



CITY OF SOUTH SAN FRANCISCO
SEWER SYSTEM MANAGEMENT PLAN
(SSMP)



June 2014 (Revised)

Prepared by B.T.C.- Batis Training and Consulting
172 Randall Ave., Vacaville, CA. 95687

**City of South San Francisco
Sewer System Management Plan
(SSMP) Development Guide**

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City of South San Francisco Sewer System Management Plan

Introduction

System Overview

The City of South San Francisco, California occupies the valley formed by the San Bruno Mountains on the north and the Coast Range on the west. Most of the valley faces the San Francisco Bay offering sweeping vistas from higher elevations and a definite sense of identification with the Bay. The site for South San Francisco, "The Industrial City," was originally selected for the establishment of stockyards and as a marketplace for cattle. It was incorporated in 1908. Other industries followed over the years and the City has become a well-balanced community of industrial and residential areas. With approximately 2,250 acres of land devoted to manufacturing, wholesaling, transportation facilities, and utilities, the City is home to more than 3,200 firms and businesses. South San Francisco offers its 64,000 citizens' fine residential areas, mild winters, dry/cool summers, and a variety of recreational activities with many local parks, swimming pools, and marinas.

The City of South San Francisco maintains all of its Sewer/Storm system facilities and infrastructures. Secondary wastewater treatment is provided for the Cities of South San Francisco, San Bruno, and Colma along with the dechlorination treatment of chlorinated effluent for the cities of Burlingame, Millbrae, and the San Francisco International Airport prior to discharging the treated wastewater into San Francisco Bay.

SSMP Regulatory Background

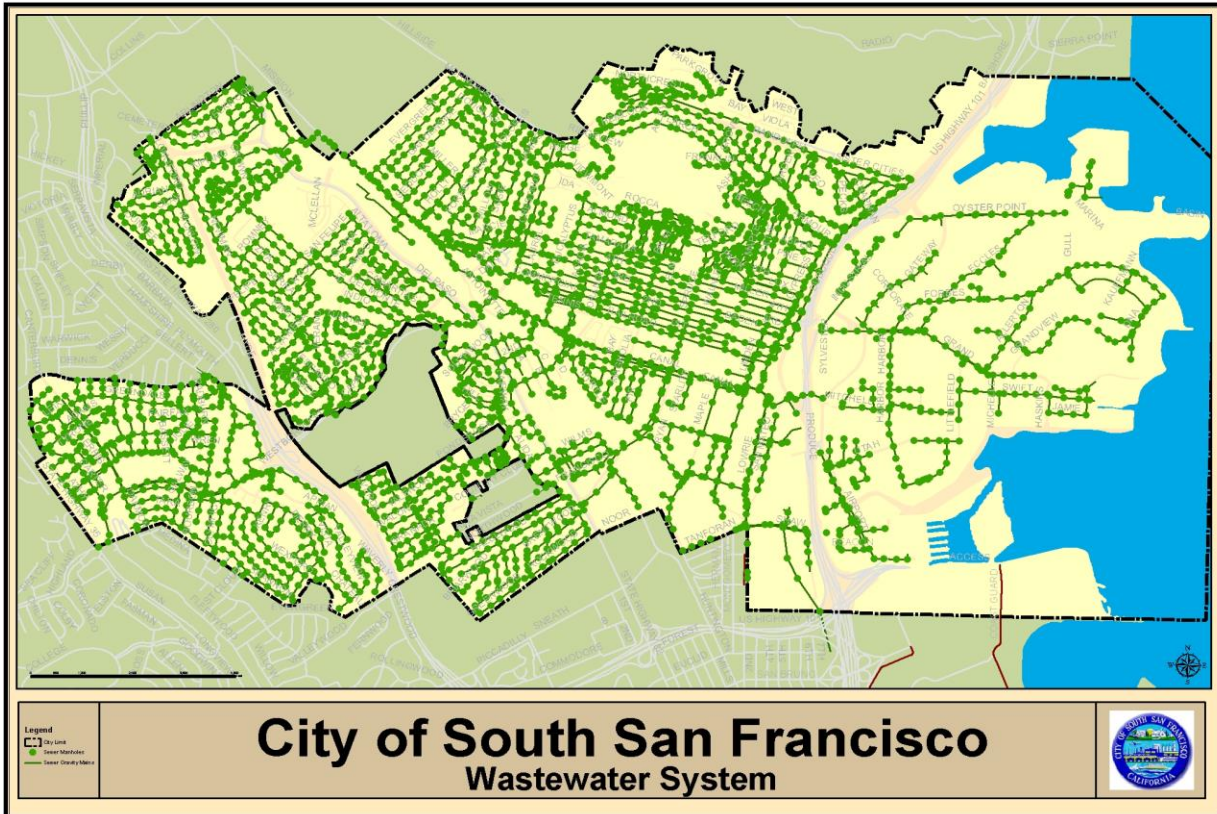
This Sewer System Management Plan (SSMP) is required under Waste Discharge Requirements (WDR) Order No. R3-2006-0003 DWQ, adopted by State Water Resources Control Board (SWRCB) and Order No. WQ 2013-0058-EXEC for Statewide General Waste Discharge Requirements and Sanitary Systems. The WDR stipulates that the permitted, must develop and implement a Management Plan in order to reduce Sanitary Sewer Overflows (SSO's). Additionally, the Management Plan provides for the implementation of measures to ensure efficient and effective response to overflows, and source control measures to minimize the introduction of grease and oils, and other materials that may cause blockages.

The SWRCB developed this WDR to promote uniformity in the management of California's collection system management that will benefit water quality and prolong the life of sanitary sewer systems.

The State Water Resources Control Board (SWRCB) may regulate sanitary sewer overflows based on authority in the Federal Clean Water Act (EPA 2002) and the Porter-Cologne Water Quality Control Act, Section 13263 (California Water Code of Regulation 2006).

The WDR under Section D.13.x states that a SSMP program audits must occur Bi-annual (minimum) and that a report must be prepared and kept on file. In addition the SSMP must be updated every 5 years. Compliance with the Statewide WDR means the components of this plan, must be presented and certified by the City of South San Francisco's City Council. The Sanitary Sewer Management Plan is a living document, intended to be routinely updated and amended as required, for best management of the Collection System.

Figure 1 - Location map showing City of South San Francisco Wastewater System



The SSMP includes 11 elements, as follows:

- I. SSMP Goals
- II. Organization
- III. Legal Authority
- IV. Measures and Activities
- V. Design and Construction Standards
- VI. Overflow Emergency Response Plan
- VII. Fats, Oils, and Grease Control Program
- VIII. System Evaluation and Capacity Assurance Plan
- IX. Monitoring, Measurement, and Program Modifications
- X. SSMP Program Audits
- XI. Communication Program

SSMP Development Plan and Implementation Schedule

The City of South San Francisco has developed an SSMP Development Plan and Implementation Schedule designed to address each mandated element of the SSMP and in accordance with the specified deadlines required in the WDRs. The SSMP Development forms have been submitted accordingly to meet GWDR deadlines (See Appendix A).

Appendix A – Submitted SSMP Development Forms

Form Name	Form Type	Completion Date
Notification Form to Indicate Receipt of Letter Requiring the Development of an SSMP	SSMP Form A	*First Submitted 8/31/05 *Revised June 2014
First Set of SSMP Elements <ul style="list-style-type: none"> ▪ Goals ▪ Organization ▪ Emergency Response Plan ▪ FOG Control Program 	SSMP Form B-1	* First Submitted 8/31/06 *Revised June 2014
Second Set of SSMP Elements <ul style="list-style-type: none"> ▪ Legal Authority ▪ Measures & Activities ▪ Design & Construction Standards 	SSMP Form B-2	* First Submitted 8/30/07 *Revised June 2014
Third Set of SSMP Elements <ul style="list-style-type: none"> ▪ Capacity Management ▪ Monitoring, Measurement, and Program Modifications ▪ SSMP Audits 	SSMP Form B-3	* First Submitted 8/27/08 *Revised June 2014

Element I – Goals

The purpose of the SSMP is to provide a plan and schedule to manage, operate, and maintain all parts of the sanitary sewer system. The primary objective of this Plan is to eliminate sanitary sewer overflows. The City has developed goals to reduce the frequency of sanitary sewer overflows and mitigate any SSOs that occur. The City seeks to provide high quality and cost-effective wastewater collection for its constituents by meeting these goals. The City of South San Francisco is committed to providing the resources necessary to maintain the sewer collection system and to implement this SSMP.

1.1 SSMP Goals

The following goals are herewith established by this SSMP:

- Properly manage and operate the City facilities to minimize SSOs.
- Implement regular, proactive maintenance of the system to remove roots, debris, and fats, oils and grease in areas prone to blockages that may cause sewer backups or SSOs.
- Provide adequate capacity to convey peak wastewater flows.
- Protect public health and safety.
- Perform all activities in accordance with established safety policies and practices.
- Protection of the bay waters and tributaries within the City's service area.
- Retain qualified employees who are well trained and certified in Collection System Maintenance.
- Uphold City's standards and specifications on newly constructed public and private sewers.
- Preserve the City's capital investment in the sanitary sewer system to assure maximum system service life.

Element II – Organization

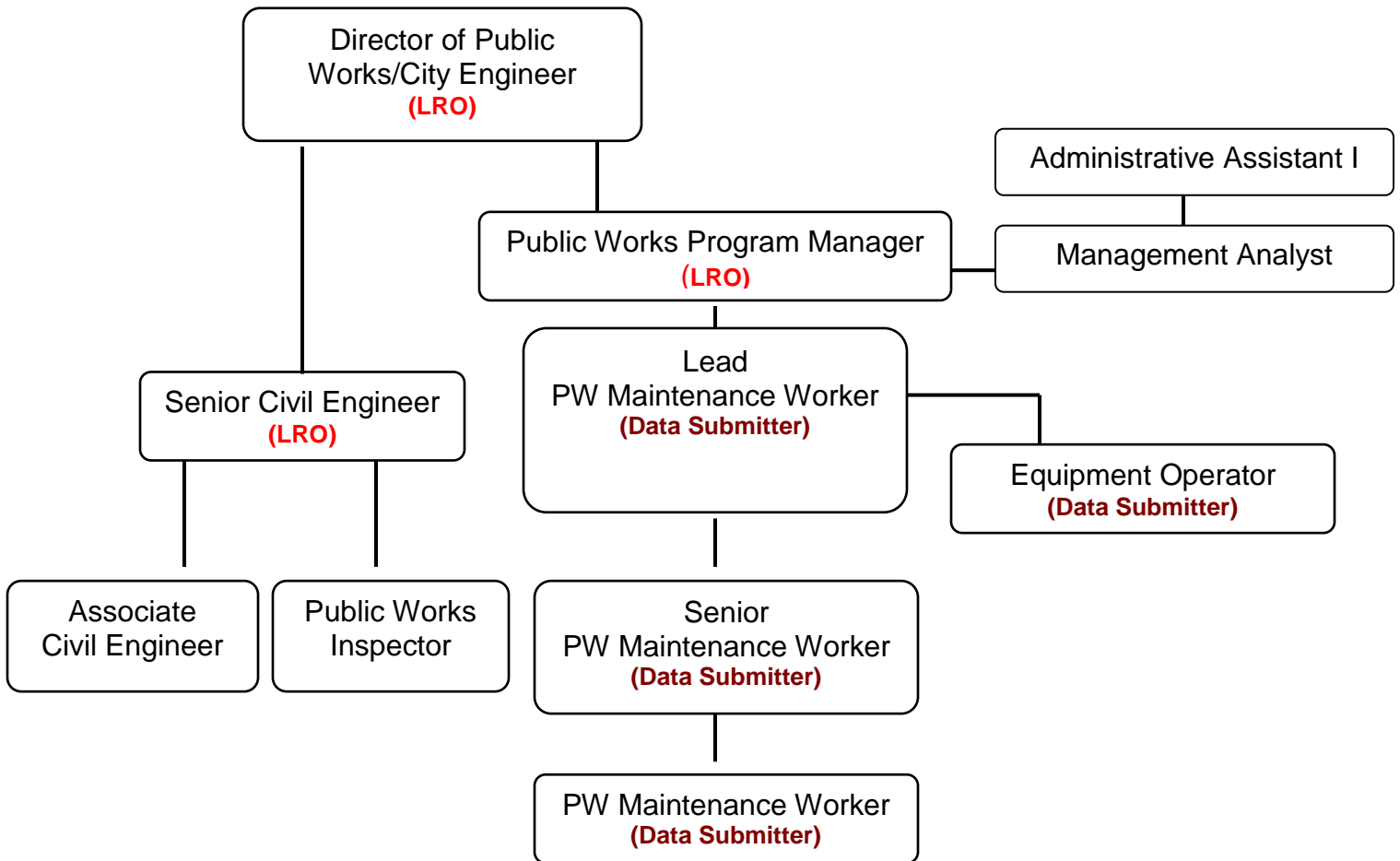
The intent of this section of the SSMP is to identify City staff responsible for implementing this SSMP, responding to SSO events, and meeting the SSO reporting requirements. This section also includes the designation of the Authorized Representative to meet SWRCB and WDR's requirements for completing and certifying spill reports.

2.1 City Organization

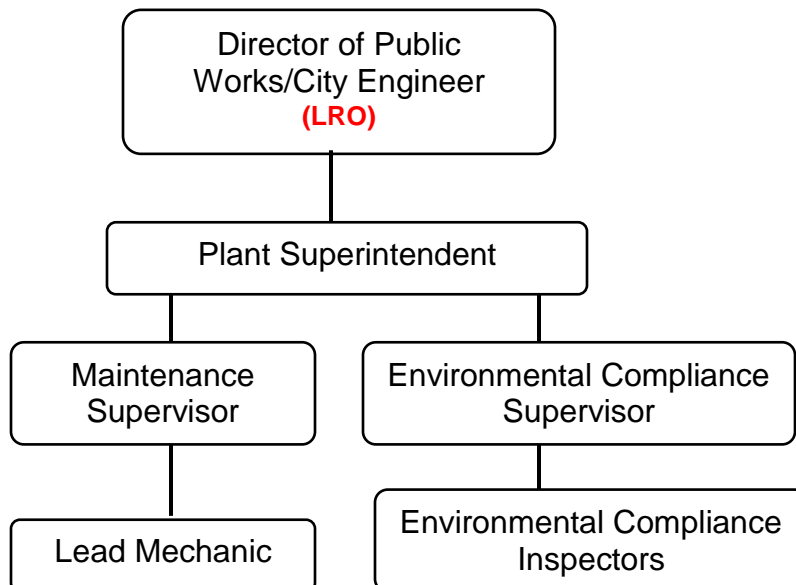
The City of South San Francisco is governed by a five (5) member City Council elected at large. Under the general direction of the City Manager the daily management of the sewer system is carried out by the Public Works Director/City Engineer and Public Works Program Manager who oversees the Public Works staff. Figure 1a below illustrates the City's organizational structure.

Figure 1a – Public Works Department Organization Structure

Engineering & Public Work Maintenance Divisions



Water Quality Control Division



2.2 Description of General Responsibilities of Public Works Personnel

Director of Public Works/Engineer

The Director of Public Works/Engineer is responsible for comprehensively planning, organizing, staffing, directing, controlling, reviewing and evaluating the activities of the department including streets, and fleet maintenance, as well as construction inspection, and water quality control plant operations; and does related work as assigned. The Director of Public Works is also a Legal Responsible Official (LRO). Under administrative direction, the City Engineer plans, directs, and manages the engineering division in connection with engineering design, construction, inspection, parking and traffic operations of public works projects and the Capital Improvement Program. The Public Works/City Engineer also a Legally Responsible Official.

Public Works Program Manager

The Program Manager of Public Works manages the activities and programs of the Public Works divisions; plans, organizes, and reviews the efficiency of the Wastewater Collection System and Public Works Maintenance functions; and does related work as required. The Program Manager of Public Works is also a Legally Responsible Official.

Administrative Assistant

The Administrative Assistant provides varied, complex, and confidential office administrative and secretarial support to a department head and related management, professional, and supervisory staff; the classification also provides office administrative support to the City Manager's Office; and does related work as required.

Management Analyst II

The Management Analyst II provides administrative, program, project, and budgetary support to a department; plans, develops, and carries out specific programmatic responsibilities related to the department to which assigned; analyzes departmental practices and procedures and makes recommendations for administrative and operational improvements; represents the department and the City in variety of meetings and presentations; and performs other duties assigned.

Senior Civil Engineer

The Senior Civil Engineer performs advanced professional engineering assignments on a wide range of municipal projects of a complex nature, including civil, sanitary, traffic, and other municipal public works, maintenance, and construction projects; serves as project manager on a variety of projects; supervises staff performing design, inspection, and surveying duties; and assists in the administration and supervision of the division. The Senior Civil Engineer is also a Legally Responsible Official.

Associate Civil Engineer

Under general direction, the Associate Civil Engineer performs difficult professional engineering work in the design and construction of public works, including sanitary, traffic, and mechanical projects; leads and trains lower-level engineering staff on assigned projects; and does related work as required.

Public Works Inspector

The Public Works Inspector inspects and participates in all phases of construction projects to ensure conformance with approved plans, specifications and departmental regulations; maintain records and prepares reports pertaining to projects inspected; and performs other related duties as assigned.

Lead Public Works Maintenance Worker

The Lead Public Works Maintenance Worker leads a crew and personally performs a variety of semiskilled and skilled tasks involved in the construction, maintenance, and repair of streets, sewers, storm drains, and related public works installations; participates in the more complex public works construction and repair work. The Lead Public Works Maintenance Worker is also a Data Submitter.

Senior Public Works Maintenance Worker

The Senior Public Works Maintenance Worker performs a variety of semi-skilled and skilled tasks in the construction, maintenance, and repair of streets, sewer mains, drainage structures, and related public infrastructure; operates light and moderately heavy power-driven equipment; leads and assists a small crew in carrying out assigned duties. The Senior Public Works Maintenance Worker is also a Data Submitter.

Public Works Maintenance Worker

The Public Works Maintenance Worker performs unskilled and semi-skilled tasks in the maintenance and construction of streets, sewers, storm drains, related public works installations; may provide limited direction to less experienced employees or to temporary and seasonal workers. The Public Works Maintenance Worker is also a Data Submitter.

Equipment Operator

The Equipment Operator operates a variety of construction and power-driven equipment including, but not limited to, graders, loaders, rollers, bobcats, water wagons, and backhoes; and performs related duties as assigned. The Equipment Operator is also a Data Submitter.

WQCP Plant Maintenance Supervisor

This classification has full supervisory responsibility for lift/or pump stations and Water Quality Plant (WQCP) maintenance. The classification has full administrative and fiscal responsibility for specific programs and/or projects; The incumbent performs professional level activities and the considerable latitude for independent decisions making in choosing methods of developing and implementing approved procedures.

Lead Plant Mechanic

The Lead Plant Mechanic organizes, leads, and personally assists a crew in performing a variety of semi-skilled and skilled mechanical maintenance and repair on a water quality control plant and pump station equipment and facilities.

Plant Mechanics

The Plant Mechanic performs a variety of semi-skilled and skilled mechanical maintenance and repair work on water quality control plant and pumping station equipment and facilities; and performs related work as required.

Environmental Compliance Supervisor

This classification is distinguished from all other technical level classifications through its responsibility for the supervision of treatment plant environmental compliance programs.

Environmental Compliance Inspectors

The Environmental Compliance Inspectors performs technical tasks in the inspection of industrial and commercial discharges to the sewer system for compliance with applicable laws and ordinances; performs chemical analyses, and coordinates the testing of individual waste samples with laboratory.

Element III – Regulatory Requirements for Legal Authority

The requirements for the Legal Authority of the SSMP are summarized below:

Regional Water Quality Control Board (RWQCB) Requirements

The City must demonstrate that it has the legal authority (through ordinances, service agreements, and other binding procedures) to control infiltration and inflow (I/I) from satellite collection systems and private service laterals; require proper design, construction, installation, testing, and inspection of new and rehabilitated d=sewers and laterals; and enforce violations of ordinances.

The SSMP should describe specific applicable legal mechanisms, with citations indicating the names and code numbers of ordinances. If legal authority does not currently exist for a required element, the SSMP should indicate a schedule of activities to obtain the proper legal authority.

State Water Resources Board (SWRCB) Requirements

The city must demonstrate, through collection system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

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

Water Quality Control Ordinance Chapter - 14.08.010

This chapter sets forth uniform requirements for direct and indirect contributors into the Publicly Owned Treatment Works (POTW) for the City of South San Francisco and enables the city to comply with all applicable State of California laws (Water Code Section 1300 et seq.) and federal laws required by the Clean Water Act of 1977 (33 U.S.C. Section 1251 et seq.) and the General Pretreatment Regulations (40 CFR, Part 403).

Wastewater discharge permits - 14.08.100

(a) It is unlawful to discharge without a permit in to any natural outlet within the city or into the POTW any wastewater except as authorized by the superintendent in accordance with the provisions of this chapter.

(b) All significant industrial users proposing to discharge wastewater to the POTW shall obtain a wastewater discharge permit from the superintendent before discharging to any public sewer. Moderate industrial users may be required to obtain a permit as deemed necessary by the superintendent.

(c) Users required to obtain a wastewater discharge permit shall complete and file with the city an application in the form prescribed by the city, accompanied by a fee as set forth in the city's master fee schedule. Proposed new users shall apply for a permit at least ninety (90) days prior to the date upon which any discharge will begin. Users shall be classified as residential, institutional, commercial, or industrial. In support of the application, the users shall submit, in units and terms appropriate for evaluation, the following information:

- (1) Name, mailing address, and location of use (if different from the address), business license number and expiration date;
- (2) SIC number according to the Standard Industrial Classification Manual;
- (3) Wastewater constituents and characteristics as determined by a reliable analytical laboratory. Sampling and analysis shall be performed in accordance with procedures established by the EPA pursuant to Section 304(g) of the Act (33 U.S.C. 1314) and contained in 40 CFR, Part 136;
- (4) Time and duration of discharge;
- (5) Average daily and thirty-minute peak wastewater flow rates, including daily, monthly and seasonal variations if any;
- (6) Site plans, floor plans, mechanical and plumbing plans and details to show all sewers, sewer connections, and appurtenances by the size, location and elevation;
- (7) Description of activities, facilities and plant processes on the premises including all materials which are or could be discharged;
- (8) Where known, the nature and concentration of any pollutants in the discharge which are subject to any pretreatment standards, and a statement, signed by an authorized representative of the use and certified to be a qualified professional, regarding whether or not the pretreatment standards are being met on a consistent basis and if not, whether additional operation and maintenance or additional pretreatment is required for the user to meet applicable pretreatment standards.
- (9) If additional pretreatment operation and maintenance will be required to meet the pretreatment standards the shortest schedule by which the user will provide such additional pretreatment. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard.

The following conditions shall apply to this schedule:

- (i) The schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable pretreatment standards (e.g., hiring

an engineer, completing preliminary plans, completing final plans, executing contract for major components, commencing construction, completing construction, etc.).

- (ii) No increment referred to in paragraph (i) of this subdivision shall exceed nine months.
- (iii) Not later than fourteen (14) days following each date in the schedule and the final date for compliance, the user shall submit a progress report to the superintendent including, at a minimum, whether or not it complied with the increment of progress to be met on such date and, if not, the date on which it expects to comply with this increment of progress, the reason for the delay, and the steps being taken by the user to return the construction to the schedule established. In no event shall more than nine months elapse between such progress reports to the superintendent.
- (10) Each product produced by type, amount, process or processes and rate of production;
- (11) Type and amount of raw materials processed (average and maximum per day);
- (12) Number and type of employees, hours of operation of plant and proposed or actual hours of operation of pretreatment system;
- (13) A baseline monitoring report (BMR) must be submitted, in compliance with, and containing all the information required by, 40 CFR 403.12 (b); and
- (14) Such other information as may be deemed by the superintendent to be necessary to evaluate the permit application.

The BMR, ninety-day (90) compliance reports, and periodic compliance reports for categorical industrial users must be signed by the appropriate official as specified in 40 CFR 403.12(1), and contain the certification statement in 40 CFR 403.6(a)(2)(ii).

14.08.110 Sewer design and construction

All new sewers and connections to new and existing sewers shall be properly designed and constructed to prevent inflow and in accordance with the Uniform Building Code then in effect and other applicable city ordinances. Any new connections from inflow sources into the POTW are prohibited. The applicant for a permit to construct sewers or connections shall furnish the chief building inspector with a copy of the wastewater discharge permit.

14.08.180 Monitoring facilities and programs

(a) The superintendent may require users to conduct and maintain monitoring programs as a means of controlling the quantity and quality of the discharge so that discharges comply with the provisions of this chapter. The monitoring program shall consist of test samples and analyses, the frequency and type of which shall be specified by the superintendent. Upon demonstrating to the superintendent that the user has the necessary qualifications and equipment to conduct the monitoring program or that the user has retained the services of a qualified consultant or laboratory so certified by the State Department of Public Health, the user may conduct this monitoring program. The user shall submit monitoring reports to the superintendent monthly unless the superintendent determines a different frequency for the periodic monitoring reports, in which case the superintendent shall specify the report frequency to the user by written notice, stating the reasons therefor. If the user fails, refuses or neglects to conduct and maintain the required monitoring program, or does not have qualified personnel and equipment therefore, or does not have the services of a qualified consultant or laboratory so certified by the State Department of Public Health, then the superintendent may establish a monitoring program with city personnel if available or with services of a qualified consultant or laboratory so certified by the State Department of Public Health, the cost of which shall be charged to the user and/or parcel owner.

(b) The city may be required to provide and operate at the user's own expense, monitoring facilities to allow inspection, sampling, and flow measurement of the building sewer and/or internal drainage systems. The monitoring facility should normally be situated on the user's premises, but the city may, when such a location would be impractical or cause undue hardship on the user, allow the facility to be constructed off-premises. There shall be ample room in or near such sampling manhole or facility to allow accurate sampling and preparation of samples for analysis. The facility, sampling, and measuring equipment shall be maintained at all times in a safe and proper operating condition at the expense of the user. The sampling and monitoring facilities shall be provided in accordance with the city's requirements and all applicable local construction shall be completed within ninety days following commencement.

(c) Monitoring and analysis to demonstrate continued compliance.

- (1) Except in the case of non-significant categorical users, the reports required by Section 14.08.170(a)(2), (a)(3), (a)(6) and (a)(11) shall contain the results of sampling and analysis of the discharge, including the flow and the nature and concentration, or production and mass where requested by the superintendent, of pollutants contained therein which are limited by the applicable pretreatment standards. This sampling and analysis may be performed by the city in lieu of the industrial user. Where the city performs the required sampling and analysis in lieu of the industrial user, the user will not be required to submit the compliance certification required under Section 14.08.200(e). In addition, where the city itself collects all the information required for the report, including flow data, the industrial user will not be required to submit the report.
- (2) The reports required in Section 14.08.170(a)(2), (a)(3), (a)(6) and (a)(11) must be based upon data obtained through appropriate sampling and analysis performed during the period covered by the report, which data are representative of conditions occurring during the reporting period. Grab samples must be used for pH, cyanide, total phenols, oil and grease, sulfide, and volatile organic compounds. For all other pollutants, 24-hour composite samples must be obtained through flow-proportional composite sampling techniques, unless time-proportional composite sampling or grab sampling is authorized by the superintendent. Where time-proportional composite sampling or grab sampling is authorized by the superintendent, the samples must be representative of the discharge. Using protocols (including appropriate preservation) specified in 40 CFR part 136 and appropriate EPA guidance, multiple grab samples collected during a 24-hour period may be composited prior to the analysis as follows: for cyanide, total phenols, and sulfides the samples may be composited in the laboratory or in the field; for volatile organics and oil & grease the samples may be composited in the laboratory. Composite samples for other parameters unaffected by the compositing procedures as documented in approved EPA methodologies may be authorized by the superintendent, as appropriate. In addition, grab samples may be required to show compliance with instantaneous limits.
- (3) For sampling required in support of baseline monitoring reports and 90-day compliance reports required by Section 14.08.170(a)(2) and (a)(5), a minimum of four (4) grab samples must be used for pH, cyanide, total phenols, oil and grease, sulfide and volatile organic compounds for facilities for which historical sampling data do not exist; for facilities for which historical sampling data are available, the superintendent may authorize a lower minimum. For the reports required by paragraphs (c),(f) and (k) of Section 14.08.170(a)(3), (a)(6) and (a)(11) , the user shall collect the number of grab samples necessary to assess and assure compliance with applicable pretreatment standards and requirements.
- (4) All analyses shall be performed in accordance with procedures established by the EPA pursuant to section 304(h) of the Act and contained in 40 CFR part 136 and amendments thereto or with any other test procedures approved by the EPA. Sampling shall be performed in accordance with the techniques approved by the EPA. Where 40 CFR part 136 does not include sampling or analytical techniques for the pollutants in question, or where the EPA determines that the part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analyses shall be performed using validated analytical methods or any other sampling and

analytical procedures, including procedures suggested by the superintendent or other parties, approved by the EPA.

- (5) If an industrial user subject to the reporting requirement in paragraph (c) or (o) of Section 14.08.170(a)(3) monitors any regulated pollutant at the appropriate sampling location more frequently than required by the city, using the procedures prescribed in paragraph 4 of this section, the results of this monitoring shall be included in the report.

14.08.200 Pretreatment compliance

- (a) Users shall provide necessary wastewater treatment as required to comply with this chapter and shall achieve compliance with all pretreatment standards within the time limitations specified by the EPA, State or the superintendent, whichever is more stringent. Any facilities required to pretreat wastewater to a level acceptable to the city shall be provided, operated and maintained at the user's expense. Detailed plans showing the pretreatment facilities and operating procedures shall be approved by the city before construction of the facility. The review of such plans and operating procedures will in no way relieve the user from the responsibility of modifying the facility as necessary to produce an effluent acceptable to the city under the provisions of this chapter or regulations promulgated by the superintendent in accordance with this chapter. Any subsequent changes in the pretreatment facilities or method of operation shall be reported to, and approved by, the city prior to the user's initiation of the changes.
- (b) The superintendent shall publish annually, in a newspaper of general circulation that provides meaningful public notice within the jurisdictions served by the POTW, a list of the users which, at any time during the previous twelve (12) months, were in significant noncompliance with applicable pretreatment standards and requirements as specified in 40 CFR 403.8 (f)(2)(vii) and additional requirements as specified below. The term significant noncompliance shall be applicable to all significant industrial users (or any other industrial user that violates paragraphs 1-13 of this Section) and shall mean:
1. Chronic violations of wastewater discharge limits, defined here as those in which sixty-six percent of all of the measurements taken for the same pollutant parameter during a 6- month period exceed (by any magnitude) a numeric pretreatment standard or requirement, including instantaneous limits, as defined by 40 CFR 403.3(1).
 2. Technical Review Criteria (TRC) violations, defined here as those in which 33 percent or more of all of the measurements taken for the same pollutant parameter during a 6-month period equal or exceed the product of the numeric pretreatment standard or requirement including instantaneous limits, as defined by 40 CFR 403.3(1) multiplied by the applicable TRC (TRC= 1.4 for BOD, TSS, fats, oil and grease and 1.2 for all other pollutants except pH).
 3. Any other violation of a pretreatment standard or requirement as defined by 40 CFR 403.3(1) (daily maximum, longer term average, instantaneous limit, or narrative standard) that the POTW determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of POTW personnel or the general public).
 4. Any discharge of a pollutant that has caused imminent endangerment to human health, welfare, or to the environment or has resulted in the POTW's exercise of its emergency authority under Section 14.08.450 to halt or prevent such a discharge.
 5. Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a wastewater discharge permit or enforcement order for starting construction, completing construction, or attaining final compliance.
 6. Failure to accurately report non-compliance.
 7. Failure to provide within 45 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules.

8. Prohibited discharges that create a fire or explosion hazard, including waste streams with a closed cup flash point of less than 140⁰ F (60⁰ C).
 9. Prohibited discharges of petroleum oil, non-biodegradable cutting oil, or products of mineral origin in amounts that cause interference or pass through.
 10. Prohibited discharges that result in toxic gases, fumes, or vapors in a quantity capable of causing worker health and safety problems.
 11. Prohibited discharges having a temperature which inhibits biological activity in the POTW resulting in interference.
 12. Prohibited discharges of wastes or wastewater containing any radioactive material, except in compliance with applicable State and Federal regulations.
 13. Any other violation or group of violations that the superintendent determines will adversely affect the operation or implementation of the city's pretreatment program.
- (c) All records relating to compliance with pretreatment standards shall be made available to city, state and federal officials upon request.
- (d) The city may seek injunctive relief for noncompliance by industrial users with pretreatment standards and requirements, and may seek additional penalties pursuant to 40 CFR 403.8 (f)(1)(vi)(A).
- (e) Certification Statements
1. Certification of Permit Applications, User Reports and Initial Monitoring Waiver. The following certification statement is required to be signed and submitted by users submitting permit applications in accordance with Section 14.08.100; users submitting baseline monitoring reports under Section 14.08.170(a)(2); users submitting reports on compliance with the categorical pretreatment standard deadlines under Section 14.08.170(a)(5); users submitting periodic compliance reports required by Section 14.08.170(a)(3), and users submitting an initial request to forego sampling of a pollutant on the basis of Section 14.08.190(d) The following certification statement must be signed by an authorized representative as defined in Section 14.08.030:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
 2. Annual Certification for Non-Significant Categorical Industrial Users. A facility determined to be a non-significant categorical industrial user by the superintendent pursuant to Sections 14.08.030 must annually submit the following certification statement signed by an authorized representative. This certification must accompany an alternative report required by the superintendent:

Based on my inquiry of the person or persons directly responsible for managing compliance with the categorical Pretreatment Standards under 40 CFR _____, I certify that, to the best of my knowledge and belief that during the period from/to[months, days, year]:

- (a) The facility described as [facility name] met the definition of a Non-Significant Categorical Industrial User as described in Section 14.08.030;
- (b) The facility complied with all applicable Pretreatment Standards and requirements during this reporting period; and (c) the facility never discharged more than 100 gallons of total categorical wastewater on any given day during this reporting period.

This compliance certification is based on the following information:

- 3. Certification of Pollutants Not Present. Users that have an approved monitoring waiver based on Section 14.08.190(d) must certify on each report with the following statement that there has been no increase in the pollutant in its waste stream due to activities of the User. Based on my inquiry of the person or persons directly responsible for managing compliance with the Pretreatment Standard for 40 CFR _____ [specify applicable National Pretreatment Standard part(s)], I certify that, to the best of my knowledge and belief, there has been no increase in the level of _____ [list pollutant(s)] in the wastewaters due to the activities at the facility since filing of the last periodic report under Section 14.08.170(a)(3).

14.08.400 Authority of superintendent

- (a) The superintendent has the authority to enforce compliance with the provisions of this chapter, and to promulgate regulations designed to assist in achieving compliance.

14.08.420 Notice of violation

Whenever the source control inspector finds that any user has violated or is violating the provisions of this chapter, the inspector may serve upon such user a written notice stating the nature of the violation. Within forty-five (45) days of the date of the notice, a plan for the satisfactory correction thereof shall be submitted to the city by the user.

14.08.490 Damage, obstruction or impairment to facilities

Any person who intentionally or negligently damages, obstructs or otherwise impairs a public sewer, water quality control plant or appurtenance thereto shall be liable for such action and the city may assess the costs of repair against such person, or seek reimbursement through a court action.

Element IV- Measures and Activities

Operations and Maintenance

This section of the SSMP discusses the City's operations, maintenance and other related measures and activities.

4.1 Collection System Map

The City has developed an up-to-date GIS database and maps of its wastewater collection system. The majority of the existing wastewater collection system has been mapped and data collection for asset management. Maps of the wastewater service areas and collection systems are shown in Figure 1 on page 6 of this document. The City has field map books as well as maps of their sewer and storm drain systems in Geographic Information System (GIS) electronic format. The field maps are based on information collected in the field and once reviewed by the Program Manager for approval is then forwarded to the Information System (IT) Specialist to update City's GIS files of the sewer system, which contain some system data, including pipe upstream and downstream manholes, pipe diameter, pipe material pipe length, pipe slope, and location (street or easement). The GIS database files were originally created from field data collections, as-built drawings and from a Computerized Maintenance Management System (CMMS) utilizing Cityworks software to manage both physical

infrastructure and land-focused asset management. Our Computer Maintenance Management System tracks maintenance activities, service request, work orders, SSO's history, sewer line cleaning, sewer line and manhole spot repairs, sewer line Closed Circuit Television (CCTV) inspections, gravity and force main infrastructure, sewer line rehabilitation and replacement projects all through our CMMS (Cityworks), GIS, and Micro Soft Applications (Excel, Work, Access). In addition the pump station condition assessments of pump station repair projects and all operations and maintenance is managed through MP2 Maintenance Software (CMMS) and Microsoft Applications. Pump station attributes and Standard Operating Procedures (SOP's) are housed in the City's GIS mapping system and monitoring is performed by SCADA (Supervisory Control and Data Acquisition System). When errors are discovered on the maps, the error is noted on a printed copy of the Field book map page and a work order is generated. Pages with errors are reported to the Public Works Program Manager and all updates are made to the GIS and field map books. The City plans to have an annual Capital Improvement Program (CIP) project to update the GIS and CMMS yearly.

4.2 Resources and Budget

The City of South San Francisco funds sewer system services, including operations, maintenance, and capital projects, through a sewer enterprise fund. This fund is structured as follows;

1. Non-Major Governmental Funds: East of 101 Sewer Impact Fee Fund – Accounts for fees paid by developers used to fund capital expenditures that improve the sewer infrastructure in the areas where new business development has shown a need for an improved sewer system.
2. Major Government Funds: Capital Improvement Fund – Accounts for revenues and expenditures associated with the acquisition, construction, or improvement of City owned facilities and infrastructure. Funding comes from the General Fund, Special Revenue Funds, grants and fees.
3. Proprietary Funds: Sewer Enterprise Fund – Accounts for user charges supporting the operation, maintenance, and capital renovation of the wastewater collection and treatment system. The City co-owns and operates a regional treatment plant with the City of San Bruno.
4. Non – Major Proprietary Funds: Sewer Capacity Charge Fund – Accounts for revenues paid by users for first time connections to the sewer system or by users who increase their sanitary sewage use through facility expansion. Charges are generally paid when building permits are issued.

4.3 Prioritized Preventive Maintenance/Schedule Inspections/Condition Assessment

The collection system for the City of South San Francisco has been maintained on a routine cleaning schedule for all sewer line segments for decades. More recently with the advent and implementation of new software those schedules are better defined. During normal daily cleaning operations, staff collects data which is downloaded into our Computer Maintenance Management System (CMMS), Cityworks and then reviewed by the Public Works Program Manager. This CMMS tracks maintenance activities, service requests, work orders, sanitary sewer overflow history, sewer line cleaning, sewer line and manhole spot repairs, sewer line CCTV inspections, gravity and force mains, and sewer line rehabilitation and replacement projects which are then maintained in Cityworks and our GIS mapping system. Segments which are more problematic receive greater attention. Although the City has always maintained a quarterly, 6 month, and annual jet cleaning schedules for "Hot Spots" this system has been improved and refined.

Our Hot Spot Cleaning Work Plan (HSCWP) consists of identifying system pipeline problems and incorporating the best methodology to prevent any sanitary sewer overflows. The main purpose of our City's preventive maintenance sewer cleaning and HSCWP program is that it maintains the hydraulic capacity of the sewer system. This permits the system to operate at the intended design flow since there are no restrictions to cause a collection of debris which could result in a stoppage, sanitary sewer overflow or backup. In addition to enhancing performance of the system, a well-defined preventive and proactive sewer maintenance program has assisted our agency's asset management program by:

- Lowering operation & maintenance costs
- Extending the useful life of the gravity sewer system
- Lowering repair, rehabilitation, and replacement costs

Our sewer cleaning is performed on a regularly scheduled basis, however, unless the cleaning schedule is adjusted to take into account the actual conditions in various parts of the collection system pipelines, routine cleaning can result in over or under maintenance of the system. In our wastewater collection systems, some sections do not require frequent cleaning, while other sections susceptible to blockages may require more frequent cleaning. Our wastewater collection system has preventive maintenance sewer cleaning in place and an HSCWP program based on the actual condition of the sewer line segments and observations made by the cleaning crews during cleaning events. For example, information obtained during CCTV inspections of sewer line segments is used to help identify defects and chronic problem areas in the gravity sewer.

Cleaning is either scheduled or unscheduled. Scheduled cleaning is preventive and proactive cleaning since it is done on a preventive basis to remove material prior to a stoppage occurring. Our scheduled maintenance program is based on a calendar time frequency, usually based on historical data. Additional cleaning may be required as-needed in cases where predictive information such as previous history; inspection data; pipe age, material, and slope; or other information indicates a need for more frequent sewer cleaning. This approach tends to minimize the cleaning of an already clean main line. All attributes such as pipe age, pipe material, and stoppages are provided on maps for use as a planning and scheduling tool. As seen in the attached spreadsheets, the quarterly, 6 months and yearly schedules are done at specific locations for the following reasons:

Quarterly

For lines which have had recent history involving blockages and areas that are susceptible to abuse from commercial lateral lines. In the event of these lines not being cleaned (jetting, rodding, etc.) within every 5 to 6 months, blockages would re-occur. Also included in this group are structural problems awaiting final repair.

6 Months Schedule

For lines which have history of blockages due to tree roots and also those that have transitioned from the quarterly schedule that contain low flow lines tending to allow sediment to settle out and that require additional flow.

Yearly Schedule

For lines which are in transition back to the routine schedule.

Unscheduled cleaning is usually the result of a reported stoppage and is therefore reactive. Normally, this type of cleaning is done on an emergency basis to clear a stoppage, restore pipe capacity to full flow, or relieve a sewer surcharging situation that has caused an overflow or a backup into private properties. Sewer line segments in the City's routine and hot spot cleaning programs are programmed into the Cityworks program. The City uses the Cityworks program to generate sewer cleaning work orders for the cleaning crews. A sample of the type of information is provided as Figure 2 below.

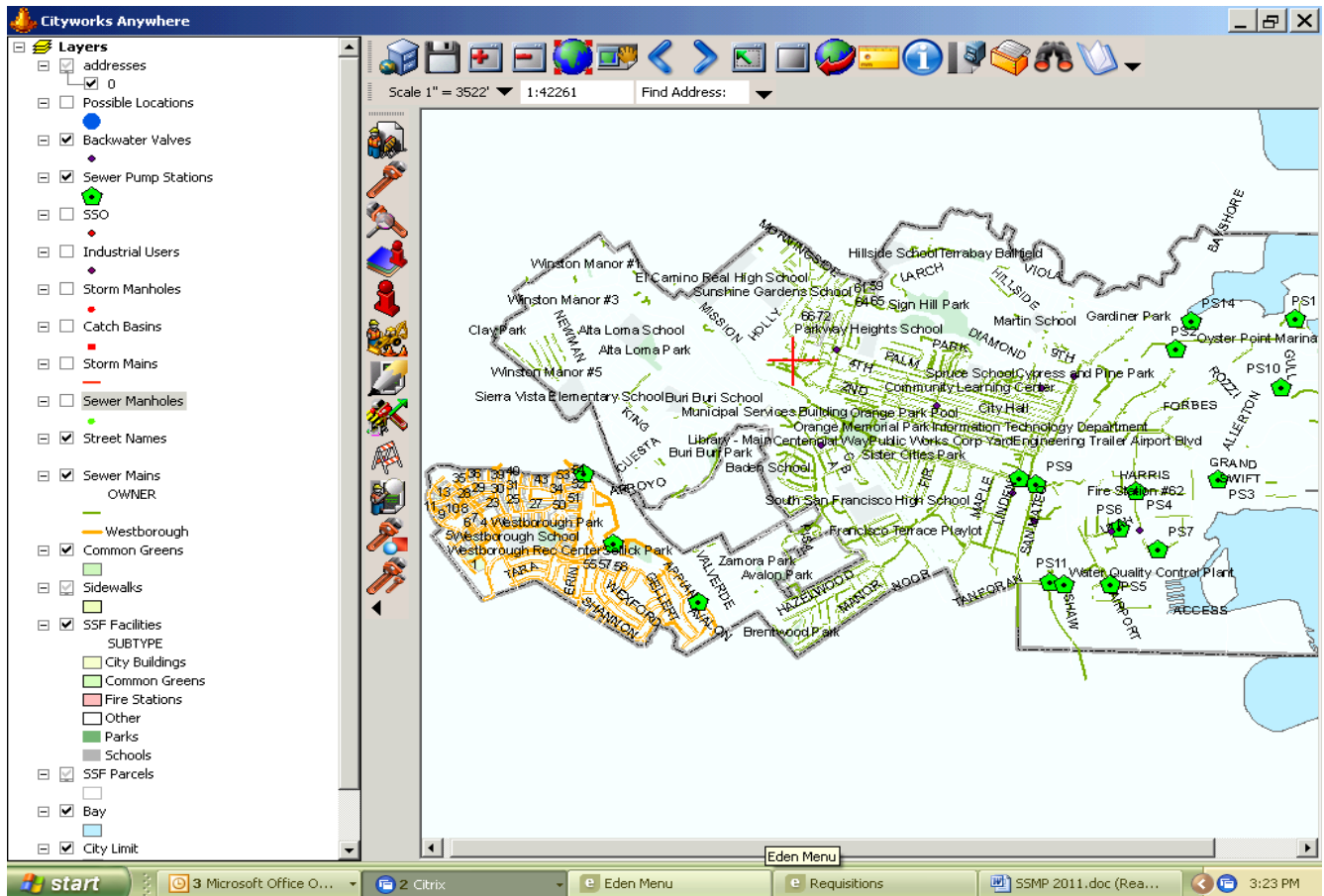


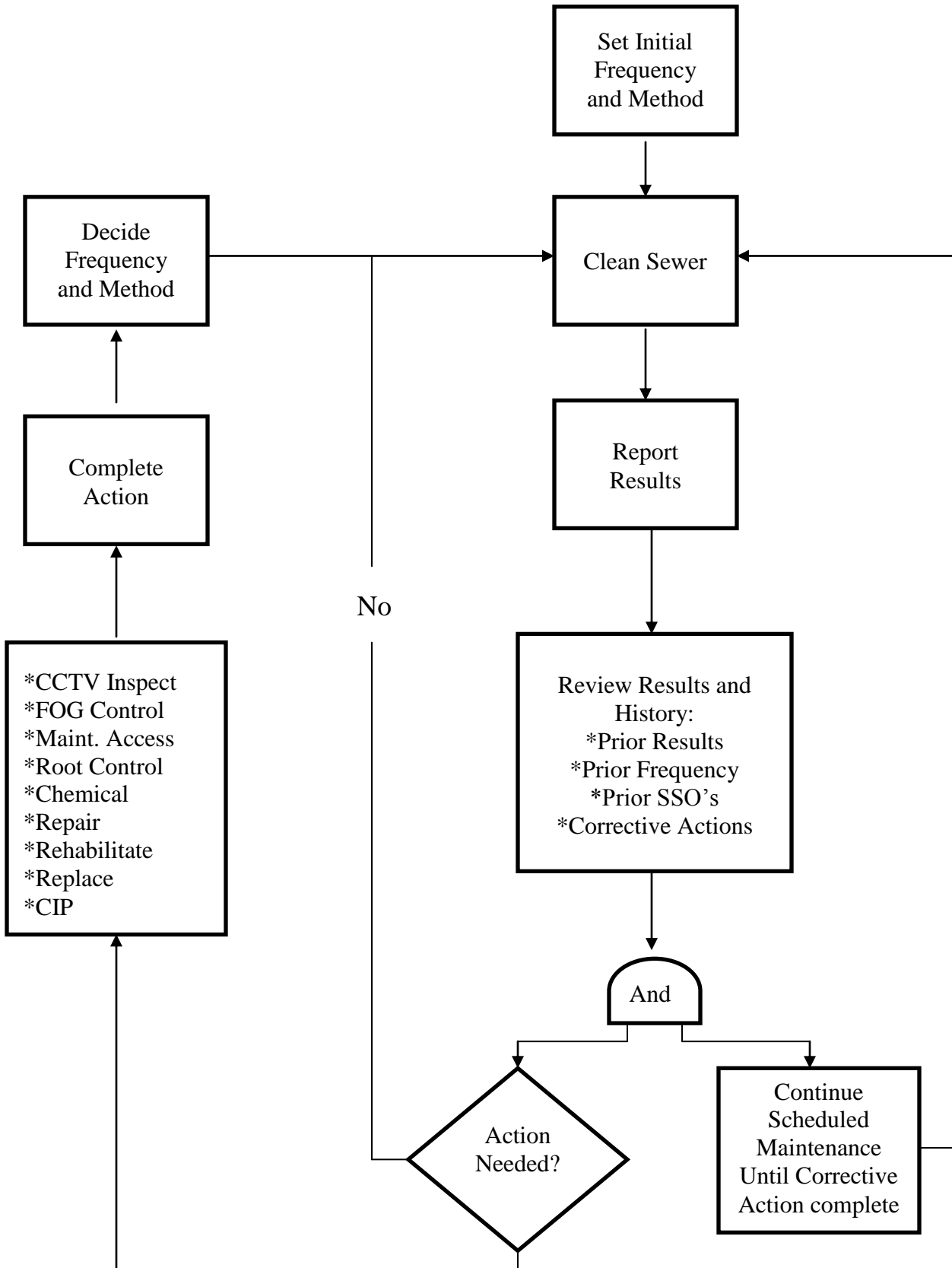
Figure 2 – Sample Cityworks Screen Showing City

Line segments found to be in need of more frequent cleaning based on observations made by the City's sewer cleaning crews are scheduled for more frequent cleaning in the year consistent with the need determined by the Program Manager in accordance with the following sewer cleaning matrix. These categories are used as a guide in assessing the maintenance conditions of locations throughout the City. These categories are used as a guide in assessing the maintenance conditions of locations throughout the City.

Figure 3 – Sewer Cleaning Matrix

	CLEAR	LIGHT	MODERATE	HEAVY
DEBRIS	No observable debris	Minor amount of debris *J-1 pass	Moderate amounts of debris *J-2 pass	*Significant amounts of debris *J-3 pass *CCTV Condition Assessment
GREASE	No observable grease	Minor amounts of grease *J-1 pass	Small "chunks" No "logs" *J-2 pass	*Big "chunks" or "logs" *J-3 pass *CCTV Condition Assessment *Directed to Environmental Enforcement Inspector
ROOTS	No observable roots	Minor amounts of roots *J-1 pass	Thin stringy roots No "clumps" *J-2 pass	*Thick roots *Large "clumps" *CCTV Condition Assessment *Chemical Root Control *Repair or replace *CIP review
DEBRIS: Structural pipe fragments, soil, rock, etc.	No observable materials	Specify material (if possible) Minor amounts of material	Specify material Moderate amounts of material per line segment	Specify material *Significant amounts of material per line segment. *CCTV Condition Assessment *CIP review
ACTION	Decrease frequency to next lower frequency after 3 consecutive results (e.g. 6 months to 12 months)	Continue current maintenance frequency	Increase maintenance frequency as necessary (e.g. 6 months to 3 months, or more frequently if necessary)	Increase maintenance frequency as necessary (e.g. 6 months to 3 months or more frequently if necessary)

**CITY OF SOUTH SAN FRANCISCO
PREVENTIVE MAINTENANCE SCHEDULING FLOW CHART**



Changes in cleaning frequency based upon cleaning results shall be as follows:

- (a) No reduction in cleaning frequency shall be made in a Sewer Line Segment with a previous history of SSOs without the approval of the Public Works Supervisor.
- (b) Three (3) consecutive results of “clear” will cause the cleaning frequency to be reduced to the next lower cleaning frequency;
- (c) Results of “moderate” to “heavy” will cause the cleaning frequency to be increased to the next highest frequency, if any, if the Sewer Line Segment is already part of the Hot Spot Cleaning Program.

Main Sewer Line Segments shall be added to the Hot “Spot Cleaning Program based on the findings from any CCTV Condition Assessment using the City’s system of Defect Codes and Ratings. Any Sewer Line Segments with a condition assessment rating of “Medium” or “Heavy” for roots, grease, or debris will be added to the Hot Spot Cleaning Program. A Sewer Line Segment with a condition assessment rating of “Medium” for roots, grease or debris will be added at a six (6) months cleaning frequency. A Sewer Line Segment with a condition assessment rating of “Heavy” for roots, grease, or debris will be added at a three (3) months cleaning frequency.

A quality assurance/quality control program (“QA/QC Program”) is utilized to spot-check the cleaning quality in a minimum of two (2) Sewer Line Segments of the cleaned sewer on a monthly basis using our CCTV to ensure adequate cleaning. If the cleaning is found to be inadequate, the Sewer Line Segment will be re-cleaned within thirty (30) days. If one (1) of the spot-checked Sewer Line Segments requires re-cleaning in any given month, the spot-checking of the system will be increased to five Sewer Line Segments of sewer lines cleaned. Where spot-checking of the system has increased to five Sewer Line Segments no reduction in spot checking will occur until three (3) consecutive months of re-cleaning was required of any of the Sewer Line Segments inspected. If a required inspection frequency increase is prompted by cleaning problems attributed to a single crew, the increased inspection schedule will only apply to that crew.

If routine sewer cleaning or hot spot cleaning of a Sewer Line Segment or areas cannot be properly accomplished due to the sewer line’s condition or access limitations, the condition of the segment shall be considered failing, and placed into the Spot Repair Program and replaced/repared. That segment will be repaired within one hundred twenty (120) days of discovery of the sewer defect, or in the event a permit or permission from a third party is required to repair the Sewer Line Segment, within one hundred twenty (120) days of obtaining the necessary permits or permission. The Sewer Line Segment shall be repaired in a manner sufficient to allow that segment or area to be effectively cleaned.

Manhole Inspection

As part of the focused and cyclic cleaning programs, City maintenance staff visually inspects manholes for corrosion, debris or damage around the base, cracks or holes, and condition of manhole steps.

Manhole inspection data is collected with GPS devices and recorded in our CMMS and GIS mapping system.

Pipeline Inspection

The Public Works Department owns a mainline CCTV system with mini service lateral camera for performing closed circuit television (CCTV) inspections. The Public Works Department have incorporated a procedure for conducting CCTV inspections on 20 percent of the collection system each year, resulting in a complete inspection over a five-year period. Priority will be given to those lines that have had historical problems or have recently backed up. Results of the CCTV inspections would be used to determine low, medium, and high areas of concern within the collection system, increase cleaning efforts and develop CIP’s to correct the areas of concern where practical.

Investigation of Customer Complaints

The City responds to customer complaints about sewer service. Complaints are generally related to sewer stoppages, overflows, or odors. Response is performed by the collection system staff during work hours and the standby worker during after hours. Response includes assessing the complaint and resolving the problem. The majority of the complaints are related to stoppages. During work hours, a cleaning crew is diverted to remove stoppages. Most of the stoppages occur in laterals. Although crews respond to all stoppage complaints, they are not responsible for clearing stoppages in laterals located on private property. The City's initial response time goal is 30 minutes. During non-work hours, the City has staff on standby to address complaints.

Pump Station Condition Assessments

City sewage pump stations are inspected daily (Monday – Friday) for operational capability. All required preventative maintenance activities are scheduled and tracked using eRPortal Computer Maintenance Management System software. Other unscheduled maintenance is tracked using employee generated work orders. All 13 Sewage pump stations are monitored by radio telemetry/(SCADA) and a phone alarm dialer pager systems with communicates with the City's Water Quality Control Plant.

Pump Stations Data is as follows:

- ✓ Year of Construction - All new information or system changes will be entered into our CMMS as needed/or on the regular basics.
- ✓ Status of Mechanical and Electrical Components - Equipment Status is listed in the Pump Station Inspection Logs and on SCADA
- ✓ Spare Parts Inventory - A Spare Parts Inventory is being generated and will be an ongoing process.
- ✓ Availability of backup power and pumping capabilities - This information is available at each pump station and also noted in the current pump station
- ✓ Standard Operating Procedures (SOP).
- ✓ Wet Well Storage Capacity - Information is on file in current pump station (SOP).
- ✓ Average and Peak Flow - Not all pump stations have flow meters installed - Calculated flow data are taken from motor run hours on pump stations with fixed speed pumps and pump/wet well draw down testing and other methodology for testing pumping effectiveness.
- ✓ Maintenance and Repair History - Information is available in our CMMS system. All the Preventative Maintenance Work Orders and employee generated work orders activities are tracked and stored in our CMMS. Any known structural defects are noted and scheduled for corrective action.

Pump Station Preventive Maintenance/Inspections

The City's Pump Stations are inspected daily (Mon - Fri) and continuously monitored at the Water Quality Control Plant via SCADA and a phone alarm dialer pager system. All pumps at each pump station are tested on a routine basis for functionality and pump capacity. Water Quality Control Plant maintenance staff performs daily, weekly, monthly, quarterly, semi-annually, and annually inspections on all pump stations. The City's maintenance program consist of Preventative Maintenance Work Orders, Employee Generated Repair Work Orders, Daily Inspection Logs, Standby Power Generator Logs, and Motor Run Hour Logs. Pump Stations SOP's are reviewed for accuracy and completeness. Force Mains are periodically tested for capacity using the maximum pumping capabilities of their associated pump stations.

Training

City field crews are trained on a regular basis on use of the sewer cleaning equipment, methods for flushing the sewer system, work safety, permitting requirements and emergency response procedures. General tailgate safety meeting are held weekly. Updates regarding the sewer system are generally announced at these meetings. The City has staff that holds certifications in the following

areas: Pipeline Assessment Certification Program (PACP), NPDES National Inspector Certification, CWEA Collection System Maintenance Grade I through IV, Environmental Compliance Inspector Grade I through IV, Mechanical Technologist Grade I through IV and Laboratory Analyst Grade I through 4.

The City budgets for training its sewer maintenance staff each year, and the Maintenance Division has an extensive training program and will continue to review its training program to meet the demands of maintaining the sewer system.

The City encourages sewer staff to become California Water Environmental Association (CWEA) certified providing training opportunities to enable all sewer maintenance staff to become and remain certified is a goal of the City. The City assists with certification by paying for preparation courses, certification exams, and required continuing education. The City also provides training tapes and manuals for employees for both work and home study. As nearly all of the City's current sewer maintenance staff are certified. The current focus is on continuing education to maintain certification. The City currently has employees that holds wastewater certifications and certificates with the following organizations; State Water Resources Control Board, CWEA, and NASSCO (National Association of Sewer Service Companies).

The City uses numerous outside programs, as well as providing in-house and on-the-job training for sewer maintenance crews. Training programs and resources utilized by the City are listed below:

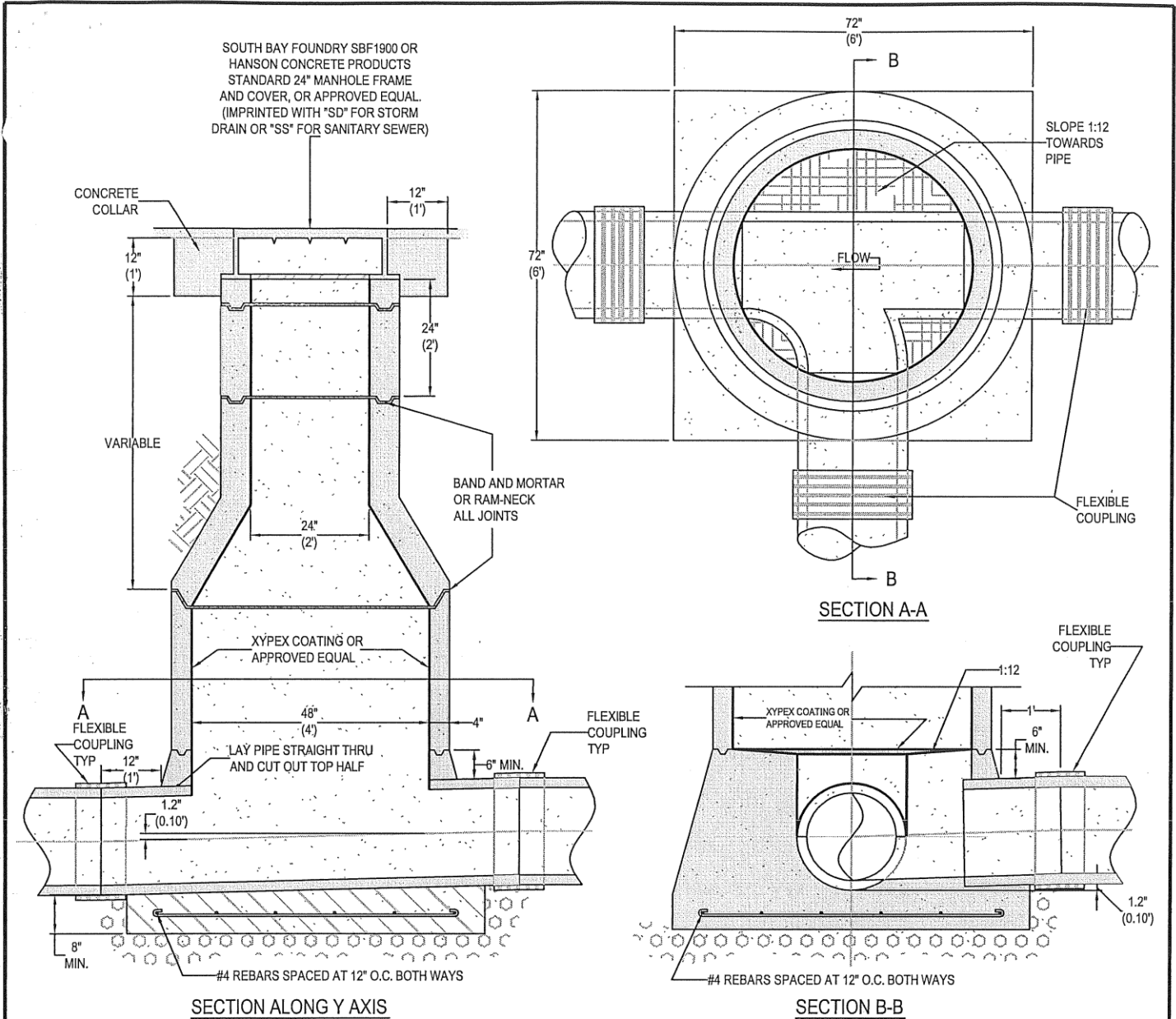
- State Water Resources Control Board
- Safety Compliance Management Inc.
- CWEA (California Water Environmental Association).
- ABAG (Association of Bay Area Governments).
- APWA (American Public Works Association).
- Maintenance Superintendent Association
- Vendor sponsored training
- B.T.C. – Batis Training and Consulting
- In-house training by Program Manager and lead worker
- Safety tailgate meetings by experienced staff or vendors

For in-house training the City uses the Operation and Maintenance of Wastewater Collection Systems (Office of Drinking Water Programs, Sacramento, CA). All field training is supervised by an experienced certified operator. New employees and operators work with an experienced senior operator until they can demonstrate competency in each skill set. Though the training listed is mainly for the maintenance crews, occasionally the training sessions are attended by the engineering crews, occasionally the training sessions are attended by the engineering staff as well.

Element V – Design and Construction Standards

5.1 Standards for Public Improvements January 2009, City of South San Francisco Drawings. See following pages for drawings of Precast Manhole (Drawing No. D-1), Sewer Laterals (Drawing No. SS-1), Sewer Lateral Cleanout (SS-2), and Sewer Lateral Replacement at Crossing (Drawing No. SS-3)

D-1 Precast Manhole



NOTES:

1. BASE AND COLLAR SHALL BE CLASS "B" (5-SACK) CONCRETE PLACED AGAINST UNDISTURBED EARTH OR APPROVED BACKFILL MATERIAL COMPACTED TO 95% RELATIVE DENSITY.
2. PRECAST BARREL AND CONE SECTIONS SHALL CONFORM TO ASTM C-478 SPECIFICATIONS.
3. MANHOLE FRAME SHALL MATCH EXISTING GRADE AFTER PAVING.
4. MORTAR JOINTS SHALL USE A MIX OF TWO PARTS SAND AND ONE PART CEMENT.
5. FOR SANITARY SEWER MANHOLES, BAND AND MORTAR ALL JOINTS PRIOR TO WATER PROOFING. FOR ALL MANHOLES, RAM-NECK ALL JOINTS.
6. WATER PROOFING SHALL BE DONE ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
7. NO CONCRETE SHALL BE PLACED PRIOR TO INSPECTION BY THE CITY CONSTRUCTION INSPECTOR. MANUFACTURED FITTINGS SHALL BE UTILIZED TO PROVIDE FOR UNIFORM SWEEP AND TRANSITION FOR LATERALS OR INTERSECTING MAINS.
8. CONSTRUCT A DROP ACROSS MANHOLE OF 0.10 FEET WHERE POSSIBLE WHEN LINE BENDS OR PIPE DIAMETER CHANGES.



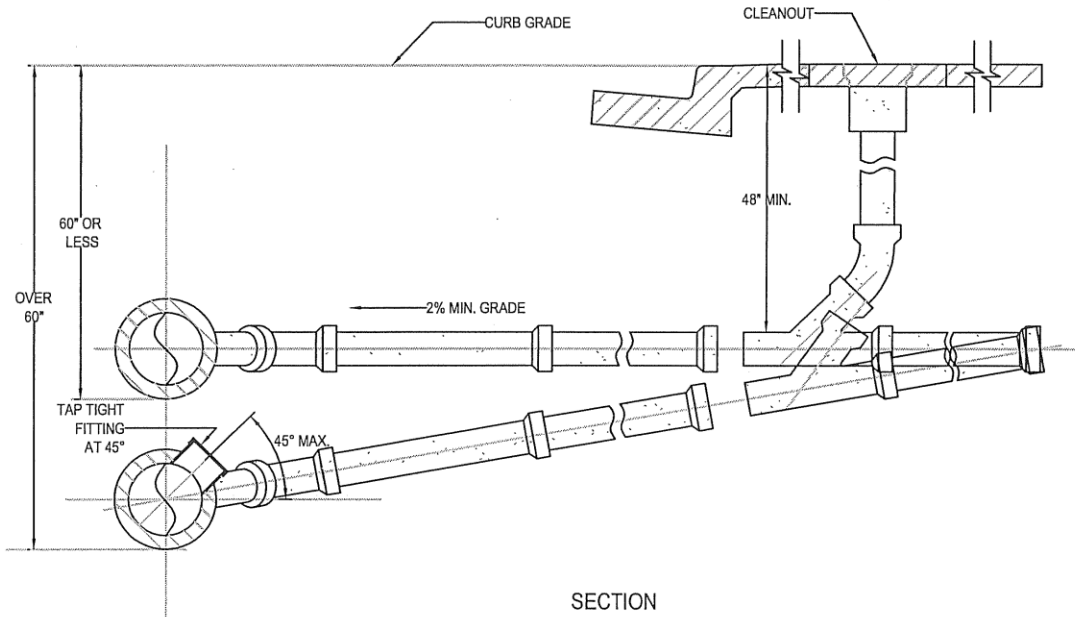
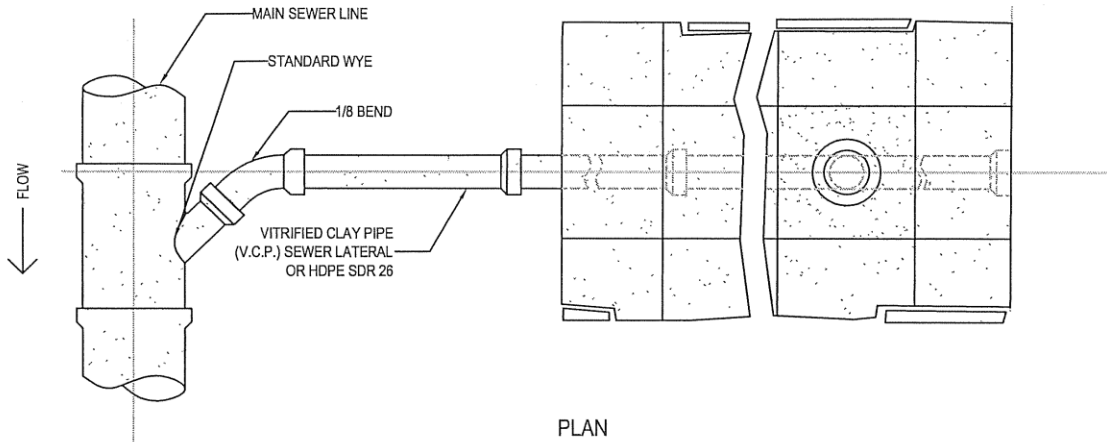
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CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

STANDARDS FOR PRECAST MANHOLE

SCALE NTS	APPROVED: RR	DRAWN: KCM
DATE: JANUARY 2009		CHECKED: SB
SHEET	DRAWING NO. D-1	

SS-1 Sewer Laterals



NOTES:

1. SEWER PIPE JOINTS SHALL BE SPEED SEAL OR APPROVED EQUAL.
2. TAP TIGHT FITTINGS APPROVED ON 8" OR LARGER PIPE I.D. INSTALLED AT 45°.
3. CLEANOUT BOX CAN BE LOCATED BEHIND SIDEWALK OR IN LANDSCAPE AREA WITHIN CITY'S RIGHT-OF-WAY AND AT GRADE.
4. ALTERNATIVE TAP TIGHT FITTING SHALL MEET THE REQUIREMENTS FOR ASTM D 3034.



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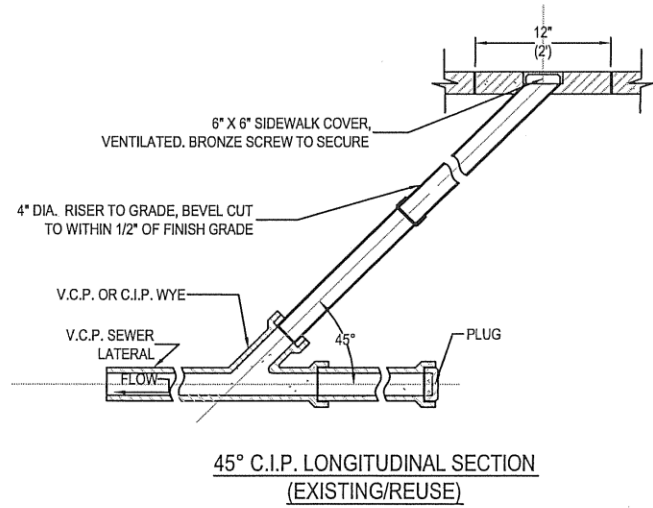
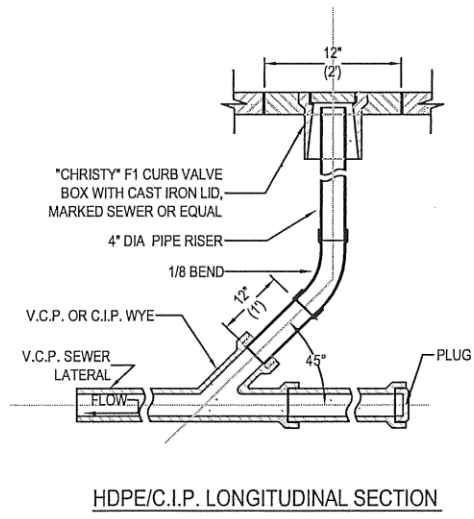
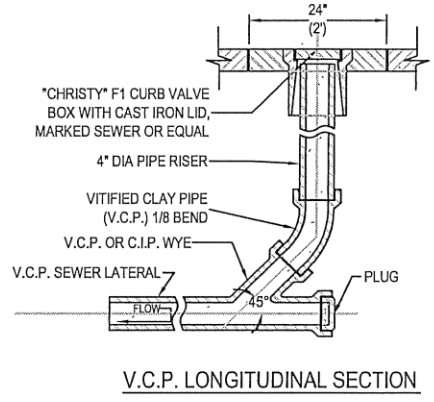
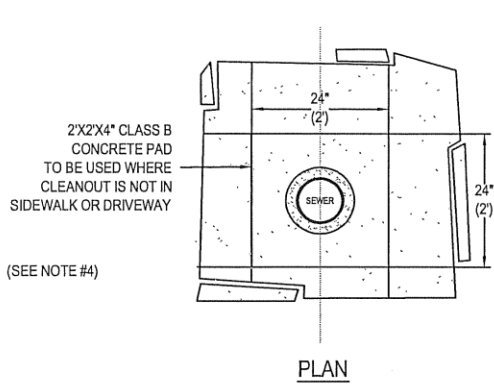
STANDARD SEWER LATERAL

SCALE NTS	APPROVED: RR	DRAWN: KCM
DATE: JANUARY 2009		CHECKED: SB
SHEET	DRAWING NO. SS-1	

CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

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SS-2 Sewer Lateral Cleanout



NOTES:

1. SEWER PIPE JOINTS SHALL BE SPEED SEAL OR APPROVED EQUAL.
2. CAST IRON PIPE (C.I.P.) MAY BE EITHER BELL AND SPIGOT OR SLEEVE AND CLAMP TYPE.
3. HDPE SDR 26 PIPE CAN BE USED IN LIEU OF CIP OR VCP.
4. LOCATE CLEANOUT BOX WITHIN CITY RIGHT OF WAY PREFERABLY IN OR BEHIND SIDEWALK OR LANDSCAPE AREA.
5. ALTERNATIVE TAP TIGHT FITTING SHALL MEET THE REQUIREMENTS FOR ASTM D 3034.



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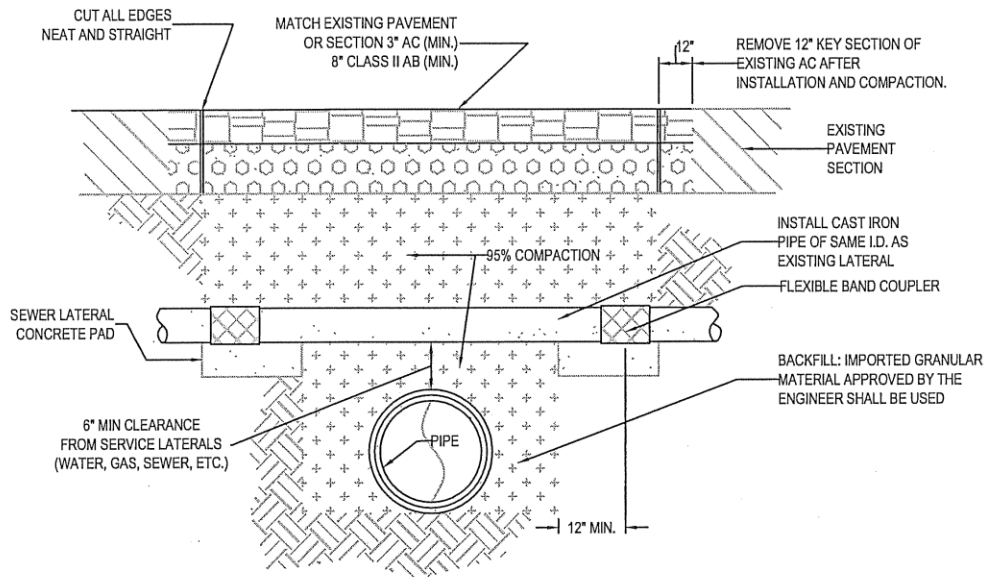
CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

STANDARD SEWER LATERAL CLEANOUT

SCALE NTS	APPROVED: <i>RR</i>	DRAWN: KCM
DATE: JANUARY 2009	CHECKED: SB	
SHEET	DRAWING NO. SS-2	


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SS-3 Sewer Lateral Replacement at Crossing



NOTES:

1. CAST IRON PIPE SHALL CONFORM TO THE SPECIFICATIONS OF ASTM-A74.
2. GM-B BANDED RUBBER COUPLINGS OR EQUIVALENT SHALL BE USED IN COMBINATION WITH ELASTOMERIC TRANSITIONAL BUSHINGS.

	3					SEWER LATERAL REPLACEMENT AT CROSSING		
	2					SCALE: NTS	APPROVED: RR	DRAWN: KCM
	1					DATE: JANUARY 2009	CHECKED: SB	
	NO.	DATE	REVISION	BY	APP.	CITY OF SOUTH SAN FRANCISCO DEPARTMENT OF PUBLIC WORKS		
						SHEET	DRAWING NO.	SS-3

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III.1 City of South San Francisco Standard Development Conditions Sanitary Services Sanitary Sewer Improvements

SANITARY SEWERS

- A. The on-site sanitary sewer system shall not be dedicated to the City for maintenance. The sanitary sewer facilities within the subdivision shall be repaired and maintained by the Homeowner's Association.
- B. The on-site sanitary sewer system shall be designed and installed in accordance with the Uniform Plumbing Code, as amended and adopted by the City, and in accordance with the requirements of the South San Francisco Building Division.

SANITARY SEWER IMPROVEMENTS

- A. New sanitary sewers and manholes shall be installed within public streets in accordance with plans prepared by the sub divider's civil engineer, as approved by the City Engineer, to accommodate the new sewage flow from the new subdivision and fully improved existing upstream developments (where applicable).
- B. Each dwelling shall be separately connected to individual private sewer laterals discharging into the proposed public sewer system within a public street or public sewer easement.

III.2 Inspection and Rehabilitation of Private Sewer Lateral (Resolution No. R2-2005-0059)

In many local jurisdictions, the maintenance of the sewer lateral, up to and including the connection to the sewer main, is the responsibility of the private property owner, while the local jurisdiction is responsible for maintenance of the sewer main.

The California Plumbing Code, 2001 Edition, published by the International Association of Plumbing and Mechanical Officials, as modified by the amendments, additions and deletions set forth in this chapter, is hereby adopted by reference as the plumbing code of the City of South San Francisco, and may be cited as such (Ord. 1331 2 (part), 2004).

Element VI – Overflow Emergency Response Plan

PURPOSE

The purpose of this Sanitary Sewer Overflow and Backup Response Plan is to ensure that City of South San Francisco (City) personnel follow established guidelines in responding to, reporting, relieving, cleaning and decontaminating sanitary sewer overflows and backups which may occur within the City service area in order to safeguard public health and the environment. The City of South San Francisco overflow emergency response plan was updated and revised April 2014 to meet the new SWRCB and WDR requirements.

POLICY

The City's employees are required to report all wastewater overflows found and to take the appropriate action to secure the wastewater overflow area, properly report to the appropriate regulatory agencies, relieve the cause of the overflow, 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 overflows as soon as possible following notification. The City will follow reporting procedures in regards to sewer spills as set forth by the San Francisco Regional Water Quality Control Board (*SFRWQCB*) and the California State Water Resources Control Board.

SEWER BACKUP INTO/ONTO PRIVATE PROPERTY CLAIMS HANDLING POLICY

It is the Policy of the City that claims form shall be offered to anyone wishing to file a claim. The following procedures will be observed for all sewer backup into/onto private property claims:

1. City staff will offer a City claim form where it is possible that the sanitary sewer backup may have resulted from an apparent blockage in the City-owned sewer lines or whenever a City customer requests a claim form. The claim may later be rejected if subsequent investigations into the cause of the loss indicate the City was not at fault. The claim will be processed pursuant to City procedures.
2. It is the responsibility of City staff to gather information regarding the incident and notify the Finance Department or their designee.
3. It is the responsibility of the Finance Department or their designee to review all claims and to oversee the adjustment and administration of the claim to closure.

AUTHORITY

- | | |
|--|---|
| <input type="checkbox"/> Health & Safety Code Sections 5410-5416 | <input type="checkbox"/> CA Water Code Section 13271 |
| <input type="checkbox"/> Fish & Game Code Sections 5650-5656 | <input type="checkbox"/> State Water Resources Control Board
Order No. 2006-0003-DWQ |

DEFINITIONS AS USED IN THIS SANITARY SEWER OVERFLOW & BACKUP RESPONSE PLAN

Nuisance - California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements: a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal. c. Occurs during, or as a result of, the treatment or disposal of wastes.

Private Lateral Sewage Discharges – Sewage discharges that are caused by blockages or other problems within a privately owned lateral.

Sanitary Sewer Overflow (SSO) - Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

- (i) Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;
- (ii) Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
- (iii) Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

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

SSO Categories -

Category 1: Discharge of untreated or partially treated wastewater of any volume resulting from an enrollee’s sanitary sewer system failure or flow condition.

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

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

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

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

Sanitary sewer system

Any 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 SSOs.

Unauthorized discharge

Title 23 California Code of Regulations Section 2250 (b) states that an unauthorized discharge is defined to be a discharge, not regulated by waste discharge requirements, of treated, partially treated, or untreated wastewater resulting from the intentional or unintentional diversion of wastewater from a collection, treatment or disposal system. For the purposes of this Plan and in accordance with SFRWQCB letter May 1, 2008 File No. 1210.57 (RS and MC), Unauthorized Discharges shall refer to those that occur at the City wastewater treatment plant facilities. Unauthorized discharges can include such discharges as untreated wastewater, partially treated wastewater, fully treated wastewater to an unauthorized location, oil spills, and spills of hazardous waste.

Untreated or partially treated wastewater

Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.

Sewer Overflow / Backup Response Summary

Sewer Crew performs the following:

Follow the instructions on the Sanitary Sewer Overflow Packet:

- Notify Program Manager or designee of the incident
- Relieve blockage and clean impacted areas
- Forward the completed Sanitary Sewer Overflow packet to the Program Manager or designee
- Program Manager or designee
- Perform required regulatory reporting in accordance with the Regulatory Notification Packet (inside the Sewer Overflow Packet)

Sewer Crew performs the following:

Follow the instructions on the Sanitary Sewer Backup Packet:

- Notify Program Manager or designee of the incident
- Relieve blockage and clean impacted areas outside the private structure
- Provide the Customer the Customer Service Packet
- Forward the complete Sanitary Sewer Backup Packet to the Program Manager or designee:
- Program Manager or designee:
 - *Perform required regulatory reporting in accordance with the Regulatory Notifications Packet (inside the Sewer Backup Packet).
 - *Notify Finance Department of Incident.

START HERE: Receive notification of Overflow/ Backup or Unauthorized Discharge

Has the overflow impacted private property?

NO

YES

Is it possible that the overflow/backup is due to a failure in the City-owned/maintained sewer line

YES

NO

Sewer Crew performs the following:

Follow the instructions on the Sanitary Sewer Backup Packet:

If customer is not home:

- Complete Door Hanger and leave on customer's door

If customer is home:

1. Explain to customer that the blockage is in their lateral and that the City does not have the legal authority to maintain or perform work on privately-owned laterals.
2. Recommend to customer they hire a contractor to clear their line.
3. Give customer the Sewer Spill Reference Guide pamphlet.

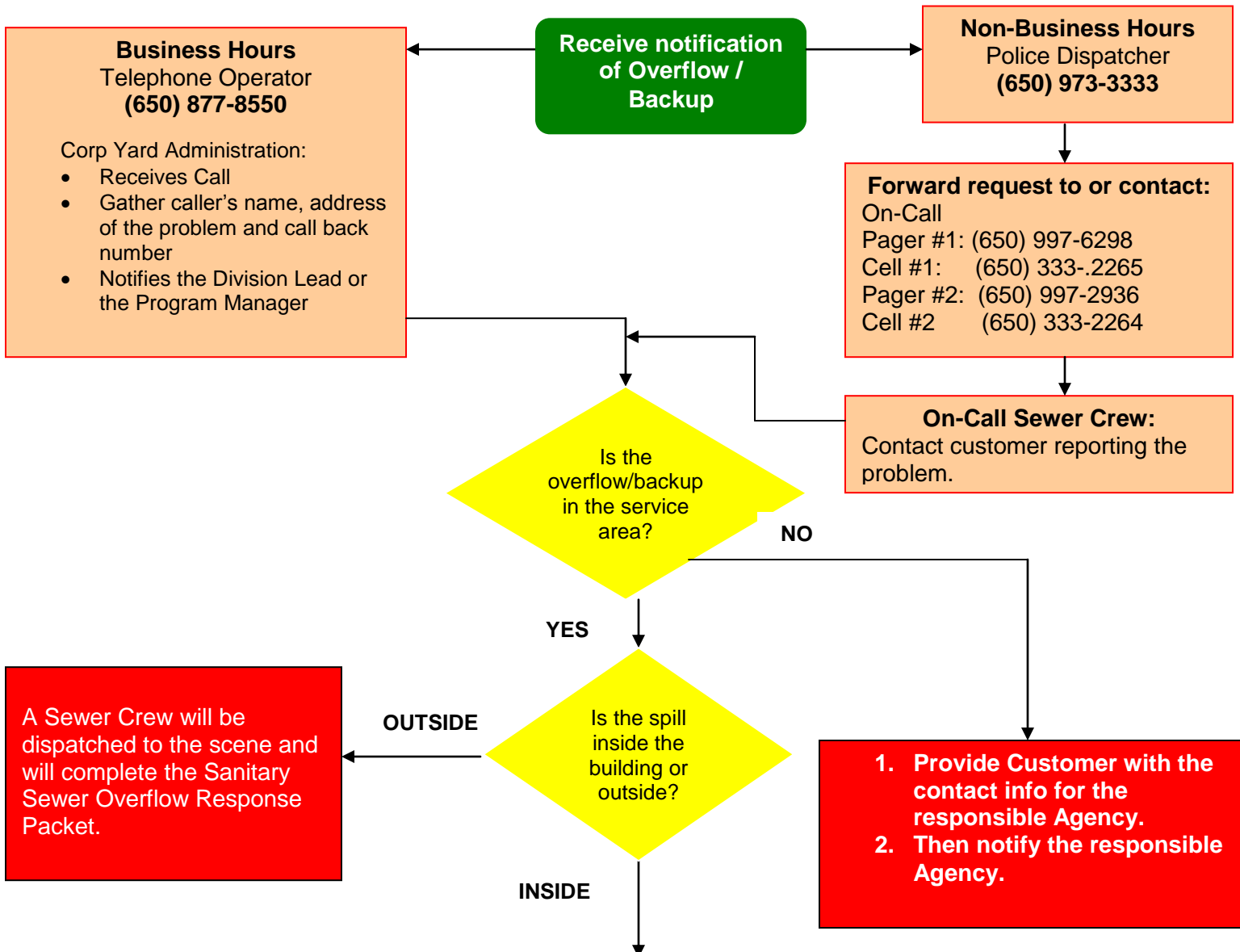
Finance Department or Designee performs the following:

1. Review incident reports, claim form and other incident information and forward, as appropriate, to:

ABAG Plan Corporation
Claims Examiner
P.O. Box 2050
Oakland, CA 94604-2050
Telephone: (510) 464-7946
Fax: (510) 464-7989

2. Communicate with claimant as appropriate
3. Communicate with ABAG Plan to adjust and administer the claim to closure.

Receiving a Sewage Overflow / Backup Report



WHAT TO TELL THE CUSTOMER (See Field Guide for tips)

- Clearly communicate who will respond, estimated time they will arrive and what area(s) will need to be accessed.
- Clearly communicate that a blockage in the sewer main line will be promptly cleared, but that the City is **not allowed to work on a blockage in the property owner's/resident's service lateral line**. Use general terms that the caller can understand, and give the caller your name for future reference.
- Show concern and empathy for the property owner/resident, **but do not admit or deny liability**.
- Instruct the caller to turn off any appliances that use water and to shut off any faucets inside the home.
- Instruct the caller to keep all family members and pets away from the affected area.
- Instruct the caller to place towels, rags, blankets, etc. between areas that have been affected and areas that have not been affected.
- Instruct the caller to not remove contaminated items – *let the professionals do this*.
- Instruct the caller to turn off their HVAC System.
- Instruct the caller to move any **uncontaminated** property away from impacted areas.

Element VII- Fats, Oils, and Grease Control Program

7.1 INTRODUCTION

THE CITY OF SOUTH SAN FRANCISCO'S FATS, OILS AND GREASE (FOG) PROGRAM
(Revision 1: August 1, 2011)

Collection Systems:

The City of South San Francisco has two separate conveyance systems that transport rainwater runoff to San Francisco Bay and sanitary wastewater to the Water Quality Control Plant for treatment. Storm drains carry storm water and other runoff from streets, commercial centers, industrial sites and open spaces into streams, creeks and ultimately to San Francisco Bay.

Any non-storm water materials that enter the storm drains are discharged directly into the creeks and the Bay with minimal treatment, Sanitary sewers convey wastewater discharges from residential, commercial, and industrial sources to the City's wastewater treatment plant, where a significant portion of the water's pollutants are removed prior to discharge into San Francisco Bay.

Cleaning and Disposal Guidelines:

The Food Handling Facilities "Best Management Practices" (BMPs) manual contains detailed guidelines for cleaning equipment and disposal of waste materials. It recommends control measures to prevent the discharge of pollutants into storm drains and sanitary sewers, and provides guidelines for proper disposal of oil and grease, tallow, used cooking oil, and hazardous materials. A checklist is also provided to assist restaurant operators and managers with the implementation of the recommended BMPs.

(1) SANITARY SEWER OVERFLOWS

Sanitary sewer overflows (SSOs) may be composed of domestic, industrial and/or commercial wastewater, depending on the pattern of land use in the area. High levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease and other pollutants may be present, potentially leading to a public nuisance, particularly when raw, untreated wastewater is discharged to areas with high public exposure, such as streets or surface waters used for drinking, fishing or body contact recreation. Pollution of surface or ground waters may also result from SSOs, threatening public health, adversely affecting aquatic life, and impairing the recreational use and aesthetic enjoyment of surface waters.

Major causes of SSOs include grease blockages, root infiltration, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, excessive storm or ground water inflow/infiltration, debris blockages, sanitary sewer system age, pipe failures, lack of proper operation and maintenance, insufficient capacity, and contractor-caused damages. Many SSOs are preventable with adequate and appropriate facilities, source control measures and proper operation and maintenance of the sanitary sewer system.

(2) JUSTIFICATION FOR THE IMPLEMENTATION OF A FOG PROGRAM

Over 40% of SSOs in South San Francisco during calendar years 2008 and 2009 resulted from grease blockages, more than from any other single source. Since FOG is a significant component of the wastewater generated by food service establishments (FSEs), they are an obvious target for source control measures to reduce SSOs. The City has had in place a FOG program for FSEs since 1998, and has encouraged the installation and proper maintenance of grease removal devices wherever feasible. As of this document's initial publication date, a total of 343 FSEs across three cities (South San Francisco, San Bruno and Colma) were included in the program. 79% of those businesses were known to have grease removal devices in operation. Through increased inspection and enforcement, it is the City's goal to minimize discharges of FOG to the

sewer through the implementation of best management practices (BMPs) by FSEs; a corollary reduction in the number of SSOs caused by grease blockages is expected.

7.2 LEGAL FRAMEWORK

(1) AUTHORITY

The authority to develop, implement, inspect, monitor and enforce provisions of the FOG program in San Bruno and South San Francisco is granted to the staff of the South San Francisco – San Bruno Water Quality Control Plant by Resolution 62-81, dated July 1, 1980. In areas of Colma served by the City of South San Francisco’s water quality control plant, the Superintendent has the authority to administer, implement and enforce the provisions of the FOG program per the City of Colma’s Municipal Code, section 3.08.010. Furthermore, section 3.01.110(a) grants the City of South San Francisco the right to inspect and monitor users of the sewer system.

(2) MUNICIPAL CODE

Discharges of FOG to the sanitary sewer from all sources in South San Francisco are governed by Municipal Code, which states: “it is unlawful for any person to dispose of any grease, or cause any grease to be disposed, by discharge into any drainage piping, by discharge into any public or private sanitary sewer, by discharge into any storm drainage system, or by discharge to any land, street, public way, river, stream or other waterway” [14.08.210(c)(1)]. The City of San Bruno’s Municipal Code prohibits the discharge of “solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities such as, but not limited to: grease concentration exceeding one hundred mg/l” [100.12.200(2)]. The City of Colma’s Municipal Code states that it is unlawful to discharge “solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities such as, but not limited to: grease” [3.08.130(b)(2)].

(3) WASTEWATER DISCHARGE PERMIT REQUIREMENT

Throughout the service area, FSEs are required to obtain permits to discharge wastewater to the sanitary sewer. Such permits provide a consistent and legally enforceable framework for treatment of wastewater by FSEs. Permits are valid for three years from the date of issue, are non-transferrable, may be revoked or modified by the City, require renewal a minimum of 30 days prior to expiration, and include general discharge prohibitions and specific permit conditions. A nominal fee (\$120) is imposed at the time of application.

(a) SPECIFIC PERMIT CONDITIONS

Specific permit conditions may include one or all of the following: right of access for City personnel, prohibition of washing outdoors where wash water may flow to the storm drain system, right of the City to collect from the facility all costs incurred as a result of a sewage spill caused by the FSE including fines imposed upon the City, requirements for grease interceptor cleaning frequency, requirement that the facility keep a log of grease interceptor maintenance, and the prohibition of dumping large quantities of greasy waste down sewer drains. Additional permit conditions may be imposed at the discretion of City personnel.

7.3 ADMINISTRATIVE CONTROLS

The City’s overriding control mechanism is the FOG ordinance, which includes Municipal Code sections 14.08.030, 14.08.210(b) and (c) and 15.12.060 (see appendix A). The administration of the FOG control program involves multiple departments, divisions and programs within the City, though the primary responsibility falls on Water Quality Control Plant Environment Compliance program. A master list of FSEs is maintained by the Environmental Compliance Program; it is used to prioritize

inspections, coordinate follow-up and to keep permits current. Business license applications are forwarded from the Finance Department when FSEs move or change ownership. When new development or tenant improvement plans are submitted to the Building Department, Water Quality Control verifies that appropriate grease removal devices are to be installed as a condition of the issuance of a building permit. Water Quality also denies permit approval to projects that include the installation of new garbage disposals. Street Department personnel advise Environmental Compliance Inspectors when SSOs are caused by grease. Municipal Code allows that a business found to be the source of such an SSO may be required to install or upgrade existing grease removal equipment. In the event that a garbage disposal is in use and is suspected to have caused a problem, Water Quality may require its removal. The Environmental Compliance Program is responsible for ensuring that FSEs comply with such requirements.

7.4 INSPECTION AND MONITORING

(1) APPLICABILITY

Regulated FSEs include food production facilities not covered under the Pretreatment Program, institutional food-service establishments, full-service restaurants, fast food outlets, coffee shops and concessions associated with other businesses where food is prepared. Each is subject to periodic inspection. Whether or not a specific business qualifies as an FSE is ultimately up to the discretion of Environmental Compliance Inspectors.

(2) PROGRAM STANDARDS

In prior years, inspections were performed on a three-year cycle. Beginning with calendar year 2011, FSEs are inspected every year. Where violations are discovered, remediation is required within 30 days. Violations include failure to implement applicable BMPs, failure to keep records of grease removal device cleaning, utilization of enzymes or emulsifiers in grease removal devices, operating without a valid wastewater discharge permit, and being shown to be the cause of an SSO.

(a) Best Management Practices (BMPs) FOR FOG CONTROL

- A properly sized grease removal device should be in use.
- Grease removal device maintenance should be performed at regular intervals by trained operators and verified by management.
- Used cooking oil should be collected for recycling by a licensed hauler.
- Dry clean-up methods should be used for dish pre-washing as well as equipment and floor cleaning.
- A spill control plan should be in place. Absorbent materials should be available to aid in spill clean-up.
- Food grinders should be removed or kept out of service.
- Greasy waste should not be poured down any drain.
- Mats, filters and floors should be cleaned such that all wash water drains through a grease removal device.
- Employees should be trained on FOG handling BMPs.

(b) ENFORCEMENT

The City of South San Francisco follows a written Enforcement Response Plan when addressing non-compliant FSEs. In case an SSO can be shown to have been caused by an FSE, depending on the severity and the underlying cause of the SSO, the City will, at a minimum send the business owner a warning letter, a Notice of Violation or an Administrative Citation (with or without monetary penalties) describing the cause of the SSO that has been attributed to the FSE, the pertinent parts of the City's FOG Ordinance, and required remediation methods and corrective actions to comply. An FSE must acknowledge receipt of such a document within 30 days of its postmark. If the City determines that it is

more appropriate, a Show Cause Hearing may be conducted or a case may be referred to the City Attorney in lieu of the letter, NOV or citation previously described.

7.5 OUTREACH AND EDUCATION

(1) COMMERCIAL AND INDUSTRIAL COMPONENT

A significant component of the FOG program involves educating sewer users about the importance of managing grease waste. Food Service Establishments (FSEs) are provided with informational pamphlets upon renewal of their wastewater discharge permits. Multi-lingual BMP posters demonstrating proper grease waste management techniques are distributed during annual inspections. The Environmental Compliance Program maintains a list of grease waste haulers and cooking oil recyclers which is provided to FSEs upon request. In 2011, FOG management pamphlets were distributed to the owners of all commercial and industrial property within South San Francisco with their sewer service charge notifications. The City may, at its discretion promote proper FOG management through partnerships with the Chamber of Commerce and other business organizations.

(2) RESIDENTIAL COMPONENT

A variety of FOG management outreach materials are available to the general public. Grease scrapers and biodegradable waste containers are distributed to residents at community events and in public buildings throughout the service area, free of charge. These items are printed with FOG control BMPs for households. Advertising was purchased at the Tanforan Movie Theater in San Bruno in 2013 and will continue to run in 2014. Around the winter holidays, posters and stickers describing proper oil disposal are handed out to retailers of turkey fryers. Multi-lingual door hangers are delivered to large, multi-unit dwellings and residences in areas where grease blockages have occurred. Materials and FOG information was distributed to eight local elementary schools in 2013. The City will provide BMPs and other FOG related information in the FOG section of the City of South San Francisco's website (www.ssf.net), Face Book, and Twitter.

Additionally, the City commits to:

- Publish an article in the Blue Line Transfer garbage collection service newsletter
- Purchase additional at local movie theaters
- Perform outreach at City sponsored events
- Distribute brochures to residential customers
- Distribute grease receptacles
- Continue to distribute educational materials to public schools.

These residential outreach commitments were initiated in the spring of 2012 and will continue as needed in the future.

7.6 DETERMINATION OF PROGRAM EFFECTIVENESS

For the past six years the City has included in their pollution prevention report the percent of SSOs that were caused by FOG. Additionally, we have included a pollution prevention plan for the next year and a summary of the effectiveness of the program for the prior year.

In the 2010 Pollution Prevention Report we also included a graph that compared the number of FOG related SSOs to the number of FSE inspections, the number of grease scrapers distributed and the pounds of influent FOG per year. The City will continue with this annual evaluation as part of its annual pollution prevention report.

The City of South San Francisco shall associate the effectiveness of its FOG program with the number of grease related SSOs in the service area. Upon implementation of all aspects of the enhanced FOG program, the City aims to reduce SSOs to five per 100 miles of sewer pipe by 2015. In order to show

that the program is effective, fewer than two of those (40%) should be attributable to grease blockages.

- A. South San Francisco FOG Ordinance
- B. Enforcement Response Plan for FSEs
- C. FOG Outreach Material

7.7 APPENDIX A: CITY OF SOUTH SAN FRANCISCO FOG ORDINANCE

14.08.030 Definitions.

“Grease” means greases, oils, fats, fatty acids, waxes, soaps or other matter which is so determined in accordance with the standard methods examination for grease in polluted waters.

14.08.210 General discharge regulations.

- (b) It is unlawful to discharge or cause to be discharged directly or indirectly, any pollutant or wastewater into any storm sewer or into any sewage facility which will interfere with the operation or performance or pass through of the POTW. These general prohibitions apply to all users whether or not the user is subject to categorical pretreatment standards or any other national, state, or local pretreatment standards or requirements. The discharge of the following is prohibited:
 - (2) Solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the POTW or pass through the POTW inadequately treated, such as, but not limited to: grease, petroleum oil, nonbiodegradable cutting oil, or products of mineral origin, garbage with particles greater than one-half inch in any dimension, animal guts or tissues, paunch manure, bones, hair, hides or fleshings, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastics, gas, tar, asphalt residues, residues from refining, or processing of fuel or lubricating oil, mud, or glass grinding or polishing wastes;
- (c) Fats, Oils and Grease.
 - (1) It is unlawful for any person to dispose of any grease, or cause any grease to be disposed, by discharge into any drainage piping, by discharge into any public or private sanitary sewer, by discharge into any storm drainage system, or by discharge to any land, street, public way, river, stream or other waterway.
 - (2) The owner of every newly constructed, remodeled, or converted commercial or industrial facility with one or more grease generating activities, including food service facilities with new or replacement kitchens, for which a building permit application is submitted on or after January 1, 2010, shall install or cause to be installed a grease interceptor for each grease generating activity, of a size equal to or greater than the minimum size meeting the definition of “grease interceptor,” as defined in the currently adopted edition of the Uniform Plumbing Code. In no case shall any grease interceptor flow less than twenty gallons per minute (gpm). The installation of new garbage disposals in any commercial or industrial facility is prohibited.
 - (3) The owner of every commercial or industrial generator of grease, including food service facilities, serviced by a sewer collection line found to have a grease blockage, a history of grease blockage, or accelerated line maintenance resulting from grease disposal, shall install or cause to be installed a grease removal device upon notification by the superintendent. If heavy solids accumulate causing a sewer blockage or accelerated line maintenance, the commercial or industrial generator shall remove any garbage disposal upon notification by the superintendent.

- (4) All grease removal devices shall be installed on the premises where grease is used or generated and shall be sized in conformance with the then currently adopted edition of the Uniform Plumbing Code. The contents of all grease removal devices shall be removed periodically as necessary to prevent violations of this chapter. At a minimum, the contents shall be removed every six months. All grease removal devices shall be kept in good repair, and shall be maintained in continuous operation. A log of all grease removal activities shall be maintained at the facility showing the date of removal, the amount removed and the disposition of the removed contents. The log shall be retained for a period of three years, and shall be available for inspection by city inspectors upon request.
- (5) Grease emulsifiers or enzymes are prohibited for use in grease interceptors or traps. Grease emulsifiers, enzymes, bacteria or any other additive in any physical state (solid, viscous, liquid, gas or combination thereof) to aid in the eradication, breakdown, decomposition, decay, removal or transformation, by any other nonmechanical means of grease removal are prohibited for use in grease interceptors, traps or any other grease removal, reduction, elimination, ejection, expulsion, or discharge device or devices. Mechanical cleaning is the only allowed means of grease removal, eradication and/or reduction. No exception or exemptions shall be permitted without prior written approval from the city Water Quality Control Plant superintendent.

15.12.060 California Plumbing Code appendices adopted.

Appendix D, "Sizing Stormwater Drainage Systems," and Appendix H, "Recommended Procedures for Design, Construction and Installation of Commercial Kitchen Grease Interceptors" are adopted. (Ord. 1331 § 2 (part), 2004)

7.8 Elements of Progressive Enforcement Actions

There are four (4) levels of increasingly significant enforcement action available to the City which are intended to correct non-compliance with a FSE's discharge permit. Progressive enforcement actions may require increasingly stringent responses to correct repeated or ongoing violations of wastewater discharge permits or other local, state, or federal discharge prohibitions. The four actions include: (1) Verbal Notification (2) Advisory Letter, (3) Notice of Violation, and (4) Civil and Criminal Administrative Actions including Abatement Orders

1. Verbal Notification

Verbal notification is used for initial contact with a FSE when appropriate Best Management Practices (BMPs) are not in use, BMP information is not posted in a conspicuous location, grease removal device maintenance records are not available for review, or a facility is operating without a valid wastewater discharge permit for more than thirty (30) days. Re-inspection of a violator by City personnel shall take place within thirty (30) days of verbal notification. Failure to correct violation(s) within that timeframe will result in the issuance of an advisory letter.

2. Advisory Letter

Advisory letters shall be mailed by certified mail or hand-delivered to the violator within seven (7) days of the City's receiving first notice that a violation of a waste discharge permit occurred, or within seven (7) days of a failed re-inspection, as previously described. "Notification" occurs immediately whenever an agent for, or employee of, the City is notified that a violation of a discharge permit or other prohibition of local, state, or federal statute or regulation has occurred. The notification may be verbal, telephone, fax, electronic, letter, report, written document, or other form of communication.

Advisory letters are intended to correct violations that are more serious than those listed in section (1), such as any of the following:

- conditions observed during the course of an on-site inspection or routine surveillance which may compromise a FSE's ability to comply with any element of its wastewater discharge permit;
- failure to properly maintain grease removal devices;
- operation without a valid wastewater discharge permit for more than 60 days; or
- any other violation or group of violations that the City deems to be detrimental to the Pollution Prevention Program.

Re-inspection of a violator by City personnel shall take place within thirty (30) days of the issuance of an advisory letter. Failure to correct violation(s) within that timeframe will result in the issuance of a notice of violation.

3. Notice of Violation (NOV)

When a violation or violations of a FSE's discharge permit is/are observed or reported, and, in the opinion of trained City personnel there is a potential for harm to life, health, the environment, the collection system, or the wastewater treatment plant, a Notice of Violation shall be issued to the FSE within seven (7) days of the City receiving first notice of said violation(s). "Notification" occurs immediately whenever an agent for, or employee of, the City is notified that a violation of a discharge permit or other prohibition of local, state, or federal statute or regulation has occurred. The notification may be verbal, telephone, fax, electronic, letter, report, written document, or other form of communication.

A Notice of Violation may be issued for any of the following reasons:

- failure to respond within the required timeframe to lesser enforcement actions;
- failure to correct violations as required by lesser enforcement actions;
- failure to install a grease removal device when required to do so by the City; or
- any other violation or group of violations that the City deems to be detrimental to the Pollution Prevention Program.

- A. Within forty-five (45) days of the date of the notice, a plan for the satisfactory correction thereof shall be submitted to the city by the user. The FSE's written response shall describe the specific violation(s) which occurred, the cause of the violation(s), all corrective actions taken to prevent any reoccurrence of the violation(s), and the date those corrective actions were/will be taken.
- B. A review of the FSE's written response shall be conducted to determine if it is adequate and appropriate. Following the issuance of a Notice of Violation, the receipt of the FSE's response, and a review of that response the City may inspect the facility if it is deemed necessary.
- C. Upon receipt of a Notice of Violation, the FSE shall have fifteen days within which to file an appeal of the Notice of Violation. Appeals shall be addressed to the WQCP Superintendent.
- D. Failure to respond to a Notice of Violation within the specified timeframe may cause the City to initiate civil and criminal actions against the violator.

4. Civil and Criminal Administration Actions

A. Abatement Orders

Abatement orders shall be issued when lesser enforcement actions have been exhausted, or in the judgment of the WQCP Superintendent there is an immediate danger to life, health, the environment, the collection system or the wastewater treatment plant. Abatement orders shall be issued by the Superintendent, and shall be sent by certified mail or be hand-delivered. Upon receipt of an Abatement Order, a FSE shall have ten (10) days from the date of receipt of the Abatement Order to appeal the enforcement action. All appeals shall be submitted, in writing, to the WQCP Superintendent.

B. Administrative Actions

When a FSE fails to comply with an Abatement Order within the specified timeframe, civil and criminal penalties may be imposed upon the violator.

i. Civil and Criminal Penalties

Any user who willfully or negligently fails to comply with any regulation or condition of a discharge permit or permit issued hereunder, shall be subject to both civil and criminal liability. All enforcement and penalty provisions identified in the South San Francisco Municipal Code are in addition to and do not supersede or limit any other civil or criminal remedies. South San Francisco Municipal Code § 14.08.510 and 14.08.530. Potential civil and criminal liability shall be as follows:

Civil Liability: Potential civil liability shall include, but not be limited to, declaration of the violation as a public nuisance and strict liability for the sum of ten thousand dollars (\$10,000) for each day or portion thereof, as set forth in South San Francisco Municipal Code Section 14.08.530, and abatement proceedings, including the collection of abatement costs, as set forth in South San Francisco Municipal Code Sections 14.08.500, 14.08.550, and 14.08.560. In addition, a user may be liable up to twenty-five thousand dollars (\$25,000) a day for each violation, as set forth in California Government Code Section 54740. South San Francisco Municipal Code § 14.08.530.

In lieu of the civil penalties set forth in California Government Code Section 54740, the City may impose administrative penalties in the following amounts, as set forth in California Government Code Section 54740.5: (1) up to three thousand dollars (\$3,000) for each day for failing or refusing to timely comply with any compliance schedule established by the City; (2) up to five thousand dollars (\$5,000) per violation for each day for discharges in violation of any waste discharge limitation, permit condition, or requirement issued, reissued, or adopted by the City; (3) up to ten dollars (\$10) per gallon for discharges in violation of any suspension, cease and desist order or other orders, or prohibition issued, reissued, or adopted by the City. Furthermore, the amount of such civil administrative penalties that have remained delinquent for a period of 60 days shall constitute a lien against the real property of the discharger from which the discharge originated resulting in the imposition of the civil penalty. California Government Code § 54740.5(d)(5).

Criminal Liability: Criminal liability shall include, but not be limited to, misdemeanor prosecution under South San Francisco Municipal Code Section 14.08.510. A person shall be guilty of a separate and distinct offense for each and every day during any portion of which any violation is committed, continued or permitted by any such person, and the user shall be punishable accordingly. South San Francisco Municipal Code §§ 1.24.0140, 14.08.510.

Injunction - Whenever a discharge of wastewater is in violation of the provisions of this plan or otherwise causes or threatens to cause a condition of contamination, pollution or nuisance, an injunction may be sought to restrain the continuance of such discharge. The City may petition the Superior Court for the issuance of a temporary or permanent injunction, or both, as the case may be, restraining the continuance of such discharge. The city may also seek an injunction against nondischarge violation of pretreatment standards or requirements. South San Francisco Municipal Code § 14.08.540.

7.9 Administrative Citations

The City reserves the right to issue Administrative Citations in accordance with the City's Municipal Code, Chapter 8.54.102. Every violation determined to be an infraction is punishable by: (1) a fine not exceeding one hundred dollars for a first violation; (2) a fine not exceeding two hundred dollars for a second violation of the same ordinance; and (3) a fine not to exceed five hundred dollars for each additional violation of the same ordinance within one year. Every violation determined to be a misdemeanor is punishable by a fine not exceeding \$1,000 per day. Administrative citations may be

issued at any level of enforcement, though generally fines are issued only in conjunction with notices of violation or administrative actions

APPENDIX C: FOG OUTREACH MATERIAL

- 1) Local theatre advertisement
- 2) Grease scrapers (BAPPG)
- 3) Grease collection receptacles (City of SSF)
- 4) Pamphlet: Only You Can Stop the Grease Blob (City of SSF)
- 5) Pamphlet: Stormwater Pollution Prevention Guidelines for Food Handling Facilities (STOPPP)
- 6) Poster: No Grease Down the Drain (EBMUD)
- 7) Door hanger: Grease Goes From the Pan to the Can (City of SSF)
- 8) Sticker and poster: Avoid Pain in the Drain (BAPPG)

Program Implementation

A list of all food handling facilities is updated on a regular basis.

The following BMPs are recommended for all food-handling facilities:

- Each facility must have a sink or other protected area for cleaning floor mats, large equipment, and containers. This area must be connected to the sanitary sewer through a grease interceptor.
- New construction must include a covered, enclosed dumpster area which drains to the sanitary sewer through a grease removal unit.

The installation of grease removal unit is required in all new restaurants and in tenant improvements of existing restaurants. Installation of a grease removal unit is also required in all new commercial and industrial food-handling facilities and in tenant improvements of existing commercial and industrial food-handling facilities.

Figure 4 - FOG Pollution Prevention Activities

Source	Audiences	Message/Program	Implementation Plan & Timeline	Evaluation Method
Food handling facilities	Owners/Managers Staff	Manage their internal activities to minimize FOG introduction to sanitary sewer and service their facility oil separation device regularly	On-going inspections BMP posters placed and used in Food Handling Facilities	Increased BMP usage annually and take enforcement when required Food Facilities use BMP poster
Residents	Homeowner, renters	Determine proper FOG BMPs Determine baseline FOG disposal information	Distribute door hangers to homeowners that have grease blockages Distribute grease scrapers and BMPs at events, school outreach presentations	Track number of grease blockages Track influent FOG to plant from residential areas. Continue with surveys
School food service facilities	Food services managers	Manage internal activities to minimize FOG introduction to sanitary sewer and service oil	Identify school food service facilities. Inspect school food service facilities	Increase BMP compliance. Use BMP poster

Element VIII – System Evaluation and Capacity Assurance Plan

This summary presents a brief background of the City’s sewer system, east of Highway 101, the need for this master plan, proposed improvements to mitigate existing capacity deficiencies, and proposed system improvements. A summary of the capital improvement program costs, through the planning horizon year of 2020.

The City recognizing the importance of planning, developing, and financing sewer system facilities to provide reliable and enhanced service for existing customers and to serve anticipated land use redevelopment, the City initiated the preparation of this sewer system master planning study which was conducted in 2002.

The study included the following tasks;

- Establish sewer system design and planning criteria.
- Evaluate the capacity of the existing sewer collection system using computer hydraulic modeling.
- Summarize existing system deficiencies and propose improvements to enhance system reliability.
- Recommend improvements needed to service anticipated build out conditions
- Develop a Capital Improvement Program with a planning horizon year of 2020.
- Prepare a Special Facilities Connection Charge report performed by another Consultant.
- Comply with Environmental clearances pertaining to the study area.

The City of South San Francisco is located in San Mateo County, approximately 10 miles south of the City of San Francisco, and is bisected by U.S. Highway 101 in a north-south direction. The study area is within the City's boundaries, east of Highway 101. The San Francisco Bay borders the area to the north and east while the City of San Bruno and the San Francisco International Airport (SFIA) surround the area to the south. In 1999, Carollo Engineers performed an Infiltration and Inflow Study for the City, west of Highway 101. The study included a small portion of the sewer system east of Highway 101, upstream of the South San Francisco San Bruno Water Quality Control Plant (WQCP). For the purpose of this master plan, this portion of the sewer system was not considered.

The City's sewer collection system master plan identifies the infrastructure necessary to the service developed lands within the study area boundary. Because few vacant lands exist east of Highway 101, the anticipated increase in sewer flows is a result of redevelopment of existing parcels. According to City planning department staff, thirty-two areas are slated for redevelopment during the planning horizon, while the remaining areas within the study areas are intended to maintain their existing land use designation over the next 20 years.

SEWER FLOWS

Data should be updated to reflect 2010-2011 Facility Plan.

DRY WEATHER CONDITIONS

During existing dry weather conditions, the average flow and peak hour flows from the study area are 1.5 and 3.4 MGD, respectively. At the 2020 planning horizon year condition, the average and peak hour dry weather flows are anticipated to approach 5.5 and 12.1 MGD, respectively. In January 2009 a sanitary sewer flow monitoring and inflow/infiltration study was performed by V&A Engineering. Data should be updated to reflect 2010-2011 Facility Plan.

WET WEATHER CONDITIONS

Evaluating the capacity adequacy of the City's sewer system during wet weather conditions included applying a hypothetical 5-year 24-hour design storm that increased the infiltration and inflow determined by the hydraulic model. Data should be updated to reflect 2010-2011 Facility Plan.

Should the design storm occur, the hydraulic model projects existing average and peak hour flows from the study area of 2.5 MGD and 5.5 MGD, respectively. Applying the same storm event during the build out condition results with average and peak hour flows of 6.4 MGD and 14.1 MGD from the study area respectively. These projected wet weather flows assume no mitigation to the current infiltration and inflow rates. Data should be updated to reflect 2010-2011 Facility Plan.

FUTURE FLOW CONDITIONS

The future average dry weather flows calculated to model the 2020 planning horizon year were determined based on industry projections and calculated flows. Industry projections were provided by several industries east of Highway 101 in response to a survey by City Staff. Thirty-two areas are slated for future redevelopment and will redevelop by changing their land use designation, mostly to Office/Research and Development (ORD), resulting in increased wastewater flow rates. The remaining lands east of Highway 101 are assumed to maintain their existing designation throughout the planning year horizon. Data should be updated to reflect 2010-2011 Facility Plan.

SEWER SYSTEM EVALUATION

The City's sewer system was evaluated based on the analysis and design criteria defined in this study. 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 slopes, pumps, etc.), and performs calculations to solve a series of mathematical equations to simulate flows in pipes.

The average flows east of Highway 101 were estimated by obtaining industrial flow projections, utilizing the 2001 Metered Water Use database, and applying land use coefficient factors. A 5-year 24-hour storm event was used to simulate the wet weather flows. Data should be updated to reflect 2010-2011 Facility Plan.

CAPITAL IMPROVEMENT PROGRAM

The cost estimates presented in the Capital Improvement Program have been prepared for general master planning purposes and for guidance in project evaluation and implementation. 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. The plan consists of Short Term Improvements, Intermediate Term, and Long Term Improvements.

The sewer system master plan contains six chapters to this document. The chapters are briefly described below:

Chapter 1 – Introduction. This chapter presents the need for this sewer system master plan and the objectives of the study. A list of abbreviations is also provided to assist the reader in understanding the information presented.

Chapter 2 – Planning Area Characteristics. This chapter presents a discussion of this study's planning area characteristics, defining the land use classifications and summarizing the proposed future redevelopment within the study area.

Chapter 3 – Planning and Design Criteria. The capacity of the study area's sanitary sewer system was evaluated based on the analysis and design criteria defined in this chapter. Historical flows at the wastewater treatment facility were reviewed and analyzed to determine daily, monthly and seasonal fluctuations experienced by the sewer system. The developed criteria address the sewer system capacity, acceptable pipe gravity slopes, acceptable depths of flow within pipes, average sewer flow coefficients, and daily and hourly peaking factors.

Chapter 4 – Existing System and Hydraulic Model. This chapter presents an overview of the sewer collection system east of Highway 101. The chapter also describes the development and calibration of the City's Sewer Hydraulic Model. This model was used for identifying existing system deficiencies and for recommending enhancements.

Chapter 5 – Sewer System Evaluation and Proposed Improvements. This chapter presents the results of the capacity evaluation of the sewer system. The chapter also presents improvements to mitigate existing system deficiencies and for servicing future growth. These improvements are recommended based on the system’s technical requirements, costs effectiveness, and operational reliability.

Chapter 6 – Capital Improvement Program. This chapter presents the recommended Capital Improvement Program (CIP) for the study area’s sewer system. The program is based on the evaluation of the sewer system, and on the recommended projects described in the previous chapters. The CIP has been staged to the planning horizon year of 2020.

Element IX – Monitoring, Measurement, and Program Modification

9.1 Monitoring and Measurement Discussion

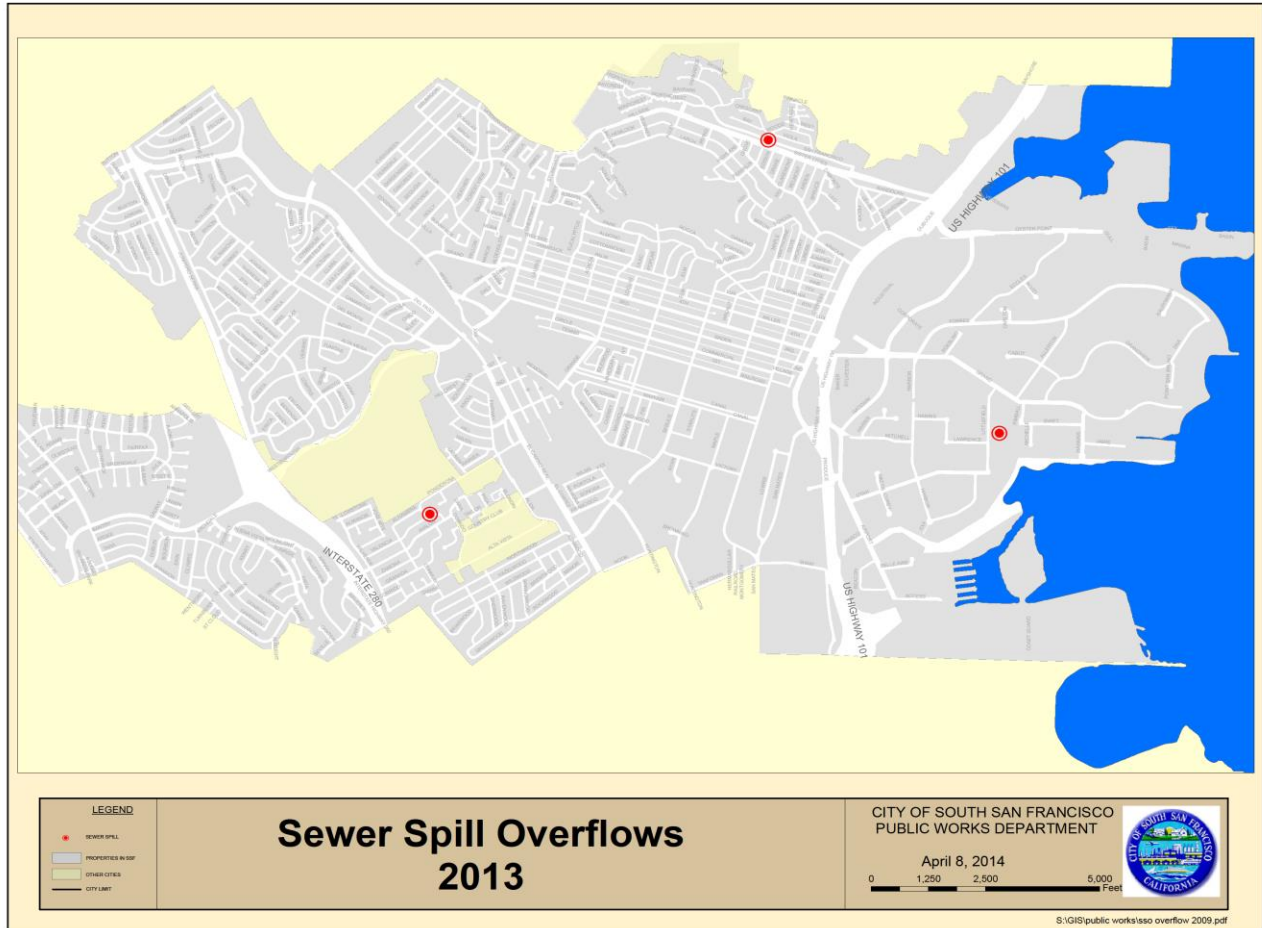
The City already tracks several performance measures through key performance indicators and technology such as; CMMS and field and flow studies and tracking logs and annual reports. The tracking information collected includes but is not limited to, number, cause and location of stoppages; number, cause location, and volume of SSO’s; stoppage response time; number and reason for customer complaints; and length of pipe cleaned and type of debris found. The City plans to continue tracking all performance measures that are currently tracked. A monitoring tracking sheet is provided as Figure 5 below.

In order to monitor the effectiveness of the SSMP, however, the City has selected certain specific parameters that can be documented and compared on an annual basis in a simple format. These parameters were selected because they are straightforward, quantitative, and focused on results. Although the parameters may not track everything associated with SSMP implementation changes in these parameters over time will indicate the overall success of the SSMP or, conversely, underlying problems that can then be investigated further. This information can be tracked on the City’s mapping system. An example of the tracking capabilities is provided as Figure 6.

Figure 5 - Monitoring Tracking Sheet

	DATE	TIME	EST. VOLUME (gal.)	EST. RECOVERED (gal.)	EST. UNRECOVERED AMOUNT (gal.)	LOCATION	CAUSE OF SSO	MANHOLE	CLEAN OUT	PUBLIC	PRIVATE	CATEGORY	RESIDENTIAL / COMERCIAL
1	1/1/13					no spill report for January #2352607							
2	2/1/13					no spill report for Febuary #2355119							
2	3/1/13					no spill report for March #2357028							
4	4/1/13					no spill report for April#2359896							
5	5/31/13	8:30am	200	200	0	SSF Dr. & WoodsCt	roots	X		X		2	R
6	6/1/13					no spill report for June #2364871							
7	7/1/13					no spill report for July#2367638							
8	8/1/13					no spill report for August#2372600							
9	9/9/13	10:20am	325	325	0	400 Littlefield	grease	X				3	C
10	10/21/13	8:05am	75	75	0	326 Valencia Dr	paper	X		x		3	R
11	11/13/14					no spill report for Nov#2380826							
12						no spill report for Dec#2380843							
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
TOTALS:			600	600	0								

Figure 6 -Example of City GIS Mapping with 2013 SSO's



Element X – SSMP Program Audits

10.1 Regulatory Requirements for SSMP Audits

Internal audits will be performed on a two year basis to determine relevance and effectiveness of each element of the SSMP. Audits will include a review of progress on deficiencies identified in the previous year audit reports. A summary of the audit results and significant findings from the Monitoring, Measurement and Program Modification Section will be created and shared with those directly involved within the City of South San Francisco.

If deficiencies or modification are identifies as part of the audit, the SSMP shall be updated accordingly. A log will be created to document and track progress on recommended program improvements.

10.2 The City of South San Francisco Audit Discussion

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

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

Annual Audit Assessment Checklist Form

Auditor:	Reference:	Comments:	Date		
			Yes	No	Initials
Goals					
Is there a hydro-jetting program in place?	Cityworks Work Order System				
Dose the staff perform routine sanitary sewer lift station checks and maintenance.	Cityworks Work Order System				
Dose the staff respond to service requests in an orderly and timely fashion?	Cityworks Work Order System				
Are Dig-Alert mark outs completed in a timely fashion?	Cityworks Work Order System				
Are easements maintained?	Cityworks Work Order System				
Is the spare parts inventory complete and up - to - date?	Collection Staff/Corp. Yard/Warehousing Inventory				
Are records of activities maintained?	Collection Staff/Granite XP/Cityworks CMMS				
Are televised inspections performed?	Collection Staff/Granite XP/Cityworks CMMS				
Is a method in place to provide updated information for sanitary sewer mapping?	Collections/Engineering/I.T. Staff				
Is a CMMS in place and utilized?	Cityworks/Granite XP/G.I.S./CMMS Software				
As monthly spill/no-spill reports completed on time?	Collections Management LRO's/Data Submitters				
Are monthly reports of Division's activities maintained?	Collection Staff/Management				
Are emergency contact list complete and up-to-date?	H.R. Database/Collection Administrative Staff/Management				
Is safety training and technical training provided?	Collection Management/H.R. Dept. Database				
Are the goals in the SSMP still appropriate?	Collection Management				
Organization					
Is an up-to-date organization chart available?	SSMP Element II, Appendix A				
Has the chart been updated in the SSMP?	SSMP Element II, Appendix A				
Does the SSMP clearly state name of the responsible or authorized as described in section J at the Order?	SSMP Element II, Section 2.2				

Annual Audit Assessment Checklist Form

Auditor:	Reference:	Comments:	Date		
			Yes	No	Initials
Ensures access for maintenance, inspection or repairs?	SSMP Element IV, Section 4.3				
Limits the discharge of fats, oil grease and debris?	SSMP Element VII				
Enforces any violation of its sewer ordinances?	SSMP Element III				
Operations and Maintenance Program					
When was the Sewer System Map last updated?	G.I.S/Database Software/I.T.				
Is the map current for?	Citywide - All Departments				
Gravity Line Segments	G.I.S/Database Software/I.T.				
Force Mains	G.I.S/Database Software/I.T.				
Manholes	G.I.S/Database Software/I.T.				
Pumping Facilities	G.I.S/Database Software/Plant Maint.				
Pressure Pipes	G.I.S/Database Software/Plant Maint.				
Valves	G.I.S/Database Software/Plant Maint.				
Are up-to-date external elements/Information included?	G.I.S/Database Software/Management				
County Stormwater	Engineering				
County Flood Control	Engineering				
Waterways/systems	Engineering/Collections				
Parcels/APN data	Engineering/Collections				
Is routine cleaning of the collection system performed?	Collections/Cityworks Software				
Is the planned cycle for cleaning adhered to?	SSMP Element IV, Section 4.3				
Is routine televising of the collection system completed?	Cityworks/Granite XP Software				

Annual Audit Assessment Checklist Form

Auditor:	Reference:	Comments:	Date		
			Yes	No	Initials
Are system deficiencies identified and prioritized?	Cityworks/Granite XP Software				
Are problem areas targeted for attention?	Cityworks/Granite XP Software				
Is a system of ranking the condition of the pipes Incorporated?	PACP/Cityworks/Granite XP Software				
Are long term and short term Rehab and replacement Plans in place?	Collections/Granite XP Software/Eng./Budget				
Has smoke testing been performed during auditing cycle?	Collections				
Have mark-outs been performed timely?	Collections/Inspectors				
Have training plans been developed for each position?	H.R. Dept./Management				
Have employees attended all required safety training?	H.R. Dept./Management				
Have employees attended all required technical training?	H.R. Dept./Management				
Has inventory list been reviewed and updated?	Collections Staff/Management				
Are critical parts available in the warehouse?	Collections Staff/Management				
Are parts for at least two repairs on each size and type of pipe in the warehouse?	Collections Staff/Management				
Overflow Emergency Response Program					
Are notification procedures in place?	SSO Emergency Response Plan				
Is SOP current?	SSO Emergency Response Plan				
Has ERP training been performed?	SSO Emergency Response Plan				
Are procedures for traffic and crowd control in place?	SSO Emergency Response Plan				
Is a program in place to contain SSO's?	SSO Emergency Response Plan				
Is a program in place minimizing SSO's?	SSO Emergency Response Plan				

Annual Audit Assessment Checklist Form

Auditor:	Reference:	Comments:	Date		
			Yes	No	Initials
Is public outreach taking place? What type?	SSMP Element VII, Section 7.5 and Element XI				
Have FSE Best Management Practices been provided to any customers?	SSMP Element III and Element VII				
Have additional Source Control Measures been Implemented? Why? /why not?	SSMP Element III and Element VII				
Design and Performance					
Have peak hydraulic capacities been estimated?	Collections/Engineering/WQCP				
Have hydraulic deficiencies been identified?	Collections/Engineering/WQCP				
Have capacities of key system components been documented?	Collections/Engineering/WQCP				
Have peak flows associated with overflow events been identified?	Collections/Engineering/WQCP				
Have short term CIP's been prepared?	Collections/Engineering/WQCP				
Have long term CIP's been prepared?	Collections/Engineering/WQCP				
Monitoring, Measurement, Program Modifications					
Have reporting mechanisms been developed to support system Improvements?	Collections/Engineering/WQCP				
Are trends of various data maintained?	Collections/Engineering/WQCP				
Are spill locations, frequencies and volumes recorded and evaluated?	SSO Emergency Response Plan/GIS Mapping System				
Are maintenance activities modified and updated? How?	Collections/CMMS Software				
Audit Program					
When was the last audit performed? By who?	Collections Staff/Management				
Is a written report of the last audit available on file with the City?	Collections/PW Office Database				
Have deficiencies identified in the previous audit been address?	Collections/PW Office Database				
Were appropriate corrective steps were taken?	Collections/PW Office Database				

Annual Audit Assessment Checklist Form

Auditor:	Reference:	Comments:	Date		
			Yes	No	Initials
List any deficiencies identified during this audit below:	Audit Team				
Staff - Prepare specific corrective action steps to address each deficiency identified.	Collections/Management and Engineering				
Prepare formal written report from the results of this audit focusing on the effectiveness of the SSMP, the compliance with the SSMP, Identification of any deficiencies and corrective action steps. Retain this report for at least five years.	Collections Management				
Communication Program					
What public communication regarding the implementation and performance under this SSP has been provided?	City Council and Management				
Are there any Systems tributary or satellite to the city wastewater system?	Collections and Engineering				

Element XI – Communication Program

11.1 State WDR's

The City must 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 City as the program is developed and implemented.

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

11.2 Communication Program

The City will communicate on a regular basis with the public on the development, implementation and performance of the SSMP, using various types of outreach including print media, the intranet, and public hearings. The City may bill stuffers to inform customers of upcoming issues of concerns related to the SSMP (example: upcoming rate changes). The City also maintains a website (www.ssf.net) to inform the public about City activities. The main page of the website (www.ssf.net) provides important announcements, agendas and minutes for City Council meetings and other key information for City residents. The City's final SSMP will also be published on the website. The completed SSMP will be certified by the City Council at a noticed public meeting. In addition the City communicates on the regular basis through citywide outreach programs such as;

- Sewer System Management Program (Internet)
- Fog Outreach Program
- Public and Educational Outreach Programs
- City News Letters and Outreach Printed Materials.
- Overflow Emergency Response Plan (Internet)
- City Council Meeting (Public Comments)
- Face Book and Twitter