pump Station Failure ☐ Flood Damage ☐ Manhole Failure ☐ Construction

☐ Private Property Lateral ☐ Other:_____ ☐ Unknown

Brief Description of Spill cause:_____

_____

_____

Sanitary Sewer Spill Report Form

SPILL CLASSIFICATION (Continued)

Final Spill Destination:

Receiving Waters Affected: ☐ Yes ☐ No Name Receiving Waters: _____

Visual Observations: _____

Cleanup Method(s) Used: Gallons Wash Water Recovered: _____

☐ Wash Water Used (Gal):_____

☐ Brooms

☐ Combo Vacuum ☐ Other: _____

SPILL ACTIONS

Area Barricaded/Taped/Closed: ☐ Yes ☐ No Time Implemented:_____ ☐ AM ☐ PM

Describe: _____

_____ Time Removed:_____ ☐ AM ☐ PM

Warning Signs Posted: ☐ Yes ☐ No Sign Location(s):

Neighbors Notified: ☐ Yes ☐ No

Sample(s) Collected: ☐ Yes ☐ No

Location(s): ☐ Upstream ☐ Downstream ☐ Discharge Point

Requested Analysis: ☐ Fecal ☐ Coliform ☐ Ammonia

Other Specify: _____

Agency Who Made Request By:

Time:

SPILL NOTIFICATIONS:

☐ California Office of Emergency Services (Cal OES) (800) 852-7550

Person Contacted:_____ Control Number: _____

☐ Basin Water Quality Control Board (951) 782-4130

Person Contacted: _____

☐ Riverside County Environmental Health (888) 722-4234

Person Contacted: _____

☐ Thaxton Van Belle (General Manager of Utilities) (951) 572-3195

Date Reported:_____(MM/DD/YY) Time Reported: _____

This Report is: ☐ Preliminary ☐ Final ☐ Revised Final

Signature of Person Completing the Form: _____

Date: _____

Sanitary Sewer Spill Report Form

SPILL BLANK PAGE

SERP Attachment B – City Spill Volume Estimation Methods and Worksheet

Camera Icon Means Photos are Mandatory

Area/Volume Spill Estimation Work Sheet

Surface: ☐ Asphalt ☐ Concrete ☐ Dirt ☐ Landscape ☐ Inside Building Other _____

(Draw / Sketch outline of Spill 'Footprint' and attach photos) Work Order Nbr: _____

~~ Breakdown the 'Footprint' into Recognizable Shapes and Determine Dimensions of Each Shape ~~

Area 1_____

☐ Stain Concrete, ☐ Stain Asphalt, or Measured Depth1____ Depth2 ____ Depth3 ____ Depth4 ____

Area 2_____

☐ Stain Concrete, ☐ Stain Asphalt, or Measured Depth1____ Depth2 ____ Depth3 ____ Depth4 ____

Area 3_____

☐ Stain Concrete, ☐ Stain Asphalt, or Measured Depth1____ Depth2 ____ Depth3 ____ Depth4 ____

Area 4_____

☐ Stain Concrete, ☐ Stain Asphalt, or Measured Depth1____ Depth2 ____ Depth3 ____ Depth4 ____

Area 5_____

☐ Stain Concrete, ☐ Stain Asphalt, or Measured Depth1____ Depth2 ____ Depth3 ____ Depth4 ____

Area 6_____

☐ Stain Concrete, ☐ Stain Asphalt, or Measured Depth1____ Depth2 ____ Depth3 ____ Depth4 ____

Camera Icon
Means Photos are
Mandatory

Area/Volume Spill Estimation Work Sheet

(To be Completed by Supervisor)

Area 1 **(A) =** Sq/Ft:_____x **(B)** Depth: ☐ Concrete 0.0026' ☐ Asphalt 0.0013' ☐ Measured: _____

(A) x (B) = Volume:_____Cu/Ft

Area 2 **(A) =** Sq/Ft:_____x **(B)** Depth: ☐ Concrete 0.0026' ☐ Asphalt 0.0013' ☐ Measured: _____

(A) x (B) = Volume:_____Cu/Ft

Area 3 **(A) =** Sq/Ft:_____x **(B)** Depth: ☐ Concrete 0.0026' ☐ Asphalt 0.0013' ☐ Measured: _____

(A) x (B) = Volume:_____Cu/Ft

Area 4 **(A) =** Sq/Ft:_____x **(B)** Depth: ☐ Concrete 0.0026' ☐ Asphalt 0.0013' ☐ Measured: _____

(A) x (B) = Volume:_____Cu/Ft

Area 5 **(A) =** Sq/Ft:_____x **(B)** Depth: ☐ Concrete 0.0026' ☐ Asphalt 0.0013' ☐ Measured: _____

(A) x (B) = Volume:_____Cu/Ft

Area 6 **(A) =** Sq/Ft:_____x **(B)** Depth: ☐ Concrete 0.0026' ☐ Asphalt 0.0013' ☐ Measured: _____

(A) x (B) = Volume:_____Cu/Ft

Total Volume:_____*Cu/Ft

Total Volume:_____*Cu Ft x 7.48 gallons =_____**** Gallons Spilled**

Volume Calculated By:_____, _____
Print Name Signature

Date:_____/_____/_____

SERP Attachment C – City Spill Start Time Estimation Worksheet

Volume Estimation Methods and Worksheets (Appendix B)

To convert inches to feet (NOTE: for the purposes of this worksheet, the unit of measurement will be in feet for formula examples)	Divide the inches by 12 or use the chart on the right. **Example 1:** 27" ÷ 12 = 2.25' **Example 2:** 1¾" = ?' 1" (0.08') + ¾" (0.06') = 0.14'
Volume of one cubic foot	7.48 gallons of liquid
Area: Two-dimensional measurement represented in square feet (SQ/FT or ft^2)	Square/rectangle: Area = Length x Width Circle: Area = π x r^2 (where $\pi \approx 3.14$ and r = radius = ½ diameter) Triangle: Area = ½ (Base x Height)
Volume: Three-dimensional measurement represented in cubic feet (CU/FT or ft^3)	Rectangle/square footprint: Volume = Length x Width x Depth Circle footprint (cylinder): Volume = π x r^2 x Depth (where $\pi \approx 3.14$ and r = radius = ½ diameter) Triangle footprint: Volume = ½ (Base x Height) x Depth
Depth: Wet Stain on Concrete or asphalt surface	If the depth is not measurable because it is only a wet stain, use the following estimated depths: Depth of a wet stain on concrete surface: 0.0026' (1/32") Depth of a wet stain on asphalt surface: 0.0013' (1/64") These were determined to be a reasonable depth to use on the respective surfaces through a process of trial and error. One gallon of water was poured onto both asphalt and concrete surfaces. Once the area was determined as accurately as possible, different depths were used to determine the volume of the wetted footprint until the formula produced a result that (closely) matched the one gallon spilled. This process was repeated several times.
Depth: Contained or "Ponded" sewage	Measure actual depth of standing sewage whenever possible. When depth varies, measure several representative sample points and determine the average. Use that number in your formula to determine volume.

Convert Inches to Feet

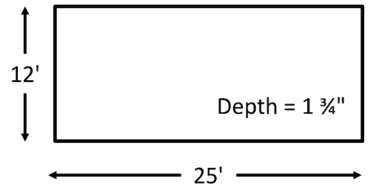
Inches	Feet
1/8"	0.01'
1/4"	0.02'
3/8"	0.03'
1/2"	0.04'
5/8"	0.05'
3/4"	0.06'
7/8"	0.07'
1"	0.08'
2"	0.17'
3"	0.25'
4"	0.33'
5"	0.42'
6"	0.50'
7"	0.58'
8"	0.67'
9"	0.75'
10"	0.83'
11"	0.92'
12"	1.00'

Miscellaneous Computations & Examples (continued)

Convert Inches to Feet	
Inches	**Feet**
1/8"	0.01'
1/4"	0.02'
3/8"	0.03'
1/2"	0.04'
5/8"	0.05'
3/4"	0.06'
7/8"	0.07'
1"	0.08'
2"	0.17'
3"	0.25'
4"	0.33'
5"	0.42'
6"	0.50'
7"	0.58'
8"	0.67'
9"	0.75'
10"	0.83'
11"	0.92'
12"	1.00'

Area/Volume of a Rectangle or Square

Formula: Length x Width x Depth = Volume in **cubic feet**



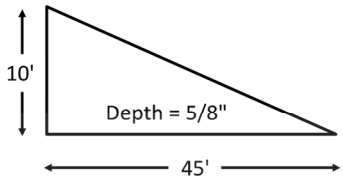
25'	X	12'	X	0.14'	=	**42 Cubic Feet**
Length		Width		Depth		Volume

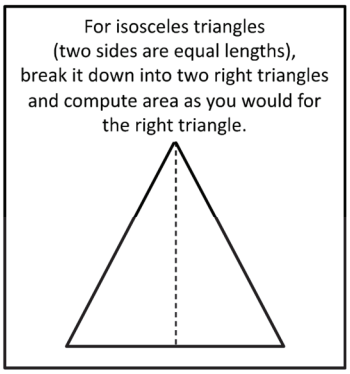
Multiply the volume by 7.48 gallons to determine the volume in **gallons**:

42 ft^3	X	7.48	=	**314.16 gallons**
Volume		gal/ft^3		Volume

Area/Volume of a Right Triangle

Formula: ½ x Base x Height x Depth = Volume in **cubic feet**



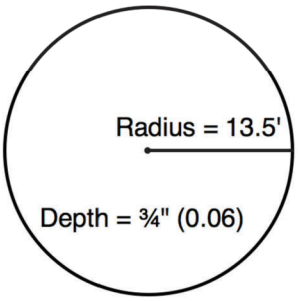


0.5	X	45'	X	10'	X	0.05'	x	7.48	=	84.15 gallons
		Base		Height		Depth		gal/ft^3		Volume

Area/Volume of a Circle

Formula: π x r^2 x Depth = Volume in **cubic feet**

The radius is ½ the diameter, which is a straight line passing from side to side through the center of a circle.



13.5'	X	13.5'	X	3.14	X	0.06'	x	7.48	=	256.8 gallons
Radius		Radius		π		Depth		gal/ft^3		Volume

o

Eyeball/bucket Estimation for Smaller Spills

STEP 1: Position yourself so that you have a vantage point where you can see the entire SSO.

STEP 2: Imagine one or more buckets or barrels of water tipped over. Depending on the size of the SSO, select a bucket or barrel size as a frame of reference. It may be necessary to use more than one bucket/barrel size.

STEP 3: Estimate how many of each size bucket or barrel it would take to make an equivalent spill. Enter those numbers in Column A of the row in the table below that corresponds to the bucket/barrel sizes you are using as a frame of reference.

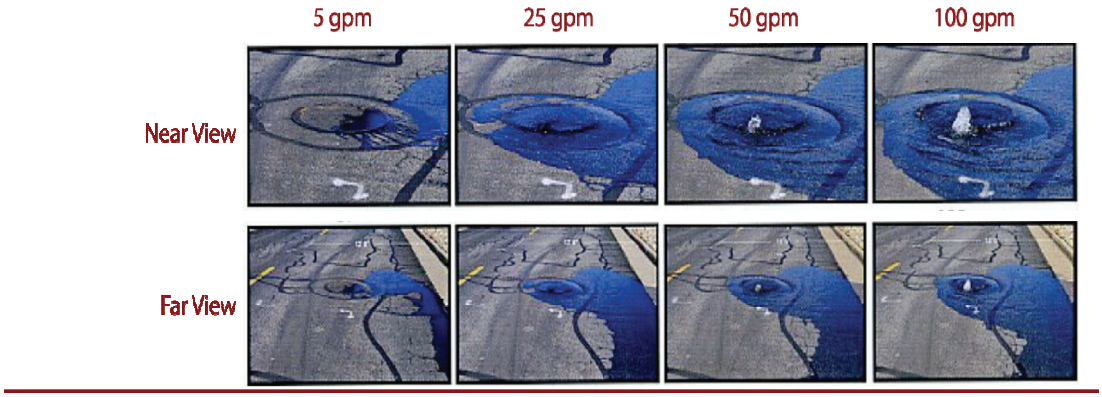
STEP 4: Multiply the number in Column A by the multiplier in Column B. Enter the result in Column C.

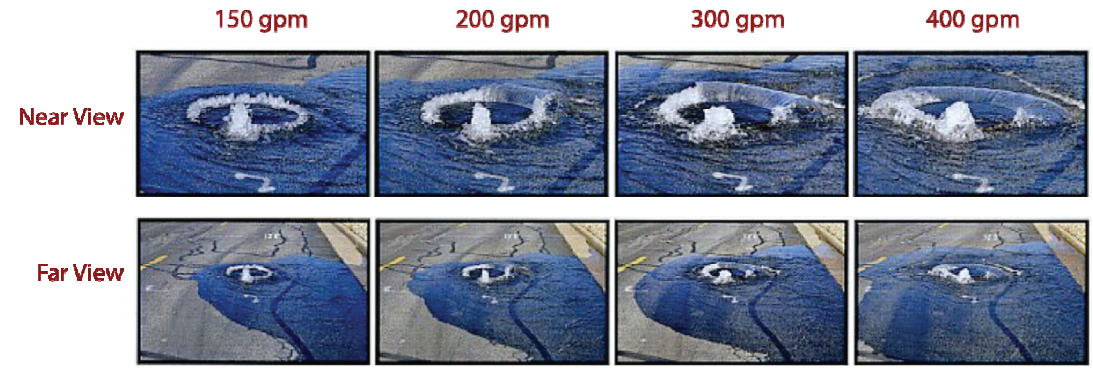
	A	B	C
Size of bucket(s) or barrel(s)	**How many of this size?**	**Multiplier**	**Estimated SSO Volume (gallons)**
1 gallon water jug		x 1 gallons	
5 gallon bucket		x 5 gallons	
32 gallon trash can		x 32 gallons	
55 gallon drum		x 55 gallons	
Other: gallons		x gallons	
		Estimated Total SSO Volume:	

Duration and Flow Rate Comparison Method

Compare the SSO to reference images below to estimate flow rate of the current overflow. **NOTE: If the manhole cover in your picture has vent holes or more than one pry hole, do not use these pictures for comparison.**

Describe which reference photo(s) were used and any additional factors that influenced applying the reference photo data to the actual SSO:





SSCSC Manhole Overflow Gauge: CWEA Southern Section Collections Systems Committee
Overflow Simulation courtesy of Eastern Municipal Water District

Flow Rate Based on Photo Comparison: _____ gallons per minute (gpm)

Start Date and Time	1.
End Date and Time	2.
SSO Event Total Time Elapsed (subtract Line 1 from Line 2. Show in minutes.)	3.
Average Flow Rate GPM (Account for diurnal flow pattern)	4.
Total Volume Estimated Using Duration and Flow Method (Line 3 x Line 4)	5.

SERP Attachment D – City Procedures for Responding to Sewer Backups

Procedures for Responding to Spills

FIRST RESPONDER PRIORITIES

The first responder's priorities are:

- To follow safe work practices. Special safety precautions must be observed when performing sewer work.
- To respond promptly with the appropriate and necessary equipment.
- To contain the spill wherever feasible.
- To restore the flow as soon as practicable.
- To minimize public access to and/or contact with the spilled sewage.
- To promptly notify the Wastewater Collection System Supervisor or designee in event of major Spill.
- To return the Spill to the sewer system.
- To restore the area to its original condition (or as close as possible); and
- To photograph and document affected and unaffected areas from a spill, making note of relevant times.

INITIAL RESPONSE

The first responder must respond to the problem site and visually check for potential sewer stoppages or spill. The first responder will:

- Note arrival time at the site of the spill/backup.
- Verify the existence of a public sewer system spill or backup.
- Determine if the spill or blockage is from a public or private sewer.
- Identify and assess the affected area and extent of spill.
- Make necessary notifications to Wastewater Collection System Supervisor.
- If the spill is large or in a sensitive area, document conditions upon arrival with photographs.
- Decide whether to proceed with clearing the blockage to restore the flow or to initiate containment measures. The guidance for this decision is:
    - Small spills (i.e., spills that are easily contained) – proceed with clearing the blockage.
    - Moderate or large spill where containment is anticipated to be simple proceed with the containment measures.
    - Moderate or large spills where containment is anticipated to be difficult proceed with clearing the blockage; however, whenever deemed necessary, call for additional assistance and implement containment measures.

RESTORE FLOW

Using the appropriate cleaning equipment, set up downstream of the blockage and hydro-clean upstream from a clear manhole. Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not reoccur downstream. If the blockage cannot be cleared within a reasonable time from arrival, or sewer requires construction repairs to restore flow, then initiate containment and/or bypass pumping. If assistance is required, immediately contact other employees, contractors, and equipment suppliers (Appendix F).

SERP Attachment E – City Spill Debriefing Form

SPILL Debriefing Form (Appendix E)
Debriefing Meeting Notes & Findings (Date:_____) Time: (_____)
ATTENDEES
FOLLOW-UP ITEMS
Name of Person Conducting the Debriefing: _____

SERP Attachment F – List of City Equipment Suppliers

Equipment Suppliers and Services

The City utilizes On-Call Emergency Services to support staff as needed.

Company	Support Services	Phone Number
Xylem (Jim Ruffling)	Bypass Pumps & Hoses	• Office (951)332-3701 • Cell (562)572-4738
Xylem (Manny Padilla)	New pumps	• Office (951)332-3669 • Cell (562)760-9258
Huston Harris (Brad)	Vactor & camera help	• Office (909)422-8990 • Cell (909)721-2708
Wright Septic	Large Vac Trucks	• Office (951)654-4840
T.E. Roberts	Pipeline Repair	• Office (714)669-0072
Inland water works	Pipe & Lift Station Parts	• Office (800)794-3121
Southern Contracting Company	Electrical	• Office (760)744-0760
Bleckert Power services (Chris)	Generator Repair	• Cell (951)550-7618

This List will be audited annually and updated as needed

SERP Attachment G – City Water Quality Monitoring Plan

Water Quality Monitoring Plan

In accordance with subsection D.7(v) of the SSS WDRs, the City has developed a Water Quality Monitoring Plan, which will be implemented as soon as reasonable, but no longer than 18 hours from initial notification for Category 1 Spills of 50,000 gallons or more to assess impacts from Spills to surface waters. The plan will also be implemented when directed to do so by a governing authority.

SAMPLING PLAN

Water quality sampling and testing will be performed as appropriate to determine the extent and impact of the Spill when spilled sewage enters a water body. The water quality sampling procedures will be implemented within 18 hours and include the following:

- The first responders will consider the need to sample surface waters the Spill may have reached.
    - If preliminary volume estimates of the Spill are 50,000 gallons or greater, the first responders will begin collecting as soon as possible but no later than 18 hours after becoming aware of the Spill.
- The water quality samples will be collected from upstream of the spill, the point of entry, and downstream of the spill in flowing water (e.g., creeks).
    - The samples will then be taken to an ELAP accredited laboratory for testing.
    - Require water quality analyses for ammonia and bacterial indicators.
    - Observe proper chain of custody procedures; and
    - Repeat sampling if deemed necessary and/or at the request of regulators.

WATERS OF THE STATE

The following Waters of the State are in the City of Beaumont's service area:

- Santa Ana River via area tributaries.

SERP Attachment H – City Contractor Emergency Plan

Contractor Sewage Spill Emergency Plan

This information is presented to Contractors during the project Pre-Construction meeting, and it must be acknowledged, by signature below, prior to beginning work.

The following procedures are to be followed if a Contractor causes or becomes aware of a Sanitary Sewer Spill. In the event of an Spill, the Contractor shall:

1. Immediately notify City Hall (during business hours) or PD Non- emergency line (for after hours):
    a. Business Hours, Contact City Hall at (951) 769-8520
    b. Non-Business Hours, Contact City Police at (951) 769-8500

2. Protect storm drains by attempting to contain the sewage before it enters the system or surface water.

3. Protect the public by posting warning signs and/or a barrier to keep the public away from affected areas.

4. Provide Information to the City Wastewater Collection System Crew, such as:

    a. Time spill was observed

    b. Appearance Point of spill
        i. Manhole
        ii. Clean Out
        iii. Pump Station
        iv. Other: _____

    c. Weather Conditions

    d. Suspected Cause

    e. Actions Taken by Contractor

    f. Other information that may be pertinent

5. Contractor to remain on-site until City personnel arrives.

Contractor Representative:_____, Title: _____
(Print Name) (Print Title)

Date:_____/_____/_____

SERP Attachment I – City Equipment and Critical Replacement Parts

Equipment and critical Replacement Parts

Item	Inventory req	On Hand
Air Vac A.R.I. USA D-025 Combination	2	1
105hp lift station pump(for Lower Oak, Upper Oak Stations)	1	1
160hp lift station pump (Four Seasons Station)	1	On Order
35hp lift station pump (Noble Creek)	1	1
30hp lift station pump(dry well, Little lower)	1	On Order
Flight Floats (All Stations)	2	2
Siemens XPS UL Ultrasonic Transducer (all Stations)	1	2
6" SDR pipe	10'	15'
6" ductile iron pipe	10'	15'
10" Expansion Flex Joint	1	1
12" Expansion Flex Joint	1	1
8" Bypass Suction hose		20'
8" Bypass Discharge hose		50'
Inventory Audit interval - Annually		
This list will be added to as more Critical parts are identified		

7.0 FOG CONTROL PROGRAM

Based on the requirement of the State Water Resources Control Board, Order No 2022-0103-DWQ, the City has determined that a FOG Control Program is necessary to mitigate the discharge of FOG appropriately and effectively to the sanitary sewer system that could cause blockages and SSSs. This section describes the City's efforts to control FOG to reduce the impacts of SSSs

7.1 What is FOG?

Fats, oils, and grease, commonly referred to as FOG, are generated from foods such as cooking oil, shortening, lard, butter, meat fats, sauces, gravy, ice cream, soups, etc.

Two main sources of FOG discharges are from Food Service Establishments (FSE) and residential users. The excessive amount of FOG being discharged may be a result of poor kitchen practices at F.S.E.'s by employees and residential users. Pouring or washing FOG down the drain causes it to solidify, accumulate and narrow the pipes internal opening. Eventually, FOG can completely clog the inside of the pipes within the establishment or residence, the property owner's private sewer laterals or the City's public sanitary sewer system, causing sewage to back up into the establishments, residences or onto the streets and into the storm drains.

7.2 FOG Public Education Outreach Program

7.2.1 Requirement

The FOG program has been implemented and schedule for a public education outreach program that proper disposal of Fog as of 11/14/22.

7.2.2 Responsible Person

Environmental Compliance Manager

7.2.3 Compliance

Commercial / Industrial FOG Dischargers

The City has identified all existing Food Service Establishments within their jurisdiction and currently monitors the grease interceptor maintenance requirements of each facility for compliance. As a part of the annual business license renewal process, the Environmental Compliance Inspector will inspect each establishment for compliance with FOG Best Management Practices (BMP). A copy of the FOG BMPs is provided to the business owner or manager along with a copy of the Beaumont Municipal Code Chapter 13.09 "Regulating Fats, Oils, and Grease Management in Food Service Establishments." The inspector will walk through the facility with the manager or owner discussing ways to reduce or eliminate FOG discharges through ongoing employee training, review waste haul manifests and inspect that drain screens are installed in

drains. As of November 14, 2022, educational materials such as FOG compliance posters and training videos will be made available to the F.S.E.

Residential FOG Dischargers

The City implemented a public education outreach program on November 14, 2022, directed at residential customers. The City will promote the residential FOG program via Social Media Blasts periodically on the City's website with information and graphics. The City will provide FOG educational flyers to all Homeowners Associations to add to their community newsletters. The City Environmental Compliance (EC) inspector will periodically give an in-person FOG presentation at various H.O.A. meetings. The City also promotes the residential FOG program during community events, such as the Cherry Festival, Octoberfest and other events as opportunities present themself. The City provides targeted outreach on a case-by-case basis.

7.3 FOG Disposal

7.3.1 Requirement

The FOG control program shall include a plan and schedule for the disposal of FOG generated within the sanitary sewer system service area.

7.3.2 Responsible Person

Wastewater Collections Supervisor

7.3.3 Compliance

FOG generated within the sanitary service area is currently removed by City crews during routine maintenance of pipes and lift stations. Grease removed from the system is disposed of at the City of Beaumont WWTP located at 715 West 4th Street in Beaumont CA.

FOG generated by Food Service Establishments is required to be disposed of appropriately, in accordance with: BMC 13.09.120 (b) "Segregation and collection of waste cooking oil" and 13.09.130 "Grease interceptor maintenance requirements" as stated in section 7 (e) below

7.4 Legal Authority

7.4.1 Requirement

The City shall have the legal authority to prohibit discharges to the system and identify measures to prevent SSSs and blockages caused by FOG.

7.4.2 Responsible Person

General Manager of Utilities

7.4.3 Compliance

According to the California State Water Resources Control Board, the Industrial Waste Survey is a required part of the wastewater industrial pre-treatment program. The City requires an Industrial Waste Survey to be completed by all businesses to identify which businesses have the potential to discharge industrial wastewater to the City's sanitary sewer system with the potential to require a grease removal device.

Legal authority prohibiting discharges of FOG to the City sanitary sewer system: BMC 13.09.030 "General prohibition"

"The discharge of fats, oils, greases, and other solids ("F.O.G.") in concentrations from food services establishments and other commercial and other industrial facilities to the City sewer systems that may adversely affect the normal function of these systems or result in blockages and/or public nuisance is prohibited."

7.5 Grease Removal Devices

7.5.1 Requirement

The FOG program shall include requirements to install grease removal devices (such as traps or interceptors), design standards, maintenance requirements, BMP requirements, record keeping and reporting requirements.

7.5.2 Responsible Person

General Manager of Utilities

7.5.3 Compliance

The following California Plumbing Code and Beaumont Municipal Codes includes the 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.

California Plumbing Code 1014.0 Grease Interceptors:

"Where it is determined by the Authority Having Jurisdiction that *waste* pre-treatment is required, an *approved* type of *grease interceptor*(s) complies with ASME A112.14.3, ASME A112.14.4, CSA B481, PDI G-101, or PDI G-102, and sized in accordance with Section 1014.2.1 or Section *1014.3.6*, shall be installed in accordance with the manufacturer's installation instructions to receive the drainage from fixtures or equipment that produce grease-laden *waste* located in areas of establishments where food is prepared, or other establishments where grease is introduced into the drainage or *sewage* system in

quantities that can affect line stoppage or hinder *sewage* treatment or private *sewage* disposal systems.

A combination of hydromechanical, gravity *grease interceptors* and engineered systems shall be allowed to meet this code and other applicable requirements of the *Authority Having Jurisdiction* where space or existing physical constraints of existing buildings necessitate such installations. A *grease interceptor* shall not be required for individual dwelling units or private living quarters. Water closets, urinals, and other *plumbing fixtures* conveying human *waste* shall not *drain* into or through the *grease interceptor*."

BMC 13.09.130 - Grease Interceptor Maintenance Requirements.

A. Grease interceptors shall be maintained in efficient operating condition by periodic removal of the full content of the interceptor which includes wastewater, accumulated F.O.G., floating materials, sludge, and solids.
B. All existing and newly installed grease interceptors shall be regularly maintained.
C. No F.O.G. that has accumulated in a grease interceptor shall be allowed to pass into any sewer lateral, sewer system, storm drain, or public right-of-way during maintenance activities.
D. Food service establishments with grease interceptors are required to submit data and information necessary to establish the maintenance frequency grease interceptors.
E. The maintenance frequency for all food service establishments with a grease interceptor shall be determined in one of the following methods:
    a. Grease interceptors shall be fully pumped out and cleaned at a frequency such that the combined F.O.G. and solids accumulation does not exceed 25 percent of the total liquid depth of the grease interceptor. This is to ensure that the minimum hydraulic retention time and required available volume is maintained to effectively intercept and retain F.O.G. discharge to the sewer system.
    b. All food service establishments with a grease interceptor shall regularly maintain their grease interceptor and maintain a record of such maintenance.
    c. Grease interceptors shall be fully pumped out and cleaned quarterly when the frequency described in (1) has not been established. The maintenance frequency may be adjusted when sufficient data have been obtained to establish an average frequency based on the requirements described in (1). Based on the actual generation of F.O.G. from the food service establishment, the maintenance frequency may increase or decrease.
    d. If the grease interceptor, at any time, contains F.O.G. and solids accumulation that does not meet the requirements described in (1), the food service establishment shall be required to have the grease interceptor serviced

immediately such that all fats, oils, grease, sludge, and other materials are completely removed from the grease interceptor. If deemed necessary, the Program Manager may also increase the maintenance frequency of the grease interceptor from the current frequency.

BMC 13.09.120 Best Management Practices: All food service establishments shall, at a minimum, implement the following Best Management Practices, when applicable:

A. Installation of Drain Screens. Drain screens shall be installed on all drainage pipes in food preparation areas.
B. Segregation and Collection of Waste Cooking Oil. All waste cooking oil shall be collected and stored properly in recycling receptacles shall be maintained properly to ensure that they do not leak. Licensed waste haulers or an approved recycling facility must be used to dispose of waste cooking oil.
C. Disposal of Food Waste. All food waste shall be disposed of directly into the organic waste bin, and not in sinks.
D. Employee Training. Employees of the food service establishment shall be trained by the food service establishment within 180 days of November 1, 2009, and twice each calendar year thereafter, on the following subjects:
E. How to "dry wipe" pots, pans, dishware, and work areas before washing to remove grease.
F. How to properly dispose of food waste and solids in enclosed plastic bags prior to disposal in trash bins or containers to prevent leaking and odors.
G. The location and use of absorption products to clean under fryer baskets and other locations where grease may be spilled or dripped.
H. How to properly dispose of grease or oils from cooking equipment into a grease receptacle such as a barrel or drum without spilling.
I. Training shall be documented, and employee signatures retained indicating each employee's attendance and understanding of the practices reviewed. Training records shall be available for review at any reasonable time by the Program Manager or an inspector.
J. Maintenance of Kitchen Exhaust Filters. Filters shall be cleaned as frequently as necessary to be maintained in good operating condition. The wastewater generated from cleaning the exhaust filter shall be disposed of properly.
K. Kitchen Signage. Best management and waste minimization practices shall be posted conspicuously in the food preparation and dishwashing areas at all times.

7.6 Inspection

7.6.1 Requirement

The District shall have the authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance

7.6.2 Responsible Person

Environmental Compliance Manager

7.6.3 Compliance

The City's Municipal Code 13.09.080 provides the legal authority to inspect grease producing facilities and 13.09.140 provides enforcement authority. Inspection and enforcement are provided by the Department of Environmental Compliance. The Environmental Compliance Manager is responsible for the inspection, enforcement and establishment of record keeping practices for the FOG program.

BMC 13.09.080 Sampling and Inspection

"Sampling and inspection of Food Service Establishments may be conducted in the time, place, manner, and frequency as determined by the City Manager or his or her designee."

BMC 13.09.140 Enforcement.

A. In addition to the specific provisions set forth in this Chapter, the City may enforce this Ordinance through any of the Civil, Criminal or Administrative Procedures established by the City of Beaumont Municipal Code.
B. In addition to the specific provisions set forth elsewhere in this Code, the City may enforce this Chapter, through any Civil, Criminal or Administrative Procedures established by State or Federal Laws.

(Ord. 959, 10/09; §1)

7.7 Identification of Potential FOG Blockages

7.7.1 Requirement

The FOG control program shall include an identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section.

7.7.2 Responsible Person

Wastewater Collections Supervisor

7.7.3 Compliance

The City is actively cleaning the system and as FOG problems are identified they are put on a quarterly high pressure cleaning list until they can be investigated further. Investigation of the problem areas can include CCTV inspection by a subcontractor, inspection by the City's in-house compliance officer and/or continued quarterly cleaning and spot checking by the City's cleaning crew.

7.8 Source Control Measures

7.8.1 Requirement

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

7.8.2 Responsible Person

General Manager of Utilities

7.8.3 Compliance

The City has a commercial FOG control program that began in 2019 and is being phased in over a five-year period. This program is directed at all Food Service Establishment businesses in the service area. The City employees one full-time position that is primarily tasked with inspecting, monitoring compliance, and educating FSE's related to FOG discharge and ensures that FSE's have grease control devices that are appropriately designed and maintained to control the discharge of FOG to the sewer collection system.

7.0 FOG - Key Performance Indicators (KPIs)		
KPI 7.1	• Is Commercial FOG Program effective?	Measured by: *a.* Review of work orders and customer service complaints for FOG related issues. *b.* Review of enforcement actions taken against City
KPI 7.2	• Is gravity pipe cleaning program effective?	Measured by Number of FOG related SSSs or blockages
KPI 7.3	• Is Residential FOG program being implemented?	Measured by *a.* Annual review of community events attended. *b.* Annual review of flyers and notices sent to customers.

8.0 SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

8.1 Identify Hydraulic Deficiencies

8.1.1 Requirement

Describe actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSS discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSSs that escape from the system) associated with conditions similar to those causing spill 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 spill events.

8.1.2 Responsible Person

Director of Public Works

8.1.3 Compliance

Recognizing the importance of planning, developing, and financing wastewater system

facilities to provide reliable and enhanced service for existing customers and to serve anticipated growth, the City initiated the preparation of this wastewater system master planning study in 2021.

The objective of the study included the following:

- Summarize the City's existing wastewater collection system facilities.
- Document growth planning assumptions and known future developments.
- Summarize the wastewater system performance criteria and design storm event.
- Project future wastewater flows.
- Develop and calibrate the physical characteristics of the hydraulic model (gravity mains,
- force mains, and lift stations).
- Evaluate the adequacy of capacity for the wastewater collection system facilities to meet existing and projected peak dry weather flows and peak wet weather flows.
- Recommend a capital improvement program (CIP) with an opinion of probable construction costs.
- Develop a 2021 Wastewater Master Plan Report.

8.2 Establish Appropriate Design Criteria

8.2.1 Requirement

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

8.2.2 Responsible Person

Director of Public Works

8.2.3 Compliance

A hydraulic sewer model was assembled and used in evaluating the adequacy of the City's sewer system. The hydraulic model combines information on the physical characteristics of the sewer system (pipe sizes, pipe materials, pipe slopes, etc.), and performs calculations to solve a series of mathematical equations to simulate flow in pipes.

Gravity pipes with diameters 10 inch and larger were modeled. The model was calibrated to Peak Dry Weather Flows and Peak Wet Weather Flows from two storm events, which occurred on 3/9/2020 to 3/10/2020 and 3/12/2020 to 3/13/2020. This established the design criteria for the Master Plan and will be used for future planning.

8.3 Capacity Enhancement Measures

8.3.1 Requirement

Define 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.

8.3.2 Responsible Person

Director of Public Works

8.3.3 Compliance

The Master Plan outlines planned capital improvement projects to address identified hydraulic deficiencies based on existing, near-term, and long-term growth scenarios. Generally, the planned improvements assume an increase in pipe size until further engineering can be performed.

The cost estimates presented in the Capital Improvement Program (CIP) have been prepared for general master planning purposes and for guidance in project evaluation and implementation. The estimated costs include the baseline costs plus 20 percent contingency allowance to account

for unforeseen events and unknown field conditions. Capital improvement costs include the estimated construction costs plus 30 percent project related costs (engineering design, project administration, construction management and inspection, and legal costs).

Final costs of projects will depend on actual labor and material costs, competitive market conditions, final project scope, implementation schedule, and other variable factors such as: preliminary alignments generation, investigation of alternative routings, and detailed utility and topography surveys.

8.4 Schedule for Planned Enhancements

8.4.1 Requirement

The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14.

8.4.2 Responsible Person

Director of Public Works

8.4.3 Compliance

The 2021 Master Plan includes a Capital Improvement Program (CIP) (Table 8.3), that includes a plan, schedule, and projected costs for capacity deficiency projects as well as lift station improvement projects. The City will monitor development trends and will review the CIP annually during the budgeting process and as needed.

8.0 SECAP - Key Performance Indicators (KPIs)		
KPI 8.1	Is gravity pipe capacity sufficient today and tomorrow?	*Measured by:* a. *Periodic review/update of land use agencies, general planning zone designations* b. *Periodic review of new construction development trends.* c. *Annual review of CIP Plan and Schedule to ensure implementation.* d. *Measured By: Review of SSS Response training records to evaluate demonstrated ability of staff.* e. *Model new development projects to ensure capacity and system impacts.*

9.0 MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

The City is dedicated to continuous improvement. Staff demonstrates this value by continually monitoring productivity and progress and taking steps to make incremental improvements to provide a high level of service. A part of this high level of service is reducing the impact of SSSs

9.1 Maintain Relevant Information

9.1.1 Requirement

The Enrollee shall maintain relevant information that can be used to establish and prioritize appropriate SSMP activities.

9.1.2 Responsible Person

Collection System Supervisor

9.1.3 Compliance

The City currently maintains paper records for maintenance activities and SSS Events. The City has selected a Computerized Maintenance Management System (CMMS) database and anticipates implementation by June 30th, 2023.

The data the City anticipates maintaining includes:

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

9.2 Measure Effectiveness

9.2.1 Requirement

The Enrollee shall monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP.

9.2.2 Responsible Person

General Manager of Utilities

9.2.3 Compliance

The City monitors and measures the effectiveness of each element of this SSMP, where appropriate, based on identified key performance indicators (KPIs). Performance indicators are listed in various elements of the SSMP. KPIs are reviewed annually to monitor effectiveness. The results are maintained in an annual report and this information is used during the next audit period. The SSMP will be updated as needed to ensure continuous improvement, system reliability and sustainability.

9.3 Assess Preventative Maintenance Program

9.3.1 Requirement

The Enrollee shall assess the success of the preventative maintenance program.

9.3.2 Responsible Person

Collection System Supervisor

9.3.3 Compliance

The City reviews and evaluates the various work programs annually to ensure goals are being met and intended outcomes are being achieved. Depending on the performance, resources can be reallocated from one work program to another to most efficiently implement the City's preventative maintenance program.

9.4 Update SSMP

9.4.1 Requirement

The Enrollee shall update program elements, as appropriate, based on monitoring or performance evaluations.

9.4.2 Responsible Person

General Manager of Utilities

9.4.3 Compliance

The City is continuously monitoring and evaluating its programs and performance of SSMP program elements and will update the SSMP on a five-year interval, in accordance with requirements, and when significant changes are made. Any of these actions will be approved by the City Council.

9.5 SSS Trends

9.5.1 Requirement

The Enrollee shall identify and illustrate SSS trends, including frequency, location, and volume.

9.5.2 Responsible Person

Collection System Supervisor

9.5.3 Compliance

The City analyzes SSS trends annually. The City looks at SSS trends in frequency, volume, location, category, material type, age of asset, and cause of SSS. This helps with planning efforts and allows for effective allocation of limited resources to reduce the impact of SSSs most effectively.

9.0 MONITORING - Key Performance Indicators (KPIs)		
KPI 9.1	Is SSMP in compliance and effective?	*Measured by annual review of KPIs*

10.0 SSMP PROGRAM AUDIT

10.1 SSMP Program Audits

10.1.1 Requirement

As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSSs. At a minimum the audits must occur every three years and a report must be prepared and kept on file.

10.1.2 Responsible Party

General Manager of Utilities

10.1.3 Compliance

According to the SSS WDR Section D.13.x, the objective of SSMP audits is to focus on evaluating the effectiveness of the SSMP and compliance with the SSMP requirements identified in the SSS WDR Order.

Compliance – First, the evaluation will determine if the City's SSMP addresses all the required elements. Second, the evaluation will determine if the City is implementing its SSMP. Any violations for non-compliance will be noted in the audit report and corrected in a timely manner.

Effectiveness – Where appropriate, key performance Indicators (KPIs) have been developed for each SSMP element to evaluate effectiveness. During the audit, the KPI's are assessed, and where appropriate, recommendations for improvement are made.

The results of the audit, including the identification of any deficiencies and corrective measures will be included in an Audit Report. A plan and schedule to address any deficiencies will be established. Any findings and related corrections that substantially change any of the elements of the SSMP will trigger an update to the SSMP, which will then be brought be the City Counsel for approval, followed by certification by the LRO.

10.0 SSMO AUDIT PROGRAM - Key Performance Indicators (KPIs)		
KPI 10.1	Is the SSMP being audited on prescribed schedule?	*Measured by review of audit timelines*
KPI 10.2	Is the SSMP being audited for compliance and effectiveness?	*Measured by review of KPIs*
KPI 10.3	Are updates and/or modifications being implemented?	*Measured by Annual Review of SSMP Change Log*

11.0 COMMUNICATION PROGRAM

11.1 Plan of Communication with the Public

11.1.1 Requirement

The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee's sanitary sewer system.

11.1.2 Responsible Person

General Manager of Utilities

11.1.3 Compliance

The City communicates with the public via direct mailings, the City website, social media, personal contact through the course of day-to-day operations and via the City's After-Hours Call Center.

a. Direct Mailings

The City occasionally mails brochures with FOG information to homeowners and to business customers regarding City services.

b. **City Web Site** (http://www.beaumontca.gov)

- The City's SSMP is posted on its website and can be used to communicate details of the SSMP implementation, FOG Control Program, and other wastewater related guidance.
- The website has several options for customers and stakeholders to contact the City staff. The City's Website includes Customer Service phone numbers for each City department.
- City Counsel agendas and minutes are posted on the website, which would include any actions taken by the counsel related to the SSMP.
- SSS reporting instructions are located on the City website. https://www.beaumontca.gov/1285/Sewer-Spills

d. Social Media

- The City has a presence on Facebook, which provides an avenue for customers and stakeholders to keep abreast of City activities and provide feedback or ask questions.

e. Personal Contact

- The City's collection crew responds to all SSSs and is the most common method of communication with home and business owners, regarding issues related to SSO' and their sewer service.
  - if a residential lateral is the cause of the SSS, then a copy of the City's private lateral sewer policy is given to the homeowner/resident/business owner and response staff provide an explanation of what needs to be done to correct the problem.
- The City's Pretreatment Services interacts with the commercial and industrial businesses, including restaurants. Inspections are conducted by the Environmental Compliance Manager at restaurants to ensure that grease interceptors, sewer laterals, and outdoor areas are properly maintained. The inspectors use the inspection as an opportunity to communicate laws, regulations, and policies that affect the industry or commercial business. These laws include the FOG program, NPDES Storm Water Permit requirements, and good housekeeping practices. The inspectors are able to deliver program information in the form of brochures and other printed material.

f. City's After Hours Call Center

- Customers and stakeholders can contact the City Police Department, during non-business hours, to report emergencies and other issues to the City's Police Department. Calls received are forwarded to appropriate response personnel.

g. Community Events

- The City periodically participates in community events, which provides opportunities to promote City programs.

11.0 COMMUNICATIONS- Key Performance Indicators (KPIs)		
KPI 11.1	Are SSMP activities available to the public?	*Measured by:* *a. Measured By: Review to ensure current SSMP is posted on the City's website.* *b. Measured By: Review of "Contact Us" postings on City's website for SSMP related comments or inquiries.* *c. Measured By: Review of City's website to ensure Council meeting agendas and minutes are posted.* *d. Measured By: Review Customer Service Requests for SSMP related implementation issues*