CITY OF EL SEGUNDO
SEWER SYSTEM MANAGEMENT PLAN

December 2014

Prepared for:

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SSMP History

SSMP Revisions	Effective Date
Original	August 2009
Revision 1	May 2012
Revision 2	December 2014

INTRODUCTION

The City of El Segundo's Water/Sewer Division is responsible for maintaining the citywide water and sewer system. The City is responsible for maintaining 56 miles of sewer main and 9 sewage lift stations. The majority of the City's sewer mains range from 8 to 12 inches in diameter, with several as large as 21 inches in diameter, the majority of which is proactively cleaned on an annual basis. In addition, the City provides customer service, identifies illegal connections to the sewer system, and addresses sewer blockages within its service area.

The elements and provisions established in the City's Sewer System Management Plan (SSMP) are based on the requirements established in the State Water Resources Control Board's Order No. 2006-0003-DWQ. All federal and State agencies, municipalities, counties, districts, and other public entities that own and operate sanitary sewer systems with the total sewer footage exceeding 1 mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California, are required to comply with the terms established in Order No. 2006-0003-DWQ.

The purpose of Order No. 2006-0003-DWQ is to prevent sanitary sewer overflows (SSOs) by establishing a statewide monitoring and reporting program and requiring each sewer agency to create and implement their own SSMP. The order requires that each agency appoint a legally responsible official (LRO) to establish a monitoring and reporting organization to monitor and report all SSOs. In accordance with the order, SSOs must be certified by the LRO using the California Integrated Water Quality System (CIWQS) within the specified timeframe. The City's SSMP and sewer maintenance and management program comply with the established order and also provide the necessary measures to reduce and prevent SSOs, and to mitigate the effects of the SSOs that do occur.

The City has established and implemented the necessary programs to maintain all aspects of its sewer system in good working order and to reduce the number and severity of SSOs in its service area. The City monitors the effectiveness of these programs throughout the year and makes the necessary modifications to correct any deficiencies. The City has established sufficient sewer designs, regularly evaluates the condition and capacity of its sewer system, and has implemented an effective FOG Control Program.

Additionally, the City has identified problematic sewer mains, which are cleaned more frequently (accelerated maintenance locations) than other segments of the sewer. In addition to proactive and preventive maintenance practices, the City also identifies areas of the sewer system in need of repair and/or replacement and prioritizes corrective measures for these area based on asset risk and resource factors. City staff members who support the operation and maintenance of the sewer system have undergone training to perform such activities and continue to develop their skills by participating in external and internal training opportunities.

1.0 GOALS

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

The City of El Segundo recognizes the importance of protecting ocean-water quality by preventing sewer spills and has supplemented its existing sewer system maintenance practices with the State Water Resources Control Board (SWRCB) Order No. 2006-0003-DWQ entitled "Statewide General Waste Discharge Requirements (WDR) for Sanitary Sewer Systems," adopted May 2, 2006. The goal of this SSMP is to provide a plan and schedule to properly manage, operate, and maintain all elements of the City's sanitary sewer collection system in order to reduce and prevent SSOs, as well as mitigate any SSOs that do occur.

2.0 ORGANIZATION

The SSMP must identify:

(a) The name of the responsible or authorized representative as described in Section J of the WDR

Section J. - REPORT DECLARATION

1. 1. All applications, reports, or information shall be signed and certified as follows:

i. All reports required by this Order and other information required by the State or Regional Water Board shall be signed and certified by a person designated, for a municipality, state, federal or other public agency, as either a principal executive officer or ranking elected official, or by a duly authorized representative of that person, as described in paragraph (ii) of this provision. (For purposes of electronic reporting, an electronic signature and accompanying certification, which is in compliance with the Online SSO database procedures, meet this certification requirement.)

ii. An individual is a duly authorized representative only if:

a. The authorization is made in writing by a person described in paragraph (i) of this provision; and

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity.

The authorized representatives for the City of El Segundo are as follow:

Lifan Xu Principal Civil Engineer (310) 524-2368	Gil Busick Wastewater Supervisor (310) 524-2754	Stephanie Katsouleas Public Works Director (310) 524-2356

(b) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program, including lines of authority by organization chart or similar document with a narrative explanation.

The City of El Segundo has created an organizational chart showing the lines of authority of the administrative and field staff for the Wastewater Division. The chart can be found in Appendix A, *Organizational Chart*.

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

To establish and document the response to SSOs, including definition of the chain of communications and reporting requirements, the City has developed and utilizes a Sewer Overflow Emergency Response Plan. The plan can be found in Appendix B, *Sanitary Sewer Overflow Emergency Response Plan*.

The Wastewater Supervisor is responsible for overseeing the SSO reporting process. The Wastewater Supervisor is also responsible for immediately notifying other agencies, including the Los Angeles Regional Water Quality Control Board, Los Angeles County Department of Health Services, and the State Office of Emergency Services (OES), if applicable.

Each SSO incident is documented on a Sewer Overflow Report form, which can be found in Appendix C, *Sewer Overflow Report Form*, and reported according to Los Angeles County policy. Once the Sewer Overflow Report form is completed, it is submitted to the Wastewater Supervisor for review and further actions (if warranted). The Wastewater Supervisor is responsible for submitting all written and/or web-based reports required by other agencies, including entry and certification through the CIWQS online spill reporting database. The Wastewater Supervisor also maintains all sewer overflow incident documentation.

3.0 LEGAL AUTHORITY

Each Enrollee 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 sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.).

The City of El Segundo enforces established City regulations prohibiting the discharge of stormwater to the sewer system through the City's Municipal Code, including Resolution 3448. The City's Municipal Code, Title 12, can be found in Appendix D, *Municipal Code Title 12*, and Resolution 3448 can be found in Appendix E, *Resolution 3448*.

The City's Municipal Code also contains provisions that prohibit the discharge of chemicals, unauthorized debris, pollutants, and any solid or viscous substances that could cause obstructions to flow in the sewer collection system.

(b) Require that sewers and connections be properly designed and constructed.

The City of El Segundo has adopted the 2012 Standard Specifications for Public Works Construction ("Greenbook"), and the latest California Plumbing Code standards and specifications for construction of sanitary sewers. Following these standards and specifications ensure sewer lines and connections are properly designed and constructed.

(c) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency.

Sewer laterals that drain each privately owned parcel or property are owned and maintained by the property owners. Current City Code, Title 12 of the Municipal Code (Appendix D), makes provisions requiring access to all facilities located within the public right-of-way.

(d) Limit fats, oils, and grease and other debris that may cause blockages.

The City of El Segundo understands the negative impacts to sewer collection system operations caused by the release of fats, oils, and grease (FOG) into the system. In 1999 the City assumed control and responsibility of a FOG Control Program from Los Angeles County. The FOG Control Program has been developed, implemented and updated to reduce the amount of FOG discharge to the sanitary sewer system. A copy of the FOG Control Program Manual can be found in Appendix F, *Fats, Oils, and Grease Control Program Manual*. The City's Municipal Code (Appendix D) establishes the legal authority required to implement a FOG Control Program.

The City is considering implementation of additional FOG control rules and regulations applicable to food service establishments (FSE). The rules and regulations may address, in greater detail than the City Code, such items as the following:

- General Waste Discharge Prohibitions
- Kitchen Best Management Practices (BMP) Requirements
- Grease Interceptor Operation and Maintenance Requirements
- Grease Trap Operation and Maintenance Requirements
- Notification Requirements
- Record-Keeping Requirements
- Drawing Submittal Requirements
- Monitoring Facilities Requirements
- Monitoring and Reporting of Conditions Requirements

The intent of these additional rules and regulations will be to further reduce FOG discharge from FSEs.

(e) Enforce any violation of its sewer ordinances.

The City of El Segundo has the legal authority to enforce the rules and regulations established in the sewer ordinances under Administrative Citation provisions of the Municipal Code (Appendix D). The Fire Department Environmental Safety Manager has citation authority to enforce sewer ordinance provisions.

4.0 OPERATION AND MAINTENANCE PROGRAM

The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:

(a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities.

The City El Segundo has a sewer atlas that shows the location of sewer facilities, including mains, manholes, and pumping stations. The atlas is generated from the City's geographic information systems (GIS) that is managed and maintained by the City's Information Systems Division and is used by the Wastewater division to assist line maintenance and cleaning. An example of the GIS atlas can be found in Appendix G, *Atlas Sample*. The City's GIS is updated as changes are made to the sewer system. The Wastewater Supervisor and the Information Systems Division are in close communication to make sure all of the sewer maps and related databases are updated. If Wastewater Maintenance crews identify a discrepancy with the GIS maps and actual sewer asset data while performing sewer maintenance activities, the Wastewater Maintenance crews highlight the discrepancy on the field tablet computers, and the Information Systems Division ensures the discrepancy is corrected in the GIS.

The City's sewer GIS has locations of sewer mains, county trunk lines, manholes, drainage areas, and pump stations. The asset data associated with sewer mains include diameter, length, material, slope, upstream and downstream manholes, installation year, flow direction, and pipeline assessment code. Asset data associated with sewer manholes include invert elevation, rim elevation, install date, and associated as-built plan. Pressure or force mains are also identified in the GIS.

The Information Systems Division is in the process of developing a web-based application that will allow authorized users to access the City's GIS over the Internet. This web-based application will have many tools, such as hyperlinked sewer asset features, that will open associated as-built plans when they are selected.

City sewer maintenance staff members recognize the link between a sewer spill and the potential contamination of a storm drain system. The City educates its staff to understand the storm drain network and to capture a spill before it enters the storm drain system. To assist the City in keeping the State's waterways free of sanitary sewer runoff, stormwater conveyance facilities have been included in the City's GIS. The relationship between the sewer and the stormwater systems is easily recognized when the two systems are mapped.

(b) Describe routine preventative operation and maintenance activities to be accomplished by staff and contractors; including a system for scheduling regular maintenance and cleaning of the sanitary sewer system; with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance Program should have a system to document scheduled and completed activities, such as work orders.

The City has developed and utilizes a Sewer System Operation and Maintenance Program to specify operation and routine preventative maintenance activities. The operation and maintenance manual detailing these activities is included as Appendix H, *Operation and Maintenance Manual*.

The City has historically cleaned the majority of its smaller diameter sewer segments, 12 inches or less in diameter, once a year and continues to do so today. However, the City does collect field observations and data during routine maintenance activities, which factor into maintenance frequencies. Utilization and analysis of field data will allow the City to optimize maintenance activities throughout the sewer system. This process will result in more sections of gravity pipelines being cleaned less frequently than the traditional 12-month cycle. Areas needing more frequent cleaning, known as accelerated maintenance locations, are cleaned on semiannual or more frequent basis. The Operation and Maintenance Manual lists the current accelerated line maintenance locations in the City.

City assets include one Vaccon combination sewer cleaning truck and one Harben hydro-jet trailer that are used primarily for sewer main cleaning. The City is adding an additional hydro-jet truck to support sewer cleaning staff and limit sewer cleaning down-time.

In addition to the crews maintaining the gravity sewer system, the City's staff supports maintenance of the nine sewer lift stations and the force mains are cleaned as needed. A total of five wastewater maintenance workers are cross-trained to assist with the maintenance of these lift systems. Maintenance activities include weekly inspections of each lift station along with periodic equipment servicing consistent with equipment manufacturer's recommendations and industry standards/best practices. Outside contractors are also utilized as needed for preventive maintenance and repairs of lift stations.

(c) Develop a rehabilitation and replacement program to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and video camera inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or are prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement program

should include a capital improvement plan that addresses proper management and protection of infrastructure assets. The plan shall include a time schedule for implementing short- and long-term actions plus a schedule for generating funds necessary for the capital improvement plan.

Closed-circuit television (CCTV) inspection of the entire collection system was conducted by the City in 2011. Significant defects identified were repaired or included in the Capital Improvement Plan (CIP) for repairs/replacement prioritization. The current CIP can be found in Appendix I, *System Evaluation and Capacity Assurance Plan (SECAP)*, which is updated in December, 2014.

During routine system maintenance and/or emergency response activities, City staff members identify problem areas and, where warranted, conduct CCTV inspections in those areas. Significant defects are identified, reviewed, and prioritized for repairs/replacement based on pipe condition and flow deficiencies, pursuant to the SECAP. Replacement equipment operations are included in the CIP and funding is generated through the Enterprise Fund and sewer-use fees. The CIP also includes costs associated with planning design, construction, and construction inspection.

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

City sewer maintenance staff members are trained in-house on procedures used to properly clean and maintain the sewer collection system, as well as to respond to spill emergencies. The City has one combination hydro-jet/vacuum truck to enable City workers to efficiently respond directly to sewer system overflows. Available staff and sufficient resources have helped to improve the response to spills and ensure that spills are contained and cleaned up in the shortest time possible.

Wastewater staff members are trained to operate and maintain all City pumping facilities and related equipment. Currently, City staff members regularly participate in documented technical training and on-the-job training programs. In addition, staff members are required to obtain a minimum Grade 1 California Water Environment Association certification. This certification must be maintained through on-going CWEA approved contact hour opportunities. Staff members are also encouraged to attend relevant vendor demonstrations. The City has also established required safety training courses that are provided by the City's Human Resources Department through a safety consultant. Examples of topics covered by the courses include blood borne pathogens, hearing conservation, respiratory protection, hazardous materials first response, traffic safety, material safety data sheets (MSDS), confined space, and driving safety.

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

The City has identified locations throughout its service area that are critical to maintaining uninterrupted service. These locations have been included in an extensive bypass procedure plan developed by the City. With the bypass procedures and necessary equipment, each of these locations could be bypassed in case of emergency or equipment failure to maintain service integrity. A copy of the bypass procedure plans can be found in the Operation and Maintenance Manual in Appendix H.

The City has taken measures to identify which spare parts are critical for maintaining uninterrupted service and stores these parts at a central location. The City also maintains spare parts that are necessary for maintenance vehicles and equipment. For parts that are not maintained in the spare parts inventory, the City also has arrangements with readily available suppliers if spare parts are needed that are not in-house. As a precaution and a means to ensure uninterrupted service, the City also has back-up power generation for lift stations.

5.0 DESIGN AND PERFORMANCE PROVISIONS

(a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances, and for the rehabilitation and repair of existing sanitary sewer systems.

The City of El Segundo has adopted the 2012 Standard Specifications for Public Works Construction ("Greenbook"), and the latest California Plumbing Code standards and specifications for construction of sanitary sewers. The Greenbook specifications for pipeline rehabilitation are used as the standard for City projects. Following these standards and specifications ensure sewer lines and connections are properly designed and constructed. Additionally, the City has standardized its use of equipment in the pumping stations for ease of maintenance and replacement.

(b) Procedures and standards for inspecting and testing the installation of new sewers, pumps and other appurtenances, and for rehabilitation and repair projects.

The City has developed standard plans and specifications for the construction of new sewer infrastructure. Inspection and testing of new construction is accomplished by trained City Public Works Agency construction inspectors. These inspectors ensure that all sewer projects are completed in accordance with the City's standards.

6.0 OVERFLOW EMERGENCY RESPONSE PLAN

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

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

The City of El Segundo has developed, implemented, and maintains a Sanitary Sewer Overflow Emergency Response Plan (SSOERP). The SSOERP is included in Appendix B. This plan has clear notification procedures to ensure that all appropriate agencies are notified in the event of an SSO. Included in the response plan is a Sanitary Sewer Overflow Report Form (Appendix C) which contains a list all agencies, and their phone numbers, that are to be contacted for each spill event.

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

Appropriate SSO response procedures are designated in the SSOERP. The plan clearly lists the actions to be performed to alleviate discharges by Public Works staff in the following order:

1. Control, contain, and/or minimize the discharge.
2. Identify and notify the responsible party.
3. Collect information, estimate discharge volumes and capture photo documentation.
4. Begin cleanup of the discharge.
5. Inform the Wastewater Supervisor, who shall provide phone notification to all applicable Federal, State, regional, and local agencies.
6. Inform the Engineering Department for an assessment and recommended course of action if the problem cannot be corrected through normal maintenance efforts.

(c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with this MRP/ All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification.

In accordance with the revised Monitoring and Reporting Program (MRP) order #WQ-2013-0058-EXEC, the City's SSOERP outlines the procedures that ensure prompt notification of appropriate regulatory agencies and other potentially affected entities of

all SSOs that may affect public health or reach the waters of the State. In addition, agencies to be notified include the Los Angeles County Department of Health Services, and the California State Office of Emergency Services (OES), if necessary. These procedures also identify the officials who will receive immediate notification.

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

All emergency response activities are coordinated by trained City personnel. Contractor personnel are aware of the SSOERP and the need to coordinate all response activities with City staff. The City conducts internal training sessions to ensure staff members' familiarity with SSOERP procedures and preparation for an SSO event, from initial notification to SSO report documentation, including any necessary emergency activities, such as traffic control.

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

The SSOERP (Appendix B) includes SSO control, containment, and clean-up procedures to address emergency operations, such as traffic and crowd control and other necessary response activities. City staff members are trained in the placement of traffic control and can respond to all but the most extreme emergencies. If a spill necessitates extensive traffic and/or crowd control, the City's Police Department is contacted. Officers are trained in traffic and crowd control during emergency situations.

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

The SSOERP includes SSO control, containment, and clean-up procedures to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States.

The City relies on the Los Angeles County Department of Health Services to monitor water quality and posting beach closures. All spills are reported immediately to the Los Angeles County Department of Health Services office. The City also has procedures for conducting water quality sampling and preparing a SSO technical report for any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters.

7.0 FOG CONTROL PROGRAM

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

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

The City provides FOG disposal education and outreach to FSEs during FOG program inspections. During the FOG program inspections, City inspectors also provide educational material, such as the FOG best management practice poster developed jointly by Los Angeles County, the California Restaurant Association, and Sanitation Districts of Los Angeles County, to FSEs. Additionally, the City has made available educational pamphlets at each of its offices.

Currently, the City has not implemented a Residential Outreach and Education Program. Historically, there have been few FOG related problems in the residential areas of the City and there are no FOG-related accelerated line maintenance locations in residential areas. The City continues to evaluate the benefits of providing residential education and outreach materials.

Should residential FOG become problematic, the City will re-evaluate its residential education and outreach efforts.

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

Proper disposal of waste grease collected from either grease traps/interceptors or through kitchen practices is essential to a successful FOG Control Program. To ensure that FSEs properly dispose of their waste FOG, during FOG inspections, City inspectors provide FSEs with information about FOG disposal and a list of approved FOG haulers.

All FOG waste collected within the City's service area is currently disposed of at private processing plants located in Los Angeles County.

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

The City of El Segundo currently enforces City regulations in its Municipal Code (Appendix D) prohibiting the discharge of chemicals, unauthorized debris, pollutants, and any solid or viscous substances that could cause obstructions to flow in the sewer collection system to the sewer system through the City's Municipal Code, Resolution.

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

General pretreatment requirements are specified in Section 3 of the Resolution 3448 (Appendix E) as follows:

> *Restaurants classified as industrial dischargers shall provide, install, and operate a gravity grease interceptor of 750 gallons capacity, or of a size capable of providing a minimum 30 minute flow dentition time at peak flow rate, whichever is larger, and at a location prior to connection with public sewer.*

Additionally, the current edition of the California Plumbing Code has been adopted by the City and includes other gravity grease interceptor design criteria. Proposed FSE plumbing plans are delivered to the FOG Program Manager from the City's Plumbing Plan Check Department to evaluate specific pretreatment requirements. The FOG Program Manager is also notified of new FSEs from the City's Business Services Division, and frequently reviews Los Angeles County Department of Health Services lists.

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

For proper FOG program management, the City conducts FSE inspections and provides FOG education. Sections 12-2-6, 12-6-1 of the Code and Section 6.28.200 of Ordinance 1329 afford the legal authority to conduct inspections and administer penalties. A copy of Ordinance 1329 can be found in Appendix J, *Ordinance 1329*. In managing and enforcing provisions of the Municipal Code, the Public Works Director, and such officers as the Director may designate, shall at any reasonable hour enter upon any premises, subject to approval of the occupant. Inspection of every facility involved with the discharge of wastewater to the City sewer system may be made by the Public Works Director.

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

Accelerated line maintenance locations or specific reaches of sewer pipe that have a history of problems or pose higher than normal risk of an SSO are cleaned more frequently than once a year. Accelerated line maintenance locations are typically identified by maintenance staff during normal maintenance of the collection system. The cleaning frequency for accelerated line maintenance locations ranges from once every 2 months to once every 6 months depending on the severity of the problem and the cleaning effectiveness. A list of the current accelerated line maintenance areas is provided in the Operation and Maintenance Manual in Appendix H.

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

The sewer line characterization process consists of collecting all known (or perceived) factors associated with each accelerated line maintenance location from the sewer maintenance staff to identify critical information. Factors related to pipe conditions and potential sources are identified and documented. When it is determined that an FSE is a potential source of FOG in an accelerated line maintenance location, that information is forwarded from the Wastewater Supervisor to the FOG Program Manager. The FOG Program Manager will, in turn, inspect and educate the source FSE(s) on proper grease control device maintenance and proper implementation of kitchen best management practices.

Potential solutions may also include evaluation of structural issues that impact accelerated line maintenance locations. The accelerated line maintenance location is evaluated to determine if repair may minimize grease accumulation and potentially resolve the accelerated line maintenance locations.

8.0 SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

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

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

In 2010 and 2011, the City had all segments of gravity sewer pipelines (total length of over 50 miles) inspected using CCTV camera equipment. These inspections included development of individual reports for each reach of the sewer system. The CCTV operator documented observations of the condition of sewer lines and rated the severity of defects within the sewer line based on the rating system established by the National Association of Sewer Service Companies. The ratings were used to prioritize repairs to be included in the City's CIP. Ratings of 4 and 5 have the most severe defects and are prioritized over locations with lower severity ratings.

The City updated its SECAP to reflect the new gravity-fed and forced mains constructed over the past 12 years. The SECAP incorporates hydraulic analysis based on land-use data and water consumption data.

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

The City of El Segundo utilizes the 2012 Greenbook and has adopted the latest California Plumbing Code standards for construction of sanitary sewers. These standards and specifications ensure sewer lines and connections are properly designed and constructed.

(c) Capacity enhancement measures: The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.

The CIP included in the 2014 SECAP addresses all capacity deficiencies and structural issues identified through capacity analysis and CCTV inspection activities. The SECAP includes cost estimates, alternatives analysis, and project priorities. The City's Sewer Enterprise Funds document describes how the City proposes to continue to pay for the CIP, noting fund balances, funding sources, and fund uses.

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

The CIP included in the 2014 SECAP provided the City with a long-range planning tool for implementing its sewer infrastructure improvements in an orderly manner, and provides a basis for financing these improvements. To accomplish this goal, the program was phased based upon implementation cost of facilities, the quantity of work the City can reasonably administer each year, and the funds available for the projects. The updated SECAP includes a schedule for repair of segments not included in the previous Sewer Master Plan and any new segments identified through the 2011 CCTV inspections and regular sewer line cleaning.

9.0 MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

The Enrollee shall:

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

The City has created and uses data sets, such as ALM cleaning observations, CCTV inspection results, and SSO response findings, to monitor SSMP related activities. Enhancements to the data collection and analysis activities are in progress and include a digital map-based system for field use. When complete, this system will be used by engineering and maintenance staff to facilitate operation and maintenance activities for the sewer collection system. This system will also enhance analysis and prioritization of SSMP activities.

(b) Monitor implementation and, where appropriate, measure effectiveness of each SSMP element.

The Wastewater Supervisor, The Environmental Safety Manager, The FOG Control Program Manager, and the Principal Engineer work together to implement all of the SSMP activities.

SSMP activity meetings to assess the effectiveness of individual elements are held as needed.

(c) Assess the success of the preventative maintenance program.

The City uses in-house crews to clean sewer collection pipelines once per year. The maintenance program has proven to be effective in maintaining a low incidence of SSOs and minimizing the size and impact of the SSOs. The Wastewater Supervisor is in charge of the routine preventive maintenance program. Line cleaning methods and schedules are continually modified as needed based upon field conditions. The Wastewater Supervisor works closely with the Principal Engineer to use available technology enhancements to assess the success and improve the effectiveness of the maintenance program.

(d) Update program elements, as appropriate, based on monitoring or performance evaluation.

The SSMP and its elements will be updated in accordance with the results of the monitoring described in Section 10. Revisions to the FOG program and SSOERP have been made in the past, and additional program revisions will be made as required.

(e) Identify and illustrate SSO trends, including frequency, location, and volume.

The City has records of all SSOs dating back to January 2007. Using this data, SSO trends are assessed and program adjustments are implemented as required. Examples of SSO trends tracked by the City include the following:

- Number and locations of SSOs over the past 12 months, distinguishing between dry-weather overflows and wet-weather overflows
- Volume distribution of SSOs (e.g., number of SSOs < 100 gallons; 100–999 gallons; 1,000–9,999 gallons; > 10,000 gallons)
- Cause of SSO and required corrective action to prevent future SSOs

10.0 SSMP PROGRAM AUDITS

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

The City conducts internal audits once every 2 years, with the last being completed in 2014, that evaluate its SSMP and its compliance with the requirements of Order No. 2006-0003-DWQ. A report of the audit results is prepared after each audit and is available upon request.

The internal audits include, but are not limited to, the following:

- A review of this SSMP document to ensure compliance with the regulations established in the State Water Resources Control Board's Order No. 2006-0003-DWQ
- A review of any supporting documents listed in this SSMP
- SSMP implementation efforts over the past 2 years
- A description of additions and improvements made to the sanitary sewer collections system during the past 2 years
- A description of additions and improvements planned for the upcoming 2 years
- A list of deficiencies, if identified, and a plan to correct the identified deficiencies

The SSMP will be updated and revised as necessary to address any deficiencies identified in the audit process.

11.0 COMMUNICATION PROGRAM

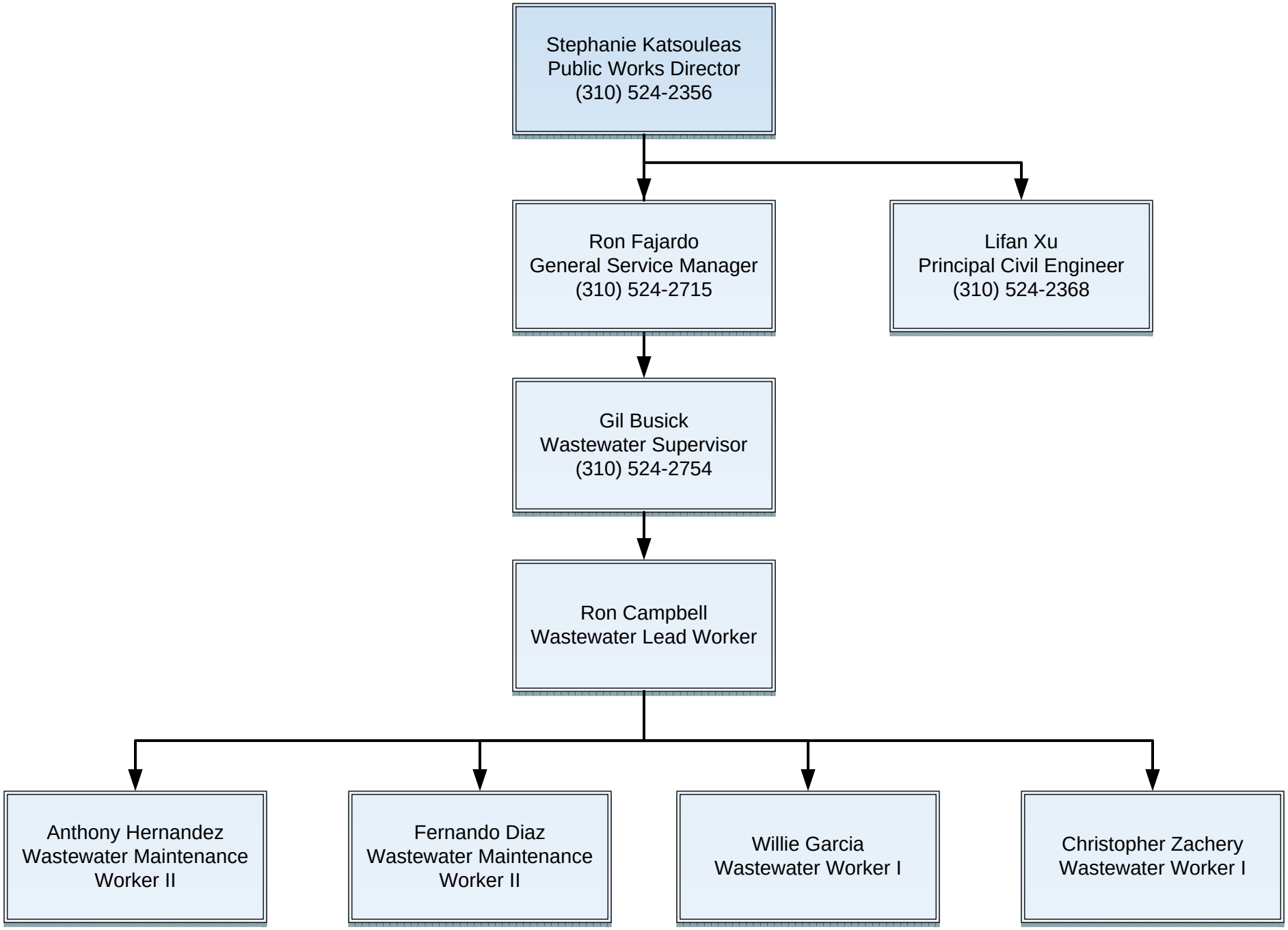
The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

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

The City currently utilizes its website to convey information on key elements of the SSMP to the public. The public is encouraged to participate in public hearings / City Council meetings and to provide comments/input on current and future SSMP development issues. The SSMP has also been uploaded to the State's CIWQS website.

APPENDIX A
ORGANIZATION CHART

SSMP Personnel Organization Chart



APPENDIX B
SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PLAN

CITY OF EL SEGUNDO
SANITARY SEWER OVERFLOW
EMERGENCY RESPONSE PLAN

December 2014

Prepared for:

City of El Segundo, Department of Public Works
350 Main Street
El Segundo, California 90245

Prepared by:

One City Boulevard West, Suite 1800
Orange, California 92868
EEC Project No: W-2677

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APPENDICES

ACRONYMS AND DEFINITIONS

ACRONYMS

CIWQS – California Integrated Water Quality System
GPM – Gallons Per Minute
GAL - Gallons
LACDHS – Los Angeles County Department of Health Services
LRO – Legally Responsible Officer
OES – Office of Emergency Services
RWQCB – Regional Water Quality Control Board
SSO – Sanitary Sewer Overflow

DEFINITIONS

Flow Rate – The amount of fluid that flows in a given time. For the purpose of this manual, flow rate is expressed in gallons per minute (GPM)

Legally Responsible Official (LRO) – Is a person who is legally responsible to represent the sewer agency and the information being presented to the State.

Public Right-of-Way – Is a path for public access either meaning a sidewalk or street and is not restricted by private land ownership.

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.

Sanitary Sewer Overflow (SSO) – Is a condition whereby untreated sewage is discharged into the environment prior to reaching sewage treatment facilities.

Storm Drain – Is a drain or drain system that is designed to drain excess rain and ground water from paved streets, parking lots, sidewalks, and roofs.

Untreated or Partially Treated Wastewater – Any volume of waste discharged from the sanitary sewer system upstream of the wastewater treatment plant headworks.

Waters of the State – Is any creek, river, channel, lake, or ocean.

GENERAL INFORMATION

OBJECTIVE

The objectives of this Sewer System Overflow (SSO) Emergency Response procedure are to protect public health, the environment, and public and private property. These objectives are accomplished by notifying, containing, stopping, cleaning up, and reporting the SSO.

POLICY

City employees are required to report all identified SSOs and to take the appropriate action to secure the SSO area, relieve the cause of the SSO, 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 SSOs as soon as possible following notification. The City will follow reporting procedures in regards to sewer spills as set forth by the Los Angeles RWQCB and the California State Water Resources Control Board pursuant to the revised Monitoring and Reporting Program (MRP) order #WQ-2013-0058-EXEC**.**

AUTHORITY

- Health & Safety Code Sections 5410-5416
- CA Water Code Section 13271
- Fish & Game Code Sections 5650-5656
- State Water Resources Control Board Order No. 2006-0003-DWQ

GENERAL PROCEDURES

When responding to a sewage spill or sewer back-up, the following general procedures should be followed in order. Additionally, refer to Appendix A, *Sanitary Sewer Overflow Emergency Response Plan Flow Diagram*, which also outlines the procedures to follow:

1st: MOBILIZE TO SITE

2nd: CONTAIN THE SPILL

3rd: STOP THE SPILL / RELIEVE THE BLOCKAGE

4th: CLEAN UP THE SPILL

5th: REPORT THE SPILL TO APPROPRIATE AUTHORITIES

SANITARY SEWER OVERFLOW TYPES

Any incident in which sewage is discharged onto the surface is considered a sewage spill. There are four types of SSO's; Category 1, Category 2, Category 3 and Private.

Category 1:

- A spill of any volume that reaches a drainage channel and/or waters of the State such as a river, creek, or ocean.
- A spill of any volume that enters a storm drain pipe that **is not fully recovered** and returned to the sanitary sewer system or disposed properly.

Category 2:

- A spill that is 1,000 gallons or greater:
    - That **does not** reach a drainage channel and/or waters of the State such as a river, creek, or ocean.
    - That enters a storm drainpipe but **is fully recovered** and returned to the sanitary sewer system.

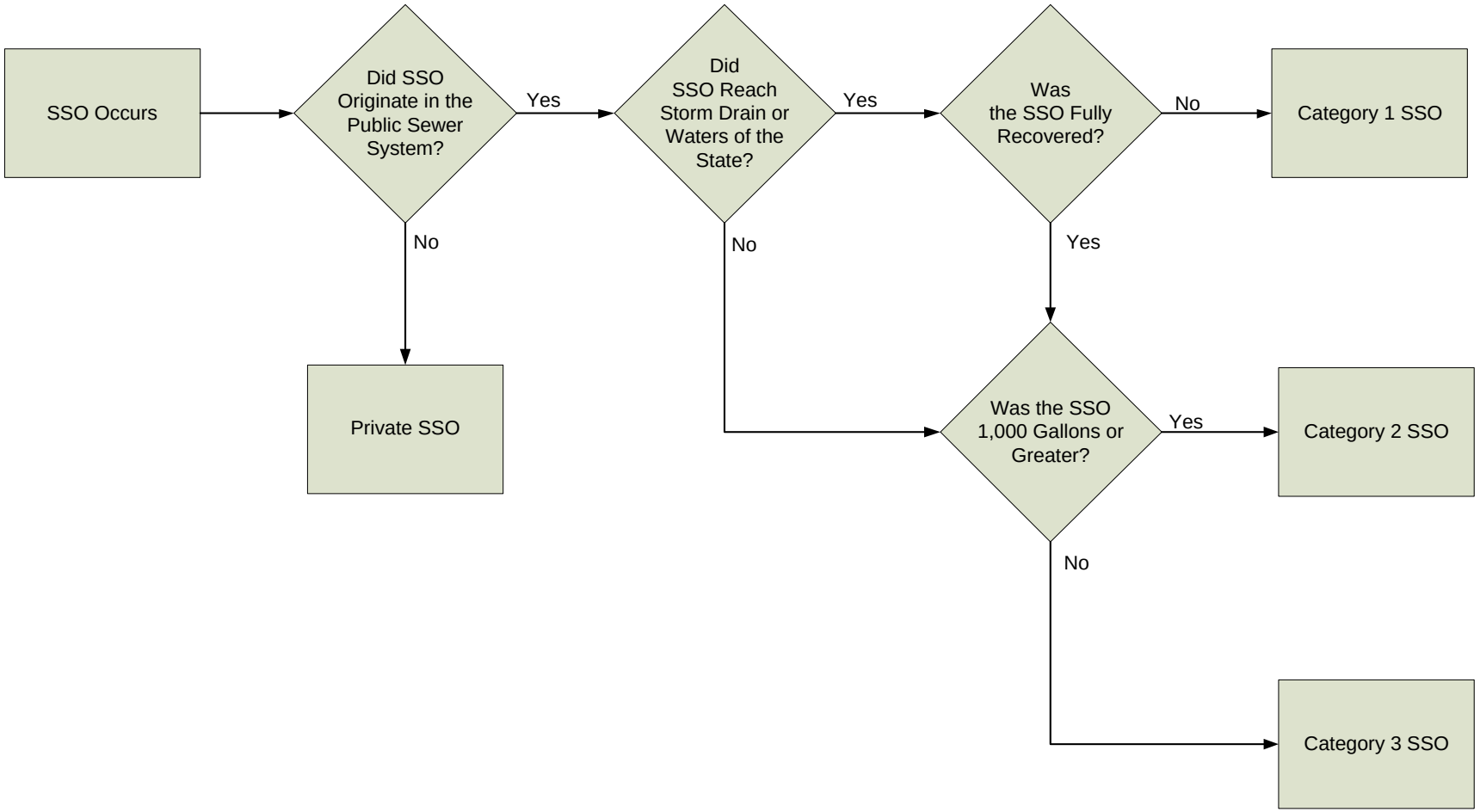
Category 3:

- Less than 1,000 gallons.
    - That **does not** reach a drainage channel and/or waters of the State.
    - That enters a storm drainpipe but **is fully recovered** and returned to the sanitary sewer system.

Private Spills:

- Discharges of untreated or partially treated wastewater resulting from blockages or other problems **within a privately owned sewer lateral** connection to the enrollee's sanitary sewer system or from other private sewer assets.

SSO CATEGORY DETERMINATION DIAGRAM



NOTIFICATION/MOBILIZE TO SITE

An SSO may be detected by residents, City employees, or by others. The City Wastewater Supervisor is responsible for receiving phone calls from the public of possible SSOs from the wastewater collection system. The call receiver shall obtain all relevant information available regarding the overflow including:

- Time and date call was received;
- Specific location and description of facility;
- Description of problem;
- Time the overflow was noticed by the caller;
- Callers name and phone number;
- Observations by the caller (e.g. odor, duration, amount);
- Other relevant information that will enable the responding investigator and crews, if required, to quickly locate, assess and stop the overflow; and
- Any information that is requested on the "Sanitary Sewer Overflow Report Form" (attached) that may help in responding to the overflow.

If the wastewater supervisor cannot be reached, dispatch will contact the designated primary on-call employee via phone or pager, who shall immediately respond and evaluate the scene, contact the Wastewater Supervisor and inform him of the sewer spill event. The primary on-call employee shall then call the rest of the on-call crew as needed and they shall report directly to the City Yard. They shall retrieve a Vaccon truck, the Harben hydro-jet trailer if needed, and a City truck with appropriate sewer spill response equipment, and mobilize to the sewer spill location.

The intent is to reduce the response time required to move the necessary equipment and manpower to the sewer spill location and to minimize the SSO spill time. The Wastewater Supervisor will also respond to the spill site and take over the SSO response operation. The table below indicates the staff available to respond to SSOs or back-ups.

Name	Title	Phone No.
Gil Busick	Wastewater Supervisor	(310) 524-2754 Cell (310) 877-0676
Ron Campbell	Wastewater Lead Worker	(310) 877-0675
Anthony Hernandez	Wastewater Maintenance Worker II	(310) 343-2605
Fernando Diaz	Wastewater Maintenance Worker II	(310) 877-0731
Willie Garcia	Wastewater Maintenance Worker I	(310) 524-2801
Christopher Zachery	Wastewater Maintenance Worker I	(323) 714-6447
Sewer Crew Pager		(310) 523-7648

SEWER SYTEM OVERFLOW EQUIPMENT:

Vaccon Truck

Harben Hydro-jet Trailer

Additional equipment:

- Sandbags or loose sand
- Storm drain socks or mats and pig barrier dams
- Additional PPE (gloves, eye protection, hand sanitizer)
- Misc. equipment (shovels, sledge hammer, manhole lift, etc.)
- Traffic control – equipment and devices
- Bypass pumps if needed
- Bypass hosing

CONTAIN THE SPILL

Upon arriving at the spill location, the on-call duty wastewater employee shall call the Wastewater Supervisor a second time and report the spill status. He shall then;

- Take immediate action to contain the spill to prevent sewage from entering storm drains, channels or other critical infrastructure.

- Establish perimeters and control zones with cones, barricades, vehicles or terrain. Maintain a "KEEP OUT ZONE" at all times.

- Collect representative photos of the spill location and flow rates.

- Notify the appropriate authorities.

Small spills can often be contained with sand berms. The additional personnel called out to assist the on-call duty wastewater employee with the spill, shall make sure to have shovels and sand available.

Medium spills may be contained with large sand berms, in strategic locations. Medium size spills may also require vacuuming and hauling the sewage or pumping the sewage to a sewer manhole for disposal, to prevent sewage from flowing over dikes. Use plastic sheeting to block storm drain inlets and other critical locations.

Large spills (spills more than a few gallons per minute that are likely to reach a storm drain inlet) in the public right of way may require various actions for containment, as follows:

- Build large sand berms to contain sewage.
- Block storm drains at inlets or at manholes at critical line intersection locations. Refer to Appendix D, *Storm Drain System Map.*
- Block sewage flow in channels with berms.
- **Call additional agency support for vacuum trucks to remove sewage off-site and for disposal. (At the discretion of the Wastewater Supervisor).**
- Use a sewer pump and hoses to pump to a sewer manhole.
- Contain the sewage in a low area.
- Estimate the rate of overflow.

For private spills, which occur on private property, make all efforts to contain the spill on the private property. Block the spillage before it enters the public right of way where possible. If it isn't practical to contain it on private property, contain the spill in the public right-of-way, before it enters a storm drain.

SSO VOLUME ESTIMATION

All reasonable efforts should be made to accurately calculate the spill rates and total volumes of an SSO. When determining the SSO spill rate and volume, the following steps should be followed at a minimum:

1. Determine the start time of the SSO. This can be determined by interviewing the person reporting the SSO to the City, or witnesses on-site.
    a. If necessary, City staff should go to residents' homes or local businesses to interview as many people as possible to determine the spill start time.

2. Document the SSO stop time. This is time the blockage is relieved in the sewer line and the sewage is no longer spilling from the SSO origination point.

3. Estimate the SSO flow rate (in gallons per minute) using the available methods provided in Appendix C. If the spill has stopped prior to arriving on scene, the SSO flow rate may need to be estimated based on eye witness accounts of spill start and stop times, or final calculations of total SSO volume.

4. Using the approved methods in Appendix C, estimate the total volume of the SSO.

5. Take representative photographs of the entire spill location including spill origination point and the point the SSO enters the storm drain system or waters of the State (if applicable). If possible take photographs of the SSO origination point that is representative of the SSO spill rate.

6. Document any assumptions made to determine the SSO spill rate and total volumes including Appendix C methods chosen. If the SSO start time could not be determined, document the method used to estimate the start time. **Do not** use the time the SSO was reported as the start time unless the SSO was reported within minutes of spilling.

STOP THE SPILL / RELIEVE THE BLOCKAGE

For spills originating in city owned sewer mains (public spills), clear the line blockage using the City Vaccon truck or Harben hydro-jet truck. In the event of an unusual situation, call the Wastewater Supervisor for support.

If the sewage spill originates on private property (private spills), contact the responsible person (usually a property manager or owner) and direct them to immediately contract a plumbing service provider to correct the problem and perform the cleanup work. Take all reasonable actions to prevent the sewage from entering the public right of way or storm drain, such as sand containment berms, until the plumbing contractor resolves the problem.

> Determine the name and contact number of the responsible party for the private property (owner, property manager, etc.).

If the spill originates on private property, call the **Los Angeles County Department of Health Services (310) 519-6060** or **(213) 974-1234**. If the property owner is uncooperative, contact the **City of El Segundo building** division inspector Jamie Taylor at (310) 524-2350; their hours of operation are 8:00 a.m. to 5:00 p.m. from Monday thru Thursday. **The City of El Segundo Wastewater division cannot shut off the water to the property unless directed to do so by a supervisor.**

Other agencies may also need to be contacted, depending on the conditions present. Ask the on-call Supervisor/Crew Leader for direction. Contact information for the agencies available to respond is included in the table below.

Agency	Phone Number
Los Angeles County Sanitation District	(562) 699-7411
City of Manhattan Beach After hours Wastewater Supervisor, Justin Gervais	(310) 545-5621 x 380 (310) 545-5621 x 221 (310-802-5000 (310)345-2442 (cell)
City of Hawthorne After hours Wastewater Supervisor, Rich Carver	(310) 970-7955 (310) 970-7052 (213)216-2356 (cell)
City of Redondo Beach Engineering Department Frank Contreras	(310) 318-0661 (310)806-8851 (cell)

CLEAN UP THE SPILL

All spills must be cleaned up. The following steps should be followed when cleaning up a spill area.

1. **Assign staff to begin cleanup**
   NOTE: If SSO was caused by a failure in a private service line, clean up impacted ***public areas only*** & document staff time, equipment used & expenses incurred.

2. **Remove all signs of SSO related pollution**
   (e.g., toilet paper, solids, grease, etc.)

3. **Flush area – Unless raining**
   a. Setup berm/other means to contain all chlorinated flush water so it can be returned to sewer

   b. Don't use disinfectants as they may enter the storm drain system and not be fully recovered or they may enter a water body. The Wastewater Supervisor will direct any special requirements for spill cleanup, such as disinfection. Do not apply disinfectant until directed to do so by the Wastewater Supervisor.

      All water used to disinfect shall be vacuumed and disposed of into the sewer and or hauled off to an appropriate waste facility.

4. **Clean the storm drain system if needed**
   a. Plug and isolate the affected areas of the storm drain system. Refer to the Storm Drain System Map (Appendix D) to identify the area of the storm drain system to be isolated.

   b. Using either the Harben Hydro-jet trailer or the Vaccon Truck, clean the isolated area of the storm drain system and collect the sewage/cleaning water with the Vaccon truck and return the sewage/cleaning water to the sewer system.

5. **Photograph the area when cleanup operations are complete**
   Photographs should be taken during each stage of the SSO response to sufficiently document the SSO. When taking photographs of the SSO, capture a reference point—a building, tree, or other permanent object—in the photograph to indicate the relative size and location of the subject of the photograph (i.e., manhole or SSO). Do not get too close to objects and ensure the photograph is clear and not blurry. When taking photographs of the same object from different angles, ensure that the photograph is being taken from the same distance as the previous photographs.

REPORT THE SPILL

It is the Wastewater Supervisor's responsibility to document and report the SSO to all appropriate agencies.

After the spill is contained, **all** sewage spills, regardless of size, must be reported as soon as possible by phone to the **Los Angeles County Department of Health Services.** Call the County Department of Health directly at **(310) 519-6060** or **(213) 974-1234**. Let the Los Angeles County Department of Health Services know that you are making an official spill notification.

Written reports of all public sewer spills must be prepared under the California Integrated Water Quality System (CIWQS) system and by a City authorized user. The Sanitary Sewer Overflow (CIWQS Reporting Form) is provided in Appendix B. All CIWQS reporting must be done via the online reporting system (CIWQS) website. For the on-call duty employee it is very important to write down all relevant information such as dates, times, names of persons contacted, estimated flow rate and volume of sewage spilled, methods used to determine spill flow rate and volume estimates, names of people responding, etc. The on-call duty employee is also required to provide photographs of the SSO, complete the attached SSO Field Form (see Appendix B) and turn it in to the Wastewater Supervisor. The Wastewater Supervisor shall review and complete the form entirely.

A mandatory debriefing meeting for the SSO will be held no later than 72 hours after the SSO has occurred. This meeting will be held between Engineering, the Wastewater Supervisor, and at least one crew member attending the SSO activities.

CATEGORY 1 SPILL REPORTING:

Category 1 spills include:

- A spill of any volume that reaches a drainage channel and/or waters of the State such as a river, creek, ocean, or
- A spill of any volume that enters a storm drain pipe that **was not fully recovered** and returned to the sanitary sewer system.

Reporting

Reporting for all Category 1 spills shall be made by the most senior on-call employee at the scene and shall be handled as follows:

1. If the Category 1 SSO is greater than 1,000 gallons, contact the **California Office of Emergency Services (Cal OES)** at **1-(800) 852-7550 WITHIN 2 HOURS** after becoming aware of the spill and wait on the phone for a control number. Cal OES will make a report and fax it to the Regional Water Quality Control Board (RWQCB). **Cal OES will**

provide a Control Number, be sure to record this number for spill reporting purposes. If the spill is very large or hazardous, Cal OES will contact RWQCB and County Department of Health personnel.

2. If the Category 1 SSO is less than 1,000 gallons, call the **Los Angeles County Department of Health Services** directly at **(310) 519-6060** or **(213) 974-1234**.

3. If it is estimated that 50,000 gallons or more of an SSO has reached water of the State, **within 48 hours** coordinate sampling for the appropriate constituents such as ammonia and appropriate bacterial indicators (i.e., fecal coliform, enterococcus, and e-coli).

4. Submit a draft report to the CIWQS Online SSO Database within 3 business days of becoming aware of the SSO and certify the SSO report in CIWQS within 15 calendar days of SSO end date. http://ciwqs.waterboards.ca.gov

5. Category 1 sewer spill certification will be performed by the City's Legally Responsible Officer (LRO).

CATEGORY 2 SPILL REPORTING:

Category 2 spills are:

- 1,000 gallons or greater which:
  - Does not reach a drainage channel and/or waters of the State such as a river, creek, ocean, or
  - Enters a storm drainpipe but **is fully recovered** and returned to the sanitary sewer system.

Reporting

Reporting for all Category 2 spills shall be made by the most senior on-call employee at the scene, but notifications to the Los Angeles County Department of Health Services can be made by any on-call employee:

1. Call the **Los Angeles County Department of Health Services** directly at **(310) 519-6060** or **(213) 974-1234**.

2. Submit a draft report to the CIWQS Online SSO Database within 3 business days of becoming aware of the SSO and certify the SSO report in CIWQS within 15 calendar days of SSO end date. http://ciwqs.waterboards.ca.gov

3. Category 2 sewer spill certification will be performed by the City's Legally Responsible Officer (LRO).

CATEGORY 3 SPILL REPORTING:

Category 3 spills are:

- Less than 1,000 gallons which:
    - Does not reach a drainage channel and/or waters of the State such as a river, creek, ocean, or
    - Enters a storm drainpipe but is fully recovered and returned to the sanitary sewer system.

Reporting

Reporting for all Category 3 spills shall be made by the most senior on-call employee at the scene, but notifications to the Los Angeles County Department of Health Services can be made by any on-call employee:

1. Call the **Los Angeles County Department of Health Services** directly at **(310) 519-6060** or **(213) 974-1234**.

2. Category 3 spills must be reported and certified through the California Integrated Water Quality System (CIWQS) within 30 days after the end of the calendar month in which the SSO occurred. http://ciwqs.waterboards.ca.gov

3. Category 3 sewer spill certification will be performed by the City's Legally Responsible Officer (LRO).

PRIVATE SPILL REPORTING:

Private spills are:

- Any spills originating from private property.

Reporting

Reporting for all private spills shall be made by the Wastewater Supervisor and or Wastewater Lead Worker during business hours, and the on-call Wastewater Employee after hours, and shall be handled as follows:

- Call the **Los Angeles County Department of Health Services.** During working hours directly at **(310) 519-6060** or **(213) 974-1234** as described above **within 2 hours** after containing the spill.

SSO TECHNICAL REPORT:

The City shall submit a SSO Technical Report within 45 calendar days after the end of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. This report shall include at a minimum:

1. **Causes and Circumstances of the SSO:**
    a. Complete and detailed explanation of how and when the SSO was discovered.
    b. Diagram showing the SSO failure point, appearance point(s), and final destination(s).
    c. Detailed description of the methodology employed and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.
    d. Detailed description of the cause(s) of the SSO.
    e. Copies of original field crew records used to document the SSO.
    f. Historical maintenance records for the failure location.

2. **City's Response to SSO:**
    a. Chronological narrative description of all actions taken by the City to terminate the spill.
    b. Explanation of how the SSMP Overflow Emergency Response plan was implemented to respond to and mitigate the SSO.
    c. Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

3. **Water Quality Monitoring:**
    a. Conduct water quality sampling **within 48 hours** after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters. Water quality sampling shall include:
        i. Analysis for the appropriate constituents such as ammonia and appropriate bacterial indicators (i.e., fecal coliform, enterococcus, and e-coli).
        ii. Description of all water quality sampling activities conducted including analytical results and evaluation of the results.
        iii. Detailed location map illustrating all water quality sampling points.

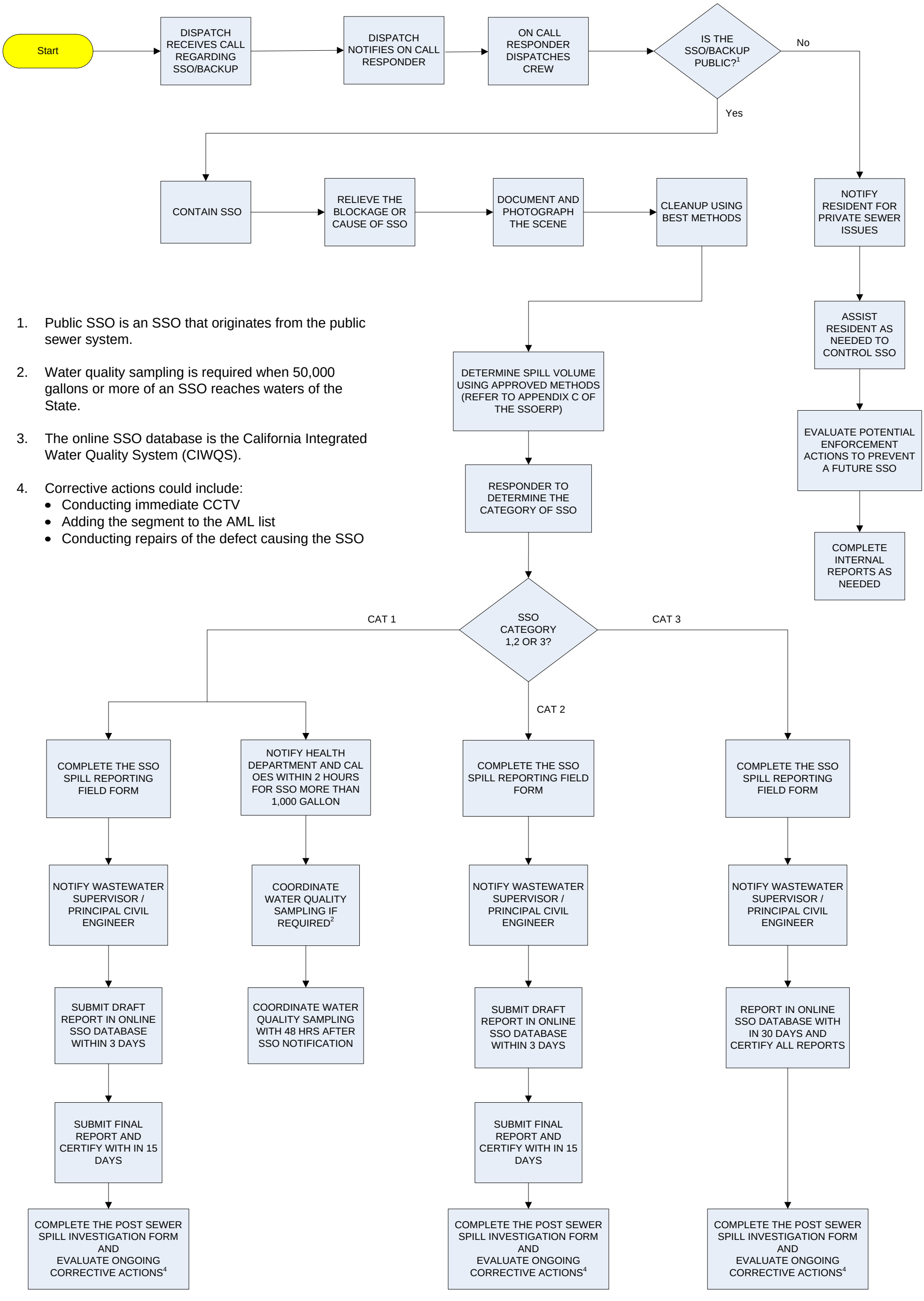
"NO SPILL" CERTIFICATION:

Certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred.

Appendix A

Sanitary Sewer Overflow Emergency Response Plan Flow Diagram

City of El Segundo SSO Emergency Response Plan Flow Diagram



1. Public SSO is an SSO that originates from the public sewer system.

2. Water quality sampling is required when 50,000 gallons or more of an SSO reaches waters of the State.

3. The online SSO database is the California Integrated Water Quality System (CIWQS).

4. Corrective actions could include:
   - Conducting immediate CCTV
   - Adding the segment to the AML list
   - Conducting repairs of the defect causing the SSO

Appendix B

Sanitary Sewer Overflow
Field Form

SSO SPILL REPORTING FIELD FORM

NOTE: ALL On-Call personnel that are required to respond to sewer spills shall read and understand the complete Sewage Spill Procedures contained in the SSOERP. When responding to a sewage spill, the following general procedures should be followed in order:

1. **CONTAIN THE SPILL**
2. **STOP THE SPILL**
3. **CALL AND REPORT TO APPROPIATE AUTHORITIES**
4. **CLEAN UP THE SPILL**
5. **FIELD REPORTS – ON CALL RESPONDER SHALL VERIFY AND FILL ALL DATA FOR THE SSO.**

BASIC SPILL INFORMATION:

1.) DATE: _____/_____/_____

2.) SPILL LOCATION: _____
Address / Street Intersection Spill Point (MH#, CO, etc.)

3.) TIME SSO STARTED (If known): _____

4) TIME CITY WAS NOTIFIED: _____

5.) OPERATOR ARRIVAL TIME: _____

6.) PRIVATE PROPERTY (Y OR N): _____

7.) SPILL END TIME: _____

8.) ESTIMATED SPILL FLOW RATE: _____ (gpm)

(Number of pick holes where water is coming out _____ Height of water spout out of the MH _____inches)

9.) ESTIMATED SPILL VOLUME LOST: _____ (GAL.)

10.) ESTIMATED SPILL VOLUME RECOVERED: _____(GAL.)

11.) TOTAL SPILL (VOLUME) (FLOW RATE X MIN):_____(GAL.)

12.) SPILL REASON/CAUSE: _____

SPILL REPORTING

TYPE OF SPILL: _____

NOTIFICATION LIST			PERSON CONTACTED	TIME	DATE	INITIALS
Agency	Normal Hours	After Hours				
LACDHS (Health Care Agency)	(310) 519-6060	(213) 974-1234				
Cal OES Control Number (if Category 1 and greater than 1,000 gal):						
Cal OES (Category 1 only)	(800) 852-7550	(800) 852-7550				

THE FOLLOWING IS TO BE COMPLETED BY THE ON-CALL Responder

SPILL CERTIFICATION

- ☐ Did the sewer spill enter a storm drain pipe and not fully recovered (Y or N) _____
- ☐ Was the sewer spill fully recovered and returned to the sanitary sewer system or disposed of properly (Y or N) _____
- ☐ Did Sewer Spill enter a drainage channel and/or surface water (Y or N) _____ (EX: Creek, River, or Ocean)
- ☐ Was Cal OES Contacted (for Category 1 and greater than 1,000 gallons) (Y or N) _____
- ☐ Cal OES Control Number (entered above)

NAME OF ON-CALL SUPERVISOR _____

SIGNED: _____ DATE: ____/____/____
(On-Call Responder) (MM/DD/YY)

POST – SEWER SPILL INVESTIGATION (Complete by Wastewater Supervisor)

DATE: _____ LOCATION:_____

SSO Cause (Findings):

_____

_____

_____

_____

Spill Date:_____

Existing Sewer Video (Y/N):_____

Investigation Work Plan:_____

_____

_____

_____

_____

Corrective Measures (Check Box):

- ☐ Pipe Replacement (Spot)
- ☐ Monitoring (Smart Cover)
- ☐ Root Control (Foam)
- ☐ Pipe Lining
- ☐ Closed Circuit Television (CCTV)
- ☐ M.H. Rehabilitation
- ☐ Other (Specify)

_____

_____

_____

_____

NAME OF WASTEWATER SUPERVISOR _____

SIGNED: _____ DATE: ____/____/____

(WASTEWATER SUPERVISOR) (MM/DD/YY)

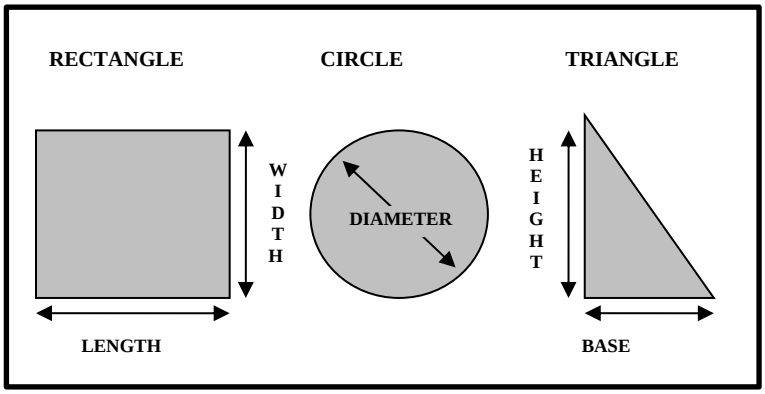
Appendix C

Volume Estimation Examples

Measured Volume

The volume of most small spills that have been contained can be estimated using this method. The shape, dimensions, and the depth of the contained wastewater are needed. The shape and dimensions are used to calculate the area of the spills and the depth is used to calculate the volume.

Common Shapes and Dimensions



1. Sketch the shape of the contained wastewater.
2. Measure or pace off the dimensions.
3. Measure the depth at several locations and select an average.
4. Convert the dimensions, including depth, to feet.
5. Calculate the area:

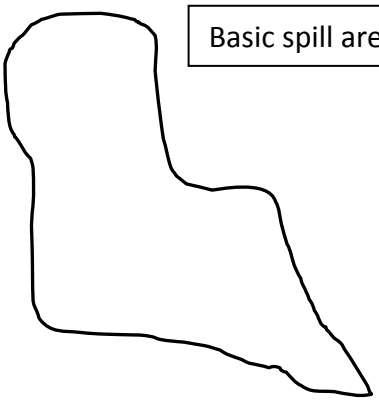
   Rectangle: Area = length (feet) x width (feet)

   Circle: Area = diameter (feet) x diameter (feet) x 3.14 divided by 4

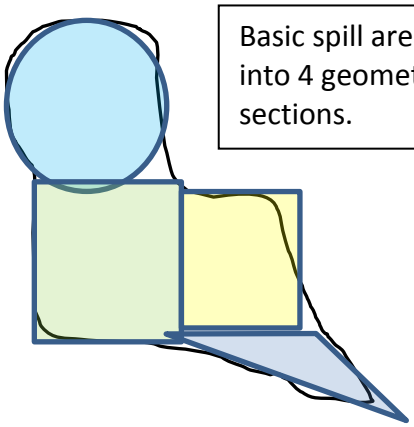
   Triangle: Area = base (feet) x height (feet) x 0.5
6. Multiply the area (square feet) times the depth (in feet) to obtain the volume in cubic feet.
7. Multiply the volume in cubic feet by 7.5 to convert to gallons

Not all SSOs will conform to a specific shape. When this occurs, break up the area of the SSO into various shapes or segments, then calculate the amount of wastewater spilled in each segment, adding them together to arrive at the total spill volume.

Example:

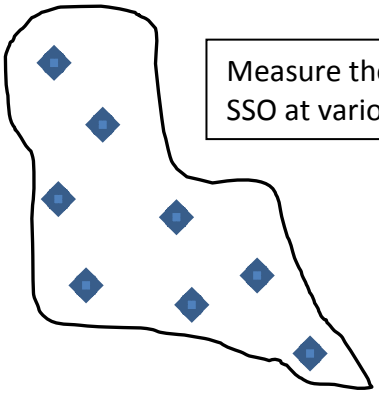


Basic spill area



Basic spill area divided into 4 geometric sections.

Determine the area of each of the geometric sections adding them all together to determine the total area of the spill.



Measure the depth of the SSO at various locations.

For wet stains on concrete use a depth of 0.0026'or 1/32".
For wet stains on asphalt use 0.0013'or 1/64".

Inch to Feet Conversion:

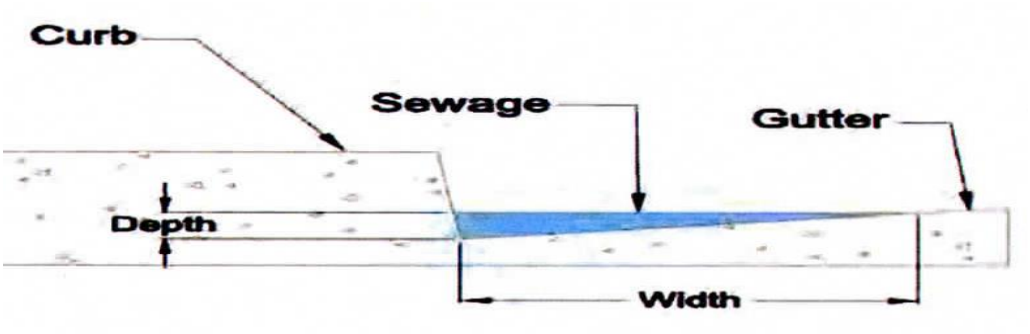
Inches	to	Feet
1/8"	=	0.01'
1/4"	=	0.02'
3/8"	=	0.03'
1/2"	=	0.04'
5/8"	=	0.05'
3/4"	=	0.06'
7/8"	=	0.07'
1"	=	0.08'
2"	=	0.17'
3"	=	0.25'
4"	=	0.33'
5"	=	0.42'
6"	=	0.50'
7"	=	0.58'
8"	=	0.67'
9"	=	0.75'

Open Channel Flow

This method can be used to measure SSOs that are flowing in open channels such as ditches, curb and gutter, etc. and still achieve reasonable estimations. Two things need to be determined to utilize this method of spill estimation, the cross sectional area of the channel and the velocity of the flow in the channel:

1. Determine the cross sectional dimensions of the channel (width and depth of flow) to determine the area of the flow.
2. Determine the velocity of the flow in the channel. To determine the velocity, drop a small floating object (ping pong ball, leaf, small piece of wood, etc.) into the flow and time how long it takes the object to travel a measured distance. This should be done several times and averaged to determine the flow velocity.

The velocity of the flow times the area of the channel times the duration of the SSO will result in the approximate volume of the SSO.



Area = length (feet) x width (feet)

Flow (gal/min) = Velocity (ft/sec) x Area (ft^2) x 449

Total Volume = (Area) X (Flow) X (SSO Duration)

Attachment D - Sample Templates for SSO Volume Estimation

TABLE 'A'

ESTIMATED SSO FLOW OUT OF M/H WITH COVER IN PLACE

24" COVER

Height of spout above M/H rim **H** in inches	S S O FLOW **Q** in gpm	in MGD	Min. Sewer size in which these flows are possible
1/4	1	0.001	
1/2	3	0.004	
3/4	6	0.008	
1	9	0.013	
1 1/4	12	0.018	
1 1/2	16	0.024	
1 3/4	21	0.030	
2	25	0.037	
2 1/4	31	0.045	
2 1/2	38	0.054	
2 3/4	45	0.065	
3	54	0.077	
3 1/4	64	0.092	
3 1/2	75	0.107	
3 3/4	87	0.125	
4	100	0.145	
4 1/4	115	0.166	
4 1/2	131	0.189	
4 3/4	148	0.214	
5	166	0.240	
5 1/4	185	0.266	
5 1/2	204	0.294	
5 3/4	224	0.322	6"
6	244	0.352	
6 1/4	265	0.382	
6 1/2	286	0.412	
6 3/4	308	0.444	
7	331	0.476	
7 1/4	354	0.509	
7 1/2	377	0.543	
7 3/4	401	0.578	8"
8	426	0.613	
8 1/4	451	0.649	
8 1/2	476	0.686	
8 3/4	502	0.723	
9	529	0.761	

36" COVER

Height of spout above M/H rim **H** in inches	S S O FLOW **Q** in gpm	in MGD	Min. Sewer size in which these flows are possible
1/4	1	0.002	
1/2	4	0.006	
3/4	8	0.012	
1	13	0.019	
1 1/4	18	0.026	
1 1/2	24	0.035	
1 3/4	31	0.044	
2	37	0.054	
2 1/4	45	0.065	
2 1/2	55	0.079	
2 3/4	66	0.095	
3	78	0.113	
3 1/4	93	0.134	
3 1/2	109	0.157	
3 3/4	127	0.183	
4	147	0.211	
4 1/4	169	0.243	
4 1/2	192	0.276	
4 3/4	217	0.312	6"
5	243	0.350	
5 1/4	270	0.389	
5 1/2	299	0.430	
5 3/4	327	0.471	
6	357	0.514	
6 1/4	387	0.558	8"
6 1/2	419	0.603	
6 3/4	451	0.649	
7	483	0.696	
7 1/4	517	0.744	
7 1/2	551	0.794	
7 3/4	587	0.845	10"
8	622	0.896	
8 1/4	659	0.949	
8 1/2	697	1.003	
8 3/4	734	1.057	
9	773	1.113	

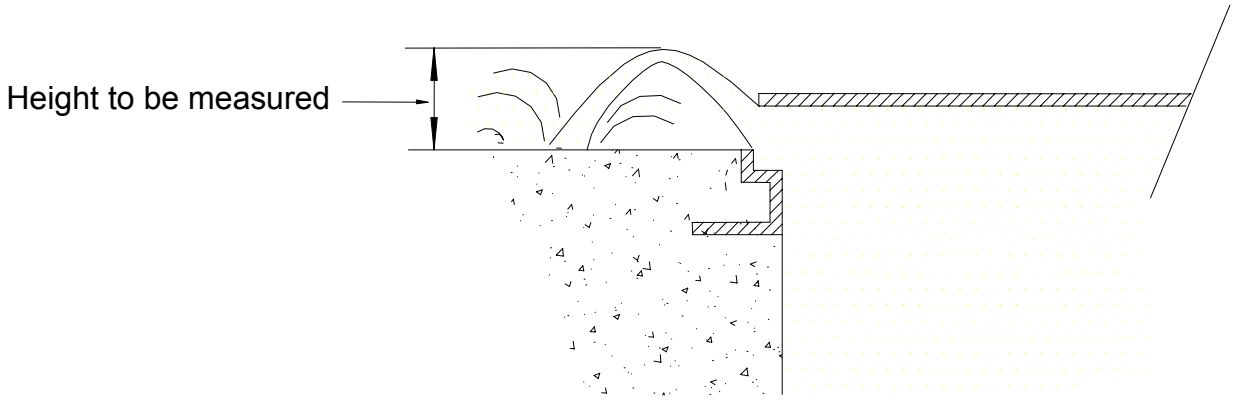
Disclaimer:
This sanitary sewer overflow table was developed by Ed Euyen, Civil Engineer, P.E. No. 33955, California, for County Sanitation District 1. This table is provided as an example. Other Agencies may want to develop their own estimating tables.

The formula used to develop Table A measures the maximum height of the water coming out of the maintenance hole above the rim. The formula was taken from hydraulics and its application by A.H. Gibson (Constable & Co. Limited).

Example Overflow Estimation:

The maintenance hole cover is unseated and slightly elevated on a 24" casting. The maximum height of the discharge above the rim is 5 ¼ inches. According to Table A, these conditions would yield an SSO of 185 gallons per minute.

FLOW OUT OF M/H WITH COVER IN PLACE



This sanitary sewer overflow drawing was developed by Debbie Myers, Principal Engineering Technician, for Ed Euyen, Civil Engineer, P.E. No. 33955, California, of County Sanitation District 1.

Collection System Collaborative Benchmarking Group
Best Practices for Sanitary Sewer Overflow (SSO) Prevention and Response Plan

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TABLE 'B'

ESTIMATED SSO FLOW OUT OF M/H WITH COVER REMOVED

24" FRAME

Water Height above M/H frame **H** in inches	S S O FLOW **Q** in gpm	in MGD	Min. Sewer size in which these flows are possible
1/8	28	0.04	
1/4	62	0.09	
3/8	111	0.16	
1/2	160	0.23	
5/8	215	0.31	6"
3/4	354	0.51	8"
7/8	569	0.82	10"
1	799	1.15	12"
1 1/8	1,035	1.49	
1 1/4	1,340	1.93	15"
1 3/8	1,660	2.39	
1 1/2	1,986	2.86	
1 5/8	2,396	3.45	18"
1 3/4	2,799	4.03	
1 7/8	3,132	4.51	
2	3,444	4.96	21"
2 1/8	3,750	5.4	
2 1/4	3,986	5.74	
2 3/8	4,215	6.07	
2 1/2	4,437	6.39	
2 5/8	4,569	6.58	24"
2 3/4	4,687	6.75	
2 7/8	4,799	6.91	
3	4,910	7.07	

36" FRAME

Water Height above M/H frame **H** in inches	S S O FLOW **Q** in gpm	in MGD	Min. Sewer size in which these flows are possible
1/8	49	0.07	
1/4	111	0.16	
3/8	187	0.27	6"
1/2	271	0.39	
5/8	361	0.52	8"
3/4	458	0.66	
7/8	556	0.8	10"
1	660	0.95	12"
1 1/8	1,035	1.49	
1 1/4	1,486	2.14	15"
1 3/8	1,951	2.81	
1 1/2	2,424	3.49	18"
1 5/8	2,903	4.18	
1 3/4	3,382	4.87	
1 7/8	3,917	5.64	21"
2	4,458	6.42	
2 1/8	5,000	7.2	24"
2 1/4	5,556	8	
2 3/8	6,118	8.81	
2 1/2	6,764	9.74	
2 5/8	7,403	10.66	
2 3/4	7,972	11.48	30"
2 7/8	8,521	12.27	
3	9,062	13.05	
3 1/8	9,604	13.83	
3 1/4	10,139	14.6	
3 3/8	10,625	15.3	36"
3 1/2	11,097	15.98	
3 5/8	11,569	16.66	
3 3/4	12,035	17.33	
3 7/8	12,486	17.98	
4	12,861	18.52	
4 1/8	13,076	18.83	
4 1/4	13,285	19.13	
4 3/8	13,486	19.42	

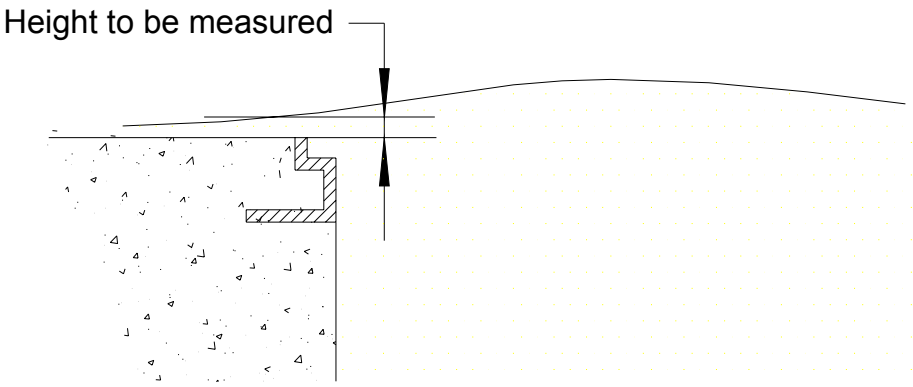
Disclaimer:
This sanitary sewer overflow table was developed by Ed Euyen, Civil Engineer, P.E. No. 33955, California, for County Sanitation District 1. This table is provided as an example. Other Agencies may want to develop their own estimating tables.

The formula used to develop Table B for estimating SSO's out of maintenance holes without covers is based on discharge over curved weir -- bell mouth spillways for 2" to 12" diameter pipes. The formula was taken from hydraulics and its application by A.H. Gibson (Constable & Co. Limited).

Example Overflow Estimation:

The maintenance hole cover is off and the flow coming out of a 36" frame maintenance hole at one inch (1") height will be approximately 660 gallons per minute.

FLOW OUT OF M/H WITH COVER REMOVED (TABLE "B")



This sanitary sewer overflow drawing was developed by Debbie Myers, Principal Engineering Technician, for Ed Euyen, Civil Engineer, P.E. No. 33955, California, of County Sanitation District 1.

TABLE 'C'

ESTIMATED SSO FLOW OUT OF M/H PICK HOLE

Height of spout above M/H cover **H** in inches	SSO FLOW **Q** in gpm
1/8	1.0
1/4	1.4
3/8	1.7
1/2	1.9
5/8	2.2
3/4	2.4
7/8	2.6
1	2.7
1 1/8	2.9
1 1/4	3.1
1 3/8	3.2
1 1/2	3.4
1 5/8	3.5
1 3/4	3.6
1 7/8	3.7
2	3.9
2 1/8	4.0
2 1/4	4.1
2 3/8	4.2
2 1/2	4.3
2 5/8	4.4
2 3/4	4.5
2 7/8	4.6
3	4.7
3 1/8	4.8
3 1/4	4.9
3 3/8	5.0
3 1/2	5.1
3 5/8	5.2
3 3/4	5.3
3 7/8	5.4
4	5.5
4 1/8	5.6
4 1/4	5.6
4 3/8	5.7
4 1/2	5.8
4 5/8	5.9
4 3/4	6.0
4 7/8	6.0
5	6.1

Height of spout above M/H cover **H** in inches	SSO FLOW **Q** in gpm	
5 1/8	6.2	
5 1/4	6.3	
5 3/8	6.3	
5 1/2	6.4	
5 5/8	6.5	
5 3/4	6.6	
5 7/8	6.6	
6	6.7	
6 1/8	6.8	
6 1/4	6.8	
6 3/8	6.9	
6 1/2	7.0	← Unrestrained M/H cover will start to lift
6 5/8	7.0	
6 3/4	7.1	
6 7/8	7.2	
7	7.2	
7 1/8	7.3	
7 1/4	7.4	
7 3/8	7.4	
7 1/2	7.5	
7 5/8	7.6	
7 3/4	7.6	
7 7/8	7.7	
8	7.7	
8 1/8	7.8	
8 1/4	7.9	
8 3/8	7.9	
8 1/2	8.0	
8 5/8	8.0	
8 3/4	8.1	
8 7/8	8.1	
9	8.2	
9 1/8	8.3	
9 1/4	8.3	
9 3/8	8.4	
9 1/2	8.4	
9 5/8	8.5	
9 3/4	8.5	
9 7/8	8.6	
10	8.7	

Note: This chart is based on a 7/8 inch diameter pick hole

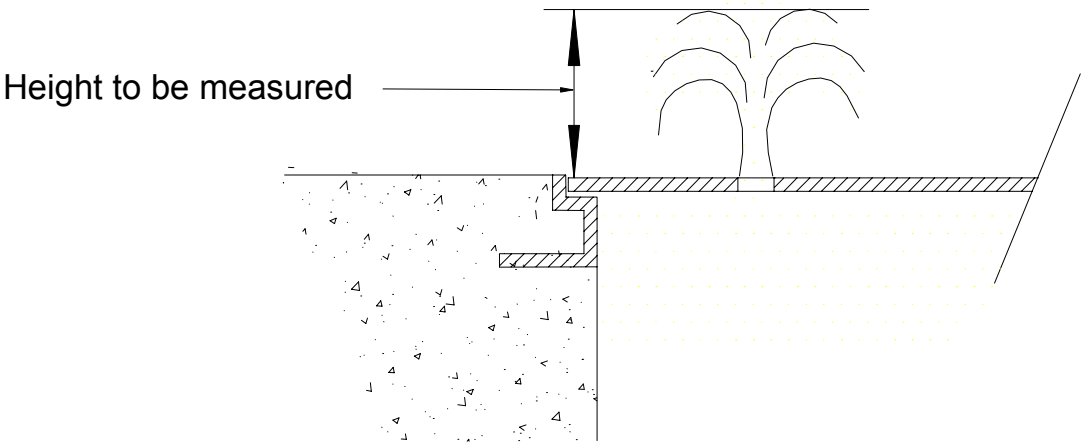
Disclaimer: This sanitary sewer overflow table was developed by Ed Euyen, Civil Engineer, P.E. No. 33955, California, for County Sanitation District 1. This table is provided as an example. Other Agencies may want to develop their own estimating tables.

The formula used to develop Table C is Q=CcVA, where Q is equal to the quantity of the flow in gallons per minute, Cc is equal to the coefficient of contraction (.63), V is equal to the velocity of the overflow, and A is equal to the area of the pick hole.[2] If all units are in feet, the quantity will be calculated in cubic feet per second, which when multiplied by 448.8 will give the answer in gallons per minute. (One cubic foot per second is equal to 448.8 gallons per minute, hence this conversion method).

Example Overflow Estimation:

The maintenance hole cover is in place and the height of water coming out of the pick hole seven-eighths of an inch in diameter (7/8") is 3 inches (3”). This will produce an SSO flow of approximately 4.7 gallons per minute.

FLOW OUT OF VENT OR PICK HOLE (TABLE "C")



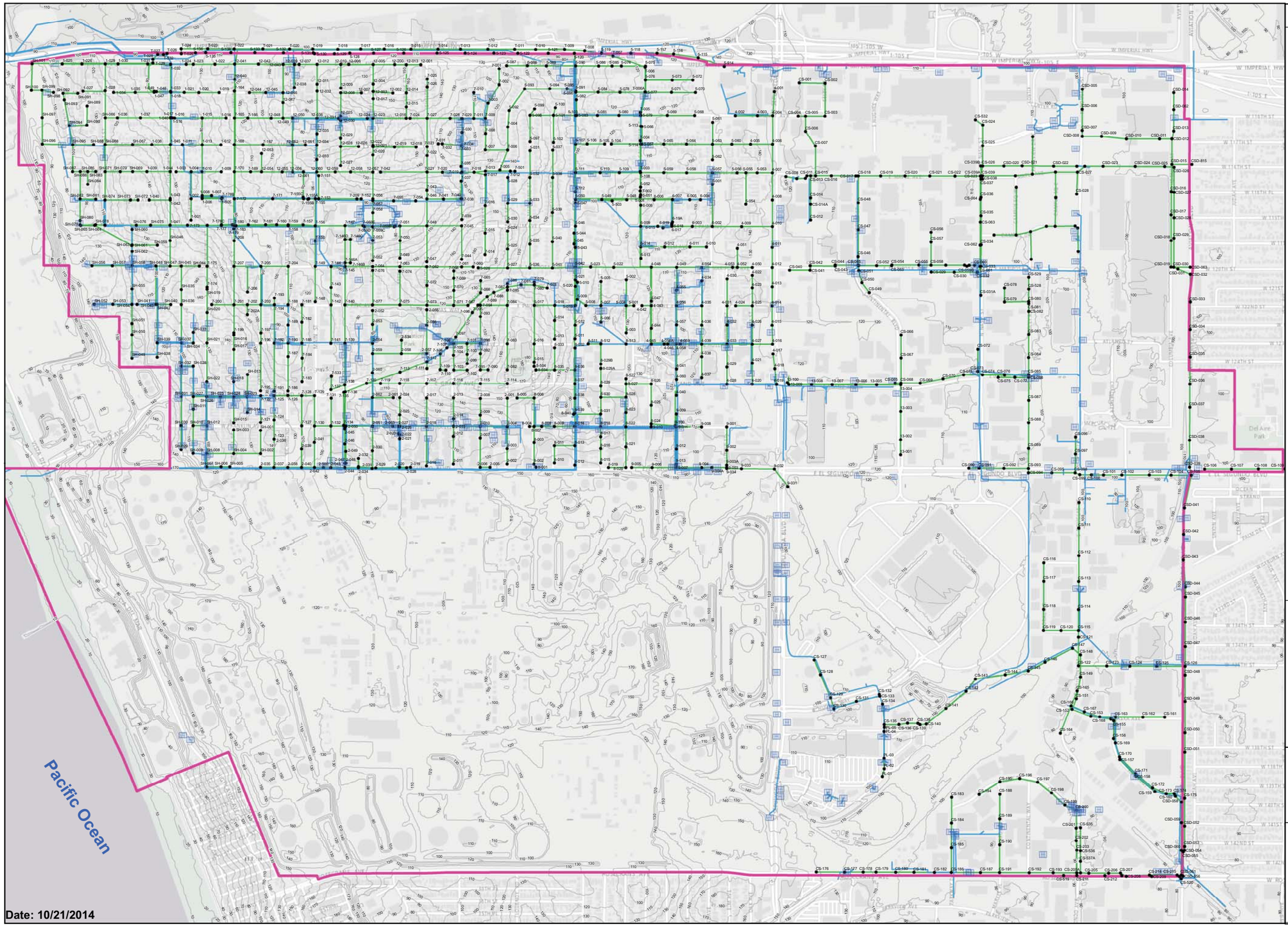
This sanitary sewer overflow drawing was developed by Debbie Myers, Principal Engineering Technician, for Ed Euyen, Civil Engineer, P.E. No. 33955, California, of County Sanitation District 1.

[2] Velocity for the purposes of this formula is calculated by using the formula h = v squared / 2G, where h is equal to the height of the overflow, v is equal to velocity, and G is equal to the acceleration of gravity.

Flow Estimation Pictures

Appendix D

Storm Drain System Map



Date: 10/21/2014

LEGEND

- Catch Basin
- Manholes
- City Boundary
- Storm Drain
- Sewer System
- Elevation Contour

N
W E
S

0 300 600 1,200 1,800 Feet

City of El Segundo
350 Main St.
El Segundo,CA, 90245

STORM DRAIN CONVEYANCE MAP

EEC ENVIRONMENTAL

APPENDIX C
SEWER OVERFLOW REPORT FORM

SSO SPILL REPORTING FIELD FORM

NOTE: ALL On-Call personnel that are required to respond to sewer spills shall read and understand the complete Sewage Spill Procedures contained in the SSOERP. When responding to a sewage spill, the following general procedures should be followed in order:

1. **CONTAIN THE SPILL**
2. **STOP THE SPILL**
3. **CALL AND REPORT TO APPROPIATE AUTHORITIES**
4. **CLEAN UP THE SPILL**
5. **FIELD REPORTS – ON CALL RESPONDER SHALL VERIFY AND FILL ALL DATA FOR THE SSO.**

BASIC SPILL INFORMATION:

1.) DATE: _____/_____/_____

2.) SPILL LOCATION: _____
Address / Street Intersection Spill Point (MH#, CO, etc.)

3.) TIME SSO STARTED (If known): _____

4) TIME CITY WAS NOTIFIED: _____

5.) OPERATOR ARRIVAL TIME: _____

6.) PRIVATE PROPERTY (Y OR N): _____

7.) SPILL END TIME: _____

8.) ESTIMATED SPILL FLOW RATE: _____ (gpm)

(Number of pick holes where water is coming out _____ Height of water spout out of the MH _____inches)

9.) ESTIMATED SPILL VOLUME LOST: _____ (GAL.)

10.) ESTIMATED SPILL VOLUME RECOVERED: _____(GAL.)

11.) TOTAL SPILL (VOLUME) (FLOW RATE X MIN):_____(GAL.)

12.) SPILL REASON/CAUSE: _____

SPILL REPORTING

TYPE OF SPILL: _____

NOTIFICATION LIST			PERSON CONTACTED	TIME	DATE	INITIALS
Agency	Normal Hours	After Hours				
LACDHS (Health Care Agency)	(310) 519-6060	(213) 974-1234				
Cal OES Control Number (if Category 1 and greater than 1,000 gal):						
Cal OES (Category 1 only)	(800) 852-7550	(800) 852-7550				

THE FOLLOWING IS TO BE COMPLETED BY THE ON-CALL Responder

SPILL CERTIFICATION

- ☐ Did the sewer spill enter a storm drain pipe and not fully recovered (Y or N) _____
- ☐ Was the sewer spill fully recovered and returned to the sanitary sewer system or disposed of properly (Y or N) _____
- ☐ Did Sewer Spill enter a drainage channel and/or surface water (Y or N) _____ (EX: Creek, River, or Ocean)
- ☐ Was Cal OES Contacted (for Category 1 and greater than 1,000 gallons) (Y or N) _____
- ☐ Cal OES Control Number (entered above)

NAME OF ON-CALL SUPERVISOR _____

SIGNED: _____ DATE: ____/____/____
(On-Call Responder) (MM/DD/YY)

POST – SEWER SPILL INVESTIGATION (Complete by Wastewater Supervisor)

DATE: _____ LOCATION:_____

SSO Cause (Findings):

_____

_____

_____

_____

Spill Date:_____

Existing Sewer Video (Y/N):_____

Investigation Work Plan:_____

_____

_____

_____

_____

Corrective Measures (Check Box):

- ☐ Pipe Replacement (Spot)
- ☐ Monitoring (Smart Cover)
- ☐ Root Control (Foam)
- ☐ Pipe Lining
- ☐ Closed Circuit Television (CCTV)
- ☐ M.H. Rehabilitation
- ☐ Other (Specify)

_____

_____

_____

_____

NAME OF WASTEWATER SUPERVISOR _____

SIGNED: _____ DATE: ____/____/____

(WASTEWATER SUPERVISOR) (MM/DD/YY)

APPENDIX D
MUNICIPAL CODE TITLE 12

TITLE 12
PUBLIC SEWER FACILITIES

CHAPTER 1
GENERAL PROVISIONS, POLICIES AND PROCEDURES

12-1-1: PURPOSE:

The purpose of this Title is to protect the public health, safety and welfare by providing for beneficial public use of the City sewer system through regulation of sewer construction, sewer use and industrial wastewater discharges; to prevent any discharge which may reasonably interfere with the operation of the system; to provide for equitable distribution of the sewer system costs; to provide procedures for complying with requirements placed on the City by State and Federal laws; and to provide funds for the operation and maintenance of the City sewer system by imposing a service charge upon the users of these facilities. (Ord. 1093, 1-20-1987)

12-1-2: DEFINITIONS:

For the purpose of this Title, certain words and phrases shall be construed herein as set forth in this Section, unless it is apparent from the context that a different meaning is intended:

AVERAGE DAILY FLOW: The number of gallons of sewage discharged into the public sewers during a twenty four (24) hour period.

BOD OR BIOCHEMICAL OXYGEN DEMAND: The measure of decomposable organic material in domestic or industrial wastewaters as represented by the oxygen utilized over a period of five (5) days at twenty degrees centigrade (20□C) and as determined by the appropriate procedure in "Standard Methods".

COD OR CHEMICAL OXYGEN DEMAND: The measure of chemically decomposable material in domestic or industrial wastewater as represented by the oxygen utilized as determined by the appropriate procedure described in "Standard Methods".

CESSPOOL: Excavation or underground structure which receives any discharge of a drainage system and is constructed to retain organic matter and solids discharged therein but which permits the liquids to seep through the bottom and sides.

CHIMNEY: A vertical section of a sewer pipe extending either from a tee set ninety degrees (90□) to the main line or from a wye and a one-quarter bend set vertically at the curb or property line, and in either case suitably reinforced with concrete.

CHLORINE DEMAND: The difference between the amount of chlorine added to a wastewater sample and the amount remaining at the end of a thirty (30) minute period as determined by the procedures given in "Standard Methods".

CLARIFICATION: The process of removal and retention of turbidity, settleable solids, deleterious, hazardous, or undesirable matter from wastes by sedimentation or flotation.

CLARIFIER OR INTERCEPTOR: A device or structure which separates and retains suspended solids, settleable solids, deleterious, hazardous, or undesirable matter from wastes prior to discharge into public sewer.

COMMERCIAL USE: Any commercial or business establishment, office, hotel, motel, or hospital.

CONTAMINATION: An impairment of the quality of the underground or surface waters by sewage or industrial waste to a degree which creates a hazard to the public health through poisoning or the spread of disease.

DISCHARGER: Any person who discharges or causes a discharge to a public sewer.

DISSOLVED SOLIDS OR DISSOLVED MATTER: The solid matter in solution in wastewater as obtained by evaporation of a sample from which all suspended matter has been removed by filtration as determined by the procedures in "Standard Methods".

DOMESTIC WASTEWATER: The water-carried wastes not produced from commercial or industrial activity and which result from normal human living processes.

EFFLUENT: The liquid flowing out of any facility operated for treatment of sewage or industrial waste.

FACILITY: A pipe or structure constructed for the purpose of collecting, conveying, pumping, treating and disposing of industrial wastewater and sewage.

GROSS ANNUAL INCOME OF THE HOUSEHOLD: The income of every member of the household received during the year for which the refund is claimed and shall include, but not be limited to, wages, salaries, bonuses, tips, gross amount of pensions and annuities, retirement benefits, social security payments, disability payments, life insurance benefits, interest, capital gains and inheritances.

GROSS FLOOR AREA: The area included within the exterior of the surrounding walls of a building or portions thereof, exclusive of courts.

HOUSE CONNECTION SEWER OR LATERAL: That part of the sewer piping within the street or public right of way which extends from the house sewer to a connection with the public sewer.

HOUSE SEWER: That part of the sewer piping beginning two feet (2') from the exterior wall of a building, structure or foundation and extending to its connection with the house connection sewer.

INDUSTRIAL CONNECTION SEWER: A house connection sewer used primarily for the discharge of industrial waste.

INDUSTRIAL USE: Any manufacturing or processing activity, airport or railroad.

INDUSTRIAL WASTE: Liquid or solid waste, except domestic sewage, including radioactive substances and explosives, and noxious or toxic gas in the sewer system.

INDUSTRIAL WASTE PRETREATMENT OR TREATMENT FACILITY: Any works or device for the treatment of industrial waste, prior to discharge into the public sewer.

INDUSTRIAL WASTEWATER: All water-carried wastes and wastewater excluding domestic wastewater and uncontaminated water, and shall include all wastewater from commercial, manufacturing, institutional, agricultural, or other operations where it includes significant quantities of wastes of nonhuman origin.

INSPECTOR: A person authorized by the Public Works Director to inspect wastewater facilities.

LICENSED: Licensed and registered by the State.

LOT: Any parcel of land occupied or to be occupied for use permitted by this Code.

MANHOLE: An access structure to a public sewer or storm drain, usually located in a street right of way, covered by a flat metal hatch.

OTHER USE: Any use not defined, including schools, churches, and the like.

pH: The logarithm of the reciprocal of the weight of hydrogen ion in grams per liter of solution.

PARKWAY: That portion of a public street which is not improved, designed, and ordinarily used for vehicular travel.

PEAK FLOW OR PEAK FLOW RATE: The maximum thirty (30) minute rate of sewage flow to be generated from the premises as estimated by the Public Works Director.

PERSON: Every owner, tenant, occupant or person having the care or control of any premises in the City and shall include the Federal, State and County Government and all cities and districts except the City of El Segundo.

POLLUTION: An impairment in the quality of the underground or surface water by sewage or industrial waste which adversely affects the use of such waters for domestic, industrial, agricultural, or other beneficial purposes.

PRETREATMENT OR TREATMENT FACILITY: See definition of Industrial Waste Pretreatment or Treatment Facility.

PUBLIC SEWER: A main line sanitary sewer, dedicated to public use and owned by the City.

PUBLIC WORKS DIRECTOR: The Director of Public Works of the City or his duly authorized representative.

RADIOACTIVE MATERIAL: Material containing chemical elements that spontaneously change their atomic structure by emitting any particles, rays or energy forms.

RESIDENTIAL USE: Any single- or multiple-family dwelling.

SEEPAGE PIT: An excavation in the ground which receives the effluent from a septic tank and permits the effluent to seep through the ground.

SEPTIC TANK: A watertight receptacle which receives the discharge from a sewer system, which retains solids, digests organic matter, and permits the liquids to discharge into the soil through a cesspool, leach field or other method.

SEWAGE: The wastewater of the community received by the sewer system consisting of the liquid and water-carried wastes from residences, commercial and industrial buildings, and institutions, and of such a character as to permit satisfactory disposal without special treatment into the public sewer system.

SEWER: The conduit that carries sewage in the sewer system.

SEWER SYSTEM: All of the property involved in the collection, treatment and disposal of sewage of the community including land, sewers and appurtenances, pumping stations, treatment works and equipment.

SHALL/MAY: "Shall" is mandatory. "May" is permissive.

SOLID WASTES: Wastes that are not water-carried and that are suitable for disposal with refuse at sanitary landfill refuse disposal sites.

STANDARD METHODS: The current edition of "Standard Methods for the Examination of Water and Wastewater", published by the American Public Health Association.

STORM DRAIN: A conduit or channel which carries storm and surface waters and drainage other than polluted wastewaters.

SUSPENDED SOLIDS OR SUSPENDED MATTER: The insoluble solid matter suspended in wastewater that is separable by filtration in accordance with the procedure described in "Standard Methods".

TAPPING: The forming of a connection to a public sewer after the sewer is in place.

TEE SADDLE: A short pipe fitting with a shoulder at one end to allow the application of the fitting to a hole tapped in the public sewer forming a ninety degree (90□) angle to the public sewer pipe.

TOXIC OR POISONOUS SUBSTANCE: Any solid, liquid or gas in sufficient quantity or concentration, either singly or by interaction with other wastes, which tends to injure or interfere with any sewage treatment process, constitutes a hazard to humans or animals, creates a public nuisance, or creates any hazard in the receiving waters of a sewage treatment facility.

TRADE SECRETS: Any formulas, plans, processes, tools, mechanisms, procedures, compilations of information, or other materials or methods which are not patented, which are known only to certain individuals within a commercial concern and are used to fabricate, produce or compound an article of trade or a service having commercial value, and which provide an opportunity for a business advantage over competitors.

UNCONTAMINATED WATER: Any water utilized by the community which is not contaminated or polluted with wastewater or sewage and which is suitable or could readily be made suitable for discharge to the storm water drainage system.

WASTEWATER: The water-carried wastes of the community derived from human or industrial sources including domestic and industrial wastewater. Rainwater, ground water, or drainage of uncontaminated water is not wastewater.

WATERCOURSE: A natural or artificial channel for the flow of storm or surface waters.

WYE SADDLE: A short pipe fitting with a shoulder at one end to allow the application of a fitting to a hole tapped in the public sewer forming a forty five degree (45□) angle to the public sewer pipe. (Ord. 1093, 1-20-1987)

12-1-3: APPLICABILITY:

A. Facilities: This Title shall apply to all sewer facilities in the City, including house connection sewers, house sewers, industrial connection sewers, interceptors, sewage and industrial waste treatment plants, sewage pumping plant, and their appurtenances, except that nonconforming facilities may be continued in use for one year from the effective date of this Title, or until such longer time as may be permitted by the Public Works Director, if they complied with the applicable provisions of law before this Title became effective.

B. Discharges: This Title shall apply to the direct or indirect discharge of all liquid-carried wastes to the sewer system of the City. This Title shall also apply to discharges of all liquid wastes into the City's storm drainage system and all waters of the State. (Ord. 1093, 1-20-1987)

12-1-4: SCOPE:

This Title provides for the regulation of discharges into the City sewer system through the issuance of permits for industrial wastewater discharge containing specific discharge requirements, as well as other permits, and through enforcement of general discharge prohibitions; imposes regulations for waste pretreatment and for sewer construction within the City; authorizes monitoring and enforcement activities; imposes reporting requirements on specific permits; sets the quantity and quality of discharged wastes; establishes penalties for violation of provisions of this Title; and sets fees for the recovery of program costs. This Title is applicable to all discharges within the City and to all persons outside the City who discharge into the City's sewer system. Except as otherwise provided, the Public Works Director of the City shall administer, implement and enforce the provisions of this Title. (Ord. 1093, 1-20-1987)

12-1-5: STRICT INTERPRETATION:

The provisions of this Title and of all rules, regulations and permits promulgated or issued hereunder shall be strictly construed and applied. (Ord. 1093, 1-20-1987)

12-1-6: LIQUID WASTE DISPOSAL POLICY:

A. General: Generally, liquid wastes originating within the City will be removed by the City sewer system, unless the wastes cause damage to structures, create nuisances such as odors, menace public health, impose unreasonable collection, treatment or disposal costs on the City, violate quantity and quality requirements prescribed by State and Federal laws, interfere with wastewater treatment processes, violate applicable State and Federal laws, or detrimentally affect the environment.

B. Cesspools And Septic Tanks: The disposal of sewage by means of septic tanks and cesspools or leach fields is a nonconforming sewer facility in the City and their use is to be discontinued pursuant to subsection 12-1-3A of this Chapter. If it can be demonstrated to the Public Works Director that the continued use of such facilities is necessary because of geographical or other conditions, then such use shall be permitted until public sewers are installed making it unnecessary to use cesspools and septic tanks.

C. Highest And Best Use: The highest and best use of the City sewer system is the conveyance, treatment and disposal of domestic wastewater. The use of the City sewer system for the discharge of industrial wastewater is subject to further regulation by the City.

D. Water Reclamation: In compliance with requirements of Federal and State agencies, the City is or may be committed to a policy of wastewater and reuse in order to provide an alternate source of water for nondomestic use and to reduce costs of wastewater treatment and disposal.

E. Industrial Wastewater: In conformance with policies of Federal and State agencies which establish higher standards of treatment plant effluent quality, provisions are made in this Title for the regulation of industrial wastewater discharges. This Title establishes quantity and quality limitations on industrial wastewater discharges which may adversely affect the City sewer system or effluent quality. Fees to recover costs from industrial wastewater dischargers are also established where the dischargers impose inequitable collection, treatment or disposal costs on the City. Optimum use of the City facilities may require the Public Works Director to limit certain industrial wastewater discharges to periods of low flow in the sewer system. (Ord. 1093, 1-20-1987)

12-1-7: MINIMUM STANDARDS FOR SEWAGE PLANTS:

Sewage and industrial waste treatment plants and facilities shall only discharge effluents to the City sewer system that meet the requirements of the Public Works Director as described in an industrial wastewater discharge permit. If the discharge is to a storm drain system, the requirements of the California Regional Water Quality Control Board must be met. (Ord. 1093, 1-20-1987)

12-1-8: MAINTENANCE OF SEWERS AND APPURTENANCES:

All house connection sewers, house sewers, industrial connection sewers, clarifiers, sewage and industrial waste treatment facilities, private pretreatment plants, sewage pumping plants, and their appurtenances shall be maintained in good operating condition and in conformity with applicable law by the owner of the property which such facilities serve. (Ord. 1093, 1-20-1987)

CHAPTER 2

ADMINISTRATION; RULES; INSPECTIONS

12-2-1: ADMINISTRATION BY PUBLIC WORKS DIRECTOR:

The Public Works Director shall administer and enforce the provisions of this Title and supervise the construction of public sewers in streets and public sewer easements owned by the City. (Ord. 1093, 1-20-1987)

12-2-2: RULES AND REGULATIONS:

A. Adoption: The Public Works Director may prescribe rules and regulations not inconsistent with this Title as are reasonably necessary for the lawful and efficient operation of the City sewer system including, but not limited to, rules and regulations mandated by State and Federal laws. Such rules and regulations shall become effective when adopted by resolution of the City Council. Such rules and regulations shall consider the quantity, quality and means of disposal of sewage and industrial wastes as well as geographic, topographic, and physical construction factors and treatment methods in the sewer system and the beneficial uses of the water in the system or of waters receiving discharge therefrom.

B. Notice: The Public Works Director shall serve on each person holding a permit under this Title a copy of all rules and regulations adopted by the City Council that are applicable to said permit. (Ord. 1093, 1-20-1987)

12-2-3: RECORDS:

The Public Works Director shall keep complete records of all permit applications and permits issued under this Title including the location; plans and specific description of the use; the names and addresses of applicants and permittees; and records of all fees paid pursuant to this Title, with the names of the persons making payments, dates of payments, purposes and amounts of the payments. These records shall be open to public inspection. (Ord. 1093, 1-20-1987)

12-2-4: TRADE SECRETS:

To the extent permitted by State law, any record, report, or information that may become known to the City in the course of implementation or enforcement of the provisions of this Title which if made public would divulge methods or processes entitled to protection as trade secrets, shall not be made public by the City if the person from whom said data is obtained requests in writing that the City maintain the confidentiality of said data. (Ord. 1093, 1-20-1987)

12-2-5: INSPECTION AUTHORIZED:

A. Entry And Inspection On Private Property: In administering and enforcing the provisions of this Title, the Public Works Director, bearing proper credentials and identification, may at any reasonable hour enter upon any premises, subject to approval of the occupant. If the owner or occupier refuses to allow entry, the Public Works Director may do so after obtaining an appropriate warrant.

B. Emergency Entry; Denial Constitutes Misdemeanor: Notwithstanding the foregoing, if the

Public Works Director has reasonable cause to believe that there are violations of this Title occurring that are so hazardous, unsafe or dangerous as to require immediate inspection to protect the public health or safety, the Public Works Director shall have the right to immediately enter and inspect such property, and may use any reasonable means required to effect such entry and make such inspection, whether such property is occupied or unoccupied and whether or not permission to inspect has been obtained. If the property is occupied, he shall first present proper credentials to the occupant and demand entry, explaining his reasons therefor and the purpose of his inspection. No person shall fail or refuse to permit reasonable inspection. (Ord. 1093, 1-20-1987)

12-2-6: ACCESS FOR INSPECTION; INTERFERENCE PROHIBITED:

A. Facilities Inspection: Inspection of every facility involved with the discharge of wastewater to the City sewer system may be made by the Public Works Director. These facilities shall include, but not be limited to, sewers, sewage pumping plants, pollution control plants, all industrial processes, industrial wastewater generation, conveyance and pretreatment facilities, and similar facilities. Inspections may be made to determine whether such facilities comply with the provisions of this Title.

B. Access: Access to such facilities shall be given to authorized personnel of the City at all reasonable times and whenever emergency conditions exist. Any obstruction to access to the sewage facility to be inspected shall promptly be removed by the facility user or owner at the written or verbal request of the Public Works Director and shall not be replaced.

C. Interference Or Refusal: No person shall interfere with, delay, or refuse entrance to authorized City personnel attempting to inspect any facility connected directly or indirectly to the City sewer system. (Ord. 1093, 1-20-1987)

12-2-7: PURPOSE OF INSPECTION:

The Public Works Director may, as herein provided, enter private property to exercise any power vested in him by this Title, including the power to determine:

A. The size, depth and location of any connection with a public sewer or storm drain.

B. The quantity, quality and nature of industrial waste, sewage, or surface waters being discharged into a public sewer, storm drain, or watercourse.

C. The effectiveness of any device used to prevent waste prohibited by this Title from entering any sewer, storm drain or watercourse.

D. The location of roof, swimming pool, and surface drains, and whether they are connected to a street gutter, storm drain, or sewer.

E. The nature of liquids and the condition of processing equipment which are a potential hazard to the City sewer system.

F. Whether there is compliance with the provisions of this Title. (Ord. 1093, 1-20-1987)

12-2-8: MAINTENANCE INSPECTIONS:

The Public Works Director may inspect, as often as he deems necessary, every public sewer, sewage pumping plant, sewage or industrial waste pretreatment or treatment facility, industrial connection sewer, clarifier, dilution basin, neutralization basin, or other similar appurtenance, to ascertain whether such facilities are maintained and operated in accordance with the provisions of this Title. (Ord. 1093, 1-20-1987)

12-2-9: INSTALLATION OF CONTROL MANHOLE:

The Public Works Director may require a control manhole of a design he approves to be furnished and installed by any industrial wastewater discharger to facilitate inspection and sampling by the City or other governmental agencies. Such manholes shall be constructed at locations approved by the Public Works Director and authorized City personnel shall have unrestricted access thereto at all times consistent with the provisions of subsection 12-2-5B of this Chapter. Access of others to such manholes shall be restricted by appropriate security measures. (Ord. 1093, 1-20-1987)

12-2-10: CHEMICAL SHUT-OFF REQUIREMENT:

A means shall be provided to effect immediate cessation of discharge of liquid chemicals, process solutions, or spent process solutions into the City sewer as a result of spills, overflows, leaks, failure of containers or inadvertent discharges. Such means of cessation shall include, but not be limited to, installation of automatic valves, gates, or bypasses to impervious containers which when activated will stop water supply to and the discharge from industrial processes. The discharger shall submit details of the proposed measures and drawings before installation and obtain approval from the Public Works Director. (Ord. 1093, 1-20-1987)

12-2-11: PERMANENT OR TEMPORARY OBSTRUCTIONS:

No person shall install, construct, or place any permanent or temporary object or structure in a location where it will interfere with ready and easy access to any pretreatment or treatment facility, sampling compartment, manhole, flow metering device, or any instrumentality for which a permit is required by this Title. Any such obstruction shall be removed upon order of the Public Works Director by the person responsible for it, at no expense to the City. (Ord. 1093, 1-20-1987)

12-2-12: CERTIFICATE OF FINAL INSPECTION:

When the Public Works Director is satisfied that all work done under a permit issued pursuant to this Title has been constructed according to and meets the requirements of this Title and such other applicable provisions of law, and that all required fees have been paid, he shall, upon request therefor, issue to the permittee constructing such work a certificate of final inspection, which shall recite that the work covered by the permit has been constructed according to this Title and is approved. (Ord. 1093, 1-20-1987)

12-2-13: SEWER FUND:

All fees received by the City under this Title shall be deposited in a Sewer Fund maintained by

the City Treasurer. The monies received and the interest thereon shall be used for the operation, maintenance and expansion of the City sewer system. (Ord. 1093, 1-20-1987)

12-2-14: VIOLATIONS; NOTICE; COMPLAINT:

A. Violations: It shall be unlawful to violate any provision of this Title, the conditions or limitations of any permit issued under this Title, or any rule or regulation prescribed and adopted pursuant to this Title.

B. Notice; Complaint: Before requesting a criminal complaint, the Public Works Director may notify any person found to be in violation of this Title or of any limitation or requirement of a permit issued hereunder. (Ord. 1093, 1-20-1987)

CHAPTER 3
SEWER CONNECTIONS; SPECIFICATIONS; MANHOLES

12-3-1: PERMITS REQUIRED:

A. Sewer Connection: No person shall connect to or tap a public sewer of the City or maintain a connection or tap to such sewer without obtaining a permit from the Public Works Director.

B. Excavations: No permit to connect to or tap a public sewer shall be issued unless a permit is also obtained pursuant to Title 9, Chapter 2 this Code, if applicable. (Ord. 1093, 1-20-1987)

12-3-2: EASEMENT REQUIRED:

No permit shall be issued to connect a house sewer or house connection sewer to a public sewer if the connection or any portion thereof is in, under, or on a lot not owned by the person whose house is to be connected and no recorded easement exists authorizing the connection of such lot. (Ord. 1093, 1-20-1987)

12-3-3: EXCESSIVE DISCHARGE OF SEWAGE:

No permit shall be issued to connect to or tap a public sewer unless said sewer has sufficient sewage capacity to receive the intended discharge. The Public Works Director may require the discharger to restrict the discharge until sufficient capacity is available, or to construct a public sewer to provide sufficient capacity. The Public Works Director may refuse service to persons locating facilities in areas where their proposed quantity or quality of sewage or industrial wastewater is unacceptable to the available treatment facility. (Ord. 1093, 1-20-1987)

12-3-4: ENVIRONMENTAL IMPACT REPORT:

No permit to connect to or tap a public sewer shall be issued if the proposed use of the public sewer may have a significant effect on the environment unless the environmental review process has been completed pursuant to the requirements of the California Environmental Quality Act [8] . (Ord. 1093, 1-20-1987)

12-3-5: FEES:

A. Sewer Connection Fees: Except as otherwise provided in this Title, no permit to connect to or tap a public sewer shall be issued unless the prescribed sewer connection fees have been paid to the City. The sewer connection fee shall be fixed and established from time to time by the City Council by resolution.

B. Increase Or Reduction Of Fee: The City Council may, for good cause, increase, remit or reduce all or any portion of any fee or charge prescribed by this Title. (Ord. 1093, 1-20-1987)

12-3-6: TAPPING PUBLIC SEWER:

A. Application For Tap: When, in the opinion of the Public Works Director, a house connection sewer should be connected to a public sewer at a point where there is no connection facility, application for a public sewer tap shall be submitted and a sewer connection fee for each tap shall be paid before the permit is issued for construction of the house connection sewer.

B. Tapping In Presence Of City Employee: All tapping of public sewers shall be made by a licensed sewer contractor in the presence and to the satisfaction of an inspector acting under the authority of the Public Works Director. (Ord. 1093, 1-20-1987)

12-3-7: SPECIFICATIONS AND GRADES:

Connections to public sewers shall comply with the following:

A. Cast Iron Pipe: House connection sewers shall be made with pipe of cast iron, clay or other material, approved by the Public Works Director.

B. City Specifications: The pipe of the house connection sewer shall be laid in conformity with City specifications for public sewers.

C. Alignment: The pipe shall be laid in a straight alignment and at a uniform slope, and shall have a fall of at least one foot (1') in fifty feet (50') unless the Public Works Director determines that an exception is warranted.

D. Depth: The pipe must be at least three and one-half feet (3 1/2') below an established street or alley grade where it crosses the property line on the date of installation unless the Public Works Director determines that an exception is warranted.

E. Right Angle From Connection: The alignment of the house connection sewer must be at right angles from the connection to the public sewer unless the Public Works Director determines that an exception is warranted.

F. Wye Or Tee Saddles: A collar wye or tee saddle shall be installed in tapped public sewers by cutting a properly proportioned hole in the public sewer and fitting the saddle tightly in place. Wye saddles shall be placed in the side of the public sewer with the wye branch so pointed as to direct the flow from the house connection sewer downstream at

approximately a forty five degree (45□) angle with the public sewer, and tilted upward at approximately forty five degrees (45□) from the horizontal. Tee saddles shall be used for the construction of chimney pipes and for connections to twelve inch (12") diameter and larger public sewers and tilted upward at approximately forty five degrees (45□) from the horizontal or as approved by the Public Works Director.

G. Wye Or Tee Connection: No house or industrial waste connection to a public sewer shall be made, except through a wye or tee branch, without written permission from the Public Works Director. (Ord. 1093, 1-20-1987)

12-3-8: HOUSE CONNECTION SEWERS, SERVE ONE LOT:

No more than one lot shall be connected to any one house connection sewer. (Ord. 1093, 1-20-1987)

12-3-9: CONNECTING CESSPOOLS OR SEPTIC TANKS:

No person shall connect any cesspool, seepage pit or septic tank to any public sewer or to any house sewer or house connection sewer. (Ord. 1093, 1-20-1987)

12-3-10: DISCONNECTION OF UNLAWFUL CONNECTION:

The Public Works Director may disconnect any house connection sewer installed or maintained in violation of the provisions of this Title. Reconnection of such a disconnected sewer shall be made only upon issuance of a permit as provided in this Title. Before such permit is issued or considered, the applicant shall reimburse the City for all cost resulting from the disconnection. (Ord. 1093, 1-20-1987)

12-3-11: COST OF REPAIR TO PUBLIC SEWER:

Any person who unlawfully obstructs, damages, destroys, or removes any public sewer, or appurtenance thereof, shall reimburse the City for the reasonable cost of necessary flushing, cleaning, repairing and reconstruction of the sewer within thirty (30) days after written request from the Public Works Director to do so. (Ord. 1093, 1-20-1987)

12-3-12: DISCHARGE INTO MANHOLE; PERMIT; FEE:

A. Opening Manhole: No person shall open, enter, or allow to remain open, any manhole in any public sewer without a permit from the Public Works Director.

B. Disposal Of Cesspool Effluent: No person shall deposit cesspool effluent or any waste or sewage into a manhole without a permit from the Public Works Director. The Public Works Director may permit disposal of cesspool effluent into designated manholes by operators of cesspool pump trucks holding valid County Health Department certificates of registration upon payment of a disposal fee of two hundred fifty dollars ($250.00) for each truckload, provided the effluent contains no substance which he determines to be deleterious; and further provided, that the cesspool wastes originated from cesspools within the City.

C. Method Of Disposal: Cesspool effluent deposited into a manhole in accordance with this

Section shall be discharged through a pipe or hose in such a manner that none of the effluent adheres to the sides or shelf of the manhole. If any effluent adheres to the sides or shelf of the manhole, it shall be removed by the operator of the cesspool pump truck. Said operator shall leave the sides and shelf of the manhole clean. (Ord. 1093, 1-20-1987)

CHAPTER 4
INDUSTRIAL WASTE AND DISPOSAL

12-4-1: INDUSTRIAL WASTE PERMIT:

A. Permit Required: No person shall discharge any industrial waste into any City sewer or storm drain without first obtaining an industrial waste permit from the Public Works Director in the case of discharge to the sewer, and from the California Regional Water Quality Control Board in the case of discharge to the storm drain.

B. Industrial Waste Disposal By Landfill: If a person chooses to dispose of industrial waste material by hauling said material to an authorized disposal site, he shall apply for an industrial waste permit as provided herein.

C. Application For Permit: Applications for industrial waste permits shall be filed in writing with the Public Works Director and shall be supplemented by such additional information as he may require. (Ord. 1093, 1-20-1987)

D. Permit Fee: Applications for permits shall be accompanied by an application fee based on the nature of work required to process the permit, which shall be fixed and established from time to time by the City Council by resolution. (Ord. 1268, 3-18-1997)

12-4-2: REVIEW AND ACTION ON APPLICATIONS:

A. Review: The Public Works Director shall review all applications for industrial waste permits to determine that the proposed discharge of waste will not violate any provision of this Title or State and Federal laws.

B. Action: Within thirty (30) days after the Public Works Director receives an application for an industrial waste permit, he shall, pursuant to this Title, grant or deny the permit and notify the applicant of the action taken. Such time limit may be extended by mutual agreement between the Public Works Director and the applicant. (Ord. 1093, 1-20-1987)

12-4-3: CONDITIONS IMPOSED:

The Public Works Director, in granting a permit, may impose conditions consistent with the purpose of this Title, including, but not limited to, pretreatment of wastewater before discharge, restriction of peak flow discharges or of discharge of certain substances, limitation of discharge to certain hours, and payment of additional charges to defray increased costs to the City created by the discharge. (Ord. 1093, 1-20-1987)

12-4-4: ENVIRONMENTAL IMPACT REPORT:

No industrial waste permit shall be granted if the proposed use of the public sewer may significantly affect the environment, unless the environmental review process has been completed pursuant to the requirements of the California Environmental Quality Act [9] . (Ord. 1093, 1-20-1987)

12-4-5: CONDITIONS CHANGED:

Whenever the operators of the treatment facilities, through which effluent from the City's sewerage system is discharged, require any modification of the conditions or composition of the effluent, the Director of Public Works may impose conditions upon any industrial waste permit in order to conform with such requirements or may revoke or suspend any such industrial waste permit. When possible, the permit holder shall be allowed sixty (60) days after notice within which to comply with the conditions of the permit. (Ord. 1093, 1-20-1987)

12-4-6: UNLAWFUL DISCHARGE OF INDUSTRIAL WASTE:

No person shall directly or indirectly discharge industrial waste into the City sewer system unless the Public Works Director has determined that the substance to be discharged will not violate the provisions of this Title or the water quality standards for receiving waters established by other government agencies. (Ord. 1093, 1-20-1987)

12-4-7: FEES; EXCEPTIONS:

The fees established in Sections 12-4-8 and 12-4-9 of this Chapter shall be applicable to all sewer connections within the City and all sewer connections to the City's system, whether within or without the City, except that those portions of the City within the Los Angeles County South Bay Sanitation District or Los Angeles County Sanitation District No. 5, shall not be subject to any of the fees set forth in the foregoing Sections, where a fee for similar service is imposed by the Los Angeles County South Bay Sanitation District or Los Angeles County Sanitation District No. 5. (Ord. 1093, 1-20-1987)

12-4-8: ANNUAL INSPECTION FEE:

Every person granted an industrial waste permit under this Title shall pay an annual fee to the City for inspection and control and such fee shall be fixed and established from time to time by the City Council by resolution. (Ord. 1093, 1-20-1987)

12-4-9: ANNUAL QUALITY SURCHARGE FEE:

A. Formula: Every person granted an industrial waste permit under this Title shall pay an annual quality surcharge fee for wastes discharged into the sanitary sewer system pursuant to the following formula:

C = V [a(SS-250) + b(BOD - 180)] k

where "C" is the quality surcharge fee;

"V" is the average daily volume of waste discharged in gallons, based on:

1. The volume of water supplied to the premises less an amount determined by the Public Works Director to account for water not discharged into the sanitary sewer system; or

2. The metered volume of waste discharged into the sanitary sewer system according to a measuring device approved by the Public Works Director; or

3. A figure determined by the Public Works Director based on any other equitable method;

SS is the suspended solids in the waste discharged, expressed in milligrams per liter;

BOD is the five (5) day biochemical oxygen demand of the waste discharged, expressed in milligrams per liter;

a is the cost assessed for each pound of suspended solids, and such cost shall be fixed and established from time to time by the City Council by resolution; presently $ 0.29/lb.

b is the cost assessed for each pound of biochemical oxygen demand, and such cost shall be fixed and established from time to time by the City Council by resolution; presently $0.11/lb.

k 365 x 8.34/1,000,000, a dimensional constant to convert C to dollars.

If the term containing SS or BOD is negative, a value of zero shall be used for that term.

SS and BOD analyses shall be made in accordance with "Standard Methods". In determining the annual quality surcharge fee, the Public Works Director may use industrial averages for SS and BOD values. The Public Works Director may group permit holders into discharge volume ranges. Where volume measurement at the premises of a permit holder is impractical for physical, economic or other reasons, these volume ranges may be used in establishing the quality surcharge fee. (Ord. 1237, 4-4-1995)

B. Appeal From Annual Quality Surcharge Fee: Any permit holder whose annual quality surcharge fee has been determined in the manner provided and who believes the discharge volume range applied to his premises is incorrect, may submit engineering data to the Public Works Director. If the Public Works Director finds the discharge of the permit holder differs significantly from the volume range which was applied, he may adjust the fee.

C. Review Of Annual Surcharge Fee: The Public Works Director shall annually review the rates assessed in subsection A of this Section for SS and BOD and make a written recommendation to the City Council concerning rate adjustments necessary to recover revenue from industrial waste dischargers to pay the cost to the City of treating sewer discharge in excess of domestic quality. (Ord. 1093, 1-20-1987)

12-4-10: ANNUAL COST OF TREATMENT FEE:

An annual cost of treatment fee of from twenty five dollars ($25.00) to one thousand dollars ($1,000.00) for a fee per unit of offending constituent as set by the Public Works Director shall be paid by permit holders who discharge wastes that impose unusual monitoring, maintenance, or capital costs on the City which are unrelated to total flow volume, SS or BOD, or peak flow rates. Such fees shall be calculated to defray costs attributable to such wastes. (Ord. 1093, 1-20-1987)

12-4-11: DUE DATES:

The annual inspection fee, quality surcharge fee, and the cost of treatment fee shall be paid annually in advance of one of four (4) dates as follows:

If The Permit Is Granted Between	Of The Annual Fee Shall Be The Due Date
Jan. 1 and Mar. 31, inclusive	April 1
April 1 and June 30, inclusive	July 1
July 1 and Sept. 30, inclusive	Oct. 1
Oct. 1 and Dec. 31, inclusive	Jan. 1

(Ord. 1093, 1-20-1987)

12-4-12: DELINQUENCY; ADDITIONAL CHARGE:

If annual fees are not paid on or before the last day of the month in which they are due, an additional charge of twenty five percent (25%) of the required fees, but not less than ten dollars ($10.00), shall be imposed and become payable as part of the annual fees. If said fees and additional charges are not paid on or before thirty (30) days after the last day of the month in which said fees were due, the permit shall be revoked pursuant to Section 12-4-13 of this Chapter. (Ord. 1093, 1-20-1987)

12-4-13: SUSPENSION AND REVOCATION OF PERMIT:

A. Authority: The Public Works Director shall suspend the permit of any permit holder who fails to comply with the conditions of his permit or any provision, rule, or regulation of this Title. Any person whose permit has been suspended shall immediately discontinue the discharge of industrial waste, and shall not resume such discharge or deposit until the permit has been reinstated. The Public Works Director shall revoke any permit suspended pursuant to this Section which is not reinstated within one year from the date of suspension.

B. Reinstatement Of Permit: The Public Works Director shall reinstate a suspended permit when all violations have been corrected and all new conditions have been met. Before any revoked permit is reissued, all delinquent fees and additional charges due and owing to the City shall be paid. (Ord. 1093, 1-20-1987)

12-4-14: TRANSFER OF PERMITS:

A. Successor In Interest: Permits issued under this Title shall be transferred to the successor in title or interest of the premises for which the permit was granted if the same business is continued and the successor files with the Public Works Director a written statement agreeing to comply with the conditions of the permit, pays an application fee, and provides satisfactory evidence of the transfer of title or interest.

B. Other Premises: Permits issued under this Title are not transferable from one location to another. (Ord. 1093, 1-20-1987)

12-4-15: DISCLOSURE AND MEASUREMENT OF WASTE PRODUCTS:

A. Origin Of Waste: The Public Works Director may require any person discharging or proposing to discharge industrial waste in a public sewer to furnish information respecting the origin and nature of such waste, and to provide and maintain facilities for sample collection and recording.

B. Measurements: Periodic measurements of flow rates, flow volumes, BOD and SS to determine the annual quality surcharge fee and such measurements of other constituents as required by the Public Works Director shall be made by industrial waste dischargers. Such sampling, analyses and flow measurements of industrial wastes shall be performed by a State certified independent laboratory; or by a laboratory of an industrial waste discharger approved by the Public Works Director; or by City personnel, at the discretion of the Public Works Director, upon written request of the discharger, and on condition that the discharger shall reimburse the City for all costs incurred by the City. Data from the laboratory of an industrial waste discharger shall be submitted only after verification by an administrative official of such discharger under penalty of perjury.

C. Analyses: All wastewater analyses shall be conducted according to the procedures stated in "Standard Methods". If no procedure is contained therein, the standard procedure of the industry or a method approved by the Public Works Director shall be used. Independent laboratories or the discharger performing tests shall furnish data on test methods or equipment as requested by the Public Works Director.

D. Rate And Volume: Dischargers making periodic measurements shall install at the control manhole or other location a calibrated fume, weir, flow meter or similar device approved by the Public Works Director to measure the wastewater flow rate and volume. A flow indicating and recording register may be required by the Public Works Director.

E. Records Of Water Use: In lieu of wastewater flow measurement, the Public Works Director may accept records of water use and adjust the flow volumes by suitable factors to determine peak and average flow rates.

F. Inspection: Sampling analysis and flow measurement procedures and equipment shall be subject at any time to inspection by the Public Works Director. Industrial plants with large fluctuations in quality and quantity of wastewater may be required to provide sampling, analysis, and flow measurement data for each work day.

G. Monitor And Alarm System: Industries producing a discharge with a fluctuating pH shall install a continuous pH monitor and alarm system to alert the discharger of any discharge with a pH higher than eleven (11) or lower than five and five-tenths (5.5). The discharger shall maintain the records of the monitoring system, incidents of discharge contrary to the permissible limits and corrective and preventive measures implemented. These records shall be available for inspection by the authorized City representative at all times.

H. Chemical Containers Identified: Tanks and containers for chemicals or other substances that might by process, leakage or spillage reach the City sewer shall be plainly identified by number and contents.

I. Random Measurements: Public Works Director shall make measurements on a random basis to verify the constituents or quantities of waste flows reported by industrial dischargers. Additional City costs resulting from violations shall be paid by the discharger.

J. Discharger Report: Dischargers shall furnish a report to the Public Works Director concerning the disposal of industrial wastes which the Public Works Director has prohibited from discharge into the City sewer system. The report shall include the date of the disposal, tanks or containers emptied, name of the disposal agency, and signed receipt. (Ord. 1093, 1-20-1987)

12-4-16: FOOD WASTES:

Food wastes processed or ground by grinders with a rated horsepower of one horsepower or more are industrial wastes and subject to the provisions of this Title. (Ord. 1093, 1-20-1987)

12-4-17: TEMPERATURE OF WASTE:

No person without specific authorization from the Public Works Director shall discharge into a public sewer any industrial waste having a temperature greater than one hundred forty degrees Fahrenheit (140□F). (Ord. 1093, 1-20-1987)

CHAPTER 5
UNAUTHORIZED DISPOSAL

12-5-1: PROHIBITED WASTE:

No person shall discharge, permit the discharge, cause the discharge, or contribute to the discharge directly or indirectly into the City sewer system or storm drain system industrial waste containing hazardous, flammable, toxic or poisonous substances in sufficient quantity, either singly or by interaction with other wastes, to be injurious to humans or animals, or to create a hazard or public nuisance, or any waste of such a nature or quality as to interfere with the effective operation of the City sewer system or storm drain system or with the water quality requirements placed on the City by other governmental agencies. (Ord. 1093, 1-20-1987)

12-5-2: ALLOWABLE CONCENTRATIONS OF CERTAIN WASTES:

The Public Works Director shall from time to time prepare a list of allowable quantities or concentrations of certain constituents in industrial wastewater flows and shall issue directions for meeting requirements of this Title. (Ord. 1093, 1-20-1987)

12-5-3: SWIMMING POOLS:

Discharges from swimming pools during maintenance operations may be made into City sewers, as determined by the Director of Public Works if the discharge is properly neutralized so as not to have a detrimental effect on the sewer, and the receiving waters thereof. A permit for the discharge shall be obtained from the Public Works Director. The fee for such a permit shall be ten dollars ($10.00). (Ord. 1093, 1-20-1987)

12-5-4: WATER ON STREETS PROHIBITED; TEMPORARY PERMITS:

No person shall negligently, wilfully or maliciously discharge, throw or deposit water on any street in such manner as to obstruct or damage the street, or to create a nuisance or hazard to

persons or property, or to prevent or interfere with the free and uninterrupted use of the street by the public; provided, however, that the Public Works Director may grant and issue permits for the temporary discharge of water upon the street, upon such terms and conditions as he may deem necessary to protect the City and public from damage and injury. (Ord. 1093, 1-20-1987)

12-5-5: UNAUTHORIZED DISCHARGE:

No person shall discharge any waste or sewage into any watercourse, flood control channel or tributaries or into the ground by percolation or injection without a permit from the Public Works Director. (Ord. 1093, 1-20-1987)

12-5-6: UNLAWFUL POLLUTION:

No permit shall be issued for, nor shall any person discharge or deposit waste or sewage which creates a public nuisance, a menace to the public safety, pollution or contamination of underground or surface waters, or impairs the use of any public sewer, storm drain channel, or public or private property. (Ord. 1093, 1-20-1987)

12-5-7: LIABILITY FOR UNLAWFUL DISCHARGE:

Any person who unlawfully discharges or causes wastewater to be discharged into the public sewer system or storm drain systems is in violation of this Chapter and is therefore liable for all damages, costs, fines or charges incurred. (Ord. 1093, 1-20-1987)

CHAPTER 6
ENFORCEMENT

12-6-1: SUSPENSION OF INDUSTRIAL WASTEWATER PERMIT:

A. Authority: The Public Works Director may suspend an industrial wastewater permit when such suspension is necessary in order to stop a discharge which presents an imminent hazard to the public health, safety or welfare, to the local environment, or which either singly or by interaction with other discharges, is an imminent hazard to the sewer system, the storm drain system, or the waters of the State, or places the City in violation of its NPDES permit.

B. Cease Discharge Upon Notice: Any discharger notified of a suspension of that discharger's industrial wastewater permit shall immediately cease and desist the discharge of all industrial wastewater to the sewer system.

C. Failure Of Discharge To Comply: In the event of a failure of the discharger to comply voluntarily with the suspension order, the Public Works Director may take such steps as are reasonably necessary to ensure compliance. These include, but are not limited to, immediate blockage or disconnection of the discharger's connection to the sewer system.

D. Notice Of Intended Order Of Suspension: In addition, the Public Works Director, in the event of violation of this Chapter, may serve the discharger with a notice of an intended

order of suspension, stating the reasons therefor, the opportunity for a hearing with respect thereto, and the proposed effective date of the intended order.

E. Request For Hearing; Council Determination: Any discharger suspended or served with a notice of an intended order of suspension may file with the City Clerk a request for a City Council hearing with respect thereto. Filing of such a request shall not stay a suspension. In the event of a suspension of a permit due to imminent hazard related to continued discharge, the discharger may request a hearing, and the City Council or a hearing examiner designated by the City Council for that purpose shall conduct a hearing within three (3) days of receipt of the request. In the event of hearing requests, for other than an imminent hazard suspension, the City Council shall hold a hearing on the suspension within fourteen (14) days of receipt of the request. At the close of the hearing, the City Council shall make its determination whether to terminate, or conditionally terminate the suspension imposed by the Public Works Director, or the City Council may cause the permit to be revoked. Except in the case of a hearing within three (3) days being required as above provided, reasonable notice of the hearing shall be given to the suspended discharger in the manner provided for in Section 12-6-5 of this Chapter.

F. Stay Of Order Pending Council Determination: In the event that the City Council fails to meet within the time set forth above or fails to make a determination within seventy two (72) hours after the close of the hearing, the order of suspension shall be stayed until a City Council determination is made with respect to the action of the Public Works Director.

G. Reinstatement Of Permit Upon Compliance: The Public Works Director shall reinstate the industrial wastewater permit upon proof of compliance which ends the emergency nature of the hazard created by the discharge that had been cause for the Public Works Director to initiate the suspension; provided, that the Public Works Director is satisfied that all discharge requirements of this Chapter, City Council rules and regulations, and any City Council order will be implemented. (Ord. 1093, 1-20-1987)

12-6-2: REVOCATION OF INDUSTRIAL WASTEWATER PERMIT:

The City Council may revoke an industrial wastewater permit upon finding that the discharger has violated any provision of this Title or the Council rules and regulations. No revocation shall be ordered until a notice and hearing on the question has been held by the Council as provided in Sections 12-6-4 and 12-6-5 of this Chapter. (Ord. 1093, 1-20-1987)

12-6-3: ADDITIONAL EMERGENCY REMEDIAL MEASURES:

The Public Works Director shall have full power and authority to take any necessary precautions including, but not limited to, decontamination, sewer closure, packaging, diking, and transportation of materials, in order to protect life, protect property, or prevent further damage resulting from a condition that is likely to result in a discharge which presents an imminent hazard to the public health, safety or welfare; or which either singly or by interaction with other discharges, is an imminent hazard to the sewer system; or which places the City in violation of its NPDES permit. In the pursuit of such an operation, City personnel, any party contracting with the City, or duly authorized representative of another government agency shall have immediate access to the premises. The Public Works Director may prohibit approach to the scene of such emergency by any person, vehicle, vessel or thing, and all persons not actually employed in the extinguishment of the condition or the preservation of lives and

property in the vicinity thereof. (Ord. 1093, 1-20-1987)

12-6-4: CITY COUNCIL HEARING; HEARING EXAMINERS:

A. Conduct Of Hearings By Council Or Examiner: With respect to permit revocation or suspension hearings, the City Council may conduct the hearing or may appoint one or more examiners or designate one or more of its members to serve as hearing examiners and to conduct a hearing with respect to any appeal or protest filed. At such hearing the discharger may appear personally or through counsel, cross-examine witnesses and present evidence in the discharger's behalf.

B. Examiners Report To Council; Notice Of Council Action:

1. The hearing examiner or examiners, if other than the City Council, shall submit a written report and recommendations to the City Council together with a brief summary of the evidence considered and conclusions reached with respect thereto.

2. The City Council, after considering evidence presented at such a hearing, and any report submitted to it with respect to such a hearing, or after any hearing which it conducts, shall adopt findings supported by the evidence, and may adopt, reject, or modify the report in whole or in part, make its decision, and issue its order.

3. If the City Council's order is to revoke the discharger's industrial wastewater permit, the order may be effective forthwith, or at a later specified date.

4. The discharger shall be notified in writing of the City Council's action.

C. Cease Discharging Upon Permit Revocation: Any discharger whose industrial wastewater permit has been revoked shall immediately cease and desist all discharge of any wastewater covered by the permit. The Public Works Director may disconnect or permanently block the discharger's connection if such action is necessary to ensure compliance with the order of revocation.

D. New Application: After revocation of a discharger's industrial waste permit, there shall be no further discharge of industrial wastewater by that discharger into the sewer system, the storm drain system, or the waters of the State unless there has been a new application filed, all fees and charges that would be required upon an initial application and all delinquent fees, charges, penalties and other sums owed by the discharger and/or the applicant to the City have been paid to the City, and a new industrial wastewater permit has been issued. Any costs incurred by the City, including administrative costs and investigative fees, in revoking the permit and disconnecting the connection if necessary, shall also be paid for by the discharger before issuance of a new industrial wastewater permit. (Ord. 1093, 1-20-1987)

12-6-5: NOTICE OF HEARING:

A. Mailing Or Posting Of Notice: Notice of the hearing shall be given to the discharger at least ten (10) days prior to the date of hearing. Unless otherwise provided herein, any notice required to be given by the Public Works Director under this Title shall be in writing and

served in person or by registered or certified mail addressed to the addressee's last known address with request for return receipt. Where no address is known, service may be made upon the owner of record of the property upon which the alleged violation occurred or by posting the notice conspicuously on the property.

B. Depositing In Mail: Notice shall be deemed to have been given at the time the written notice is deposited, postage prepaid, in the United States mail at El Segundo, California. (Ord. 1093, 1-20-1987)

12-6-6: ADDITIONAL LEGAL REMEDIES; ATTEMPT:

Any person who attempts to commit an act which is in violation of this Chapter shall be guilty of a misdemeanor punishable as provided in Section 1-2-1 of this Code. (Ord. 1093, 1-20-1987; amd. 2000 Code)

12-6-7: CONFLICTING PROVISIONS:

Provisions of this Title shall prevail over any other inconsistent or conflicting provisions of this Chapter. (Ord. 1093, 1-20-1987)

CHAPTER 7
SEWER USE FEE

12-7-1: PURPOSE:

The purpose of this Chapter is to provide funds for the operation and maintenance of the City sewer system by imposing a City sewer use fee upon the users of these facilities. This charge is to be reviewed at least bi-annually. (Ord. 1093, 1-20-1987)

12-7-2: IMPOSITION OF SEWER USE FEE:

Every person discharging sewage, effluent, industrial waste, or other waste matter into a public sewer shall pay a sewer use fee to the City. This fee shall be in addition to any other fee imposed by this Title. (Ord. 1093, 1-20-1987)

12-7-3: DETERMINATION OF FEE:

The sewer use fee shall be computed and determined on the basis of water supplied to the premises and shall be fixed and established from time to time by the City Council by resolution. (Ord. 1093, 1-20-1987)

12-7-4: COLLECTION OF FEE BY UTILITY BILL:

The fees imposed by this Chapter shall be collected by adding the same to the water bills rendered by the Director of Finance of the City. The period covered by each billing shall be the same period for which the water bill is rendered and shall be paid at the same time and in the same manner as the water bill. (Ord. 1093, 1-20-1987)

12-7-5: DELINQUENCIES:

Bills for sewer use fee set forth on water bills shall be delinquent if not paid when the water bill is due; otherwise, within fifteen (15) days from the date the bill is delivered or mailed. (Ord. 1093, 1-20-1987)

12-7-6: JOINT OCCUPANCY:

When there is more than one dwelling unit, business, industry, or other use on any premises served by a single water meter, the sewer use fee will be billed to the water user. In those instances where the water user fails to pay such sewer use fee, the owner shall be liable to the City for payment thereof. (Ord. 1093, 1-20-1987)

12-7-7: DISCONTINUANCE OF SERVICE:

In case of delinquency in payment of the sewer use fee, the sewer lateral shall be plugged. The lessor or the owner shall be responsible for payment of all fees incurred in plugging or unplugging of the sewer lateral in addition to the delinquent charges. (Ord. 1093, 1-20-1987)

12-7-8: APPLICATION FOR EXEMPTION:

A. Water Supply Not Discharged To City Sewer: Where no portion of the water supplied to any premises enters a public sewer of the City, no fee shall accrue under this Chapter if an application for exemption is filed with the Public Works Director and he finds that there is no discharge of any sewage, effluent, industrial waste or other waste matter from such premises into a public sewer of the City.

B. Low Income Residential Discount: Low income residential users meeting the adjusted gross annual income criteria included in the current City water rate resolution shall receive a discount equal to fifty percent (50%) of the monthly charges for sewer use. (Ord. 1237, 4-4-1995)

12-7-9: APPLICATION FOR ADJUSTMENT OF FEE:

A. Determination Of Reasonable Fee: In any case where it is believed that a sewer use fee imposed by this Chapter is excessive, the person responsible for paying such fee may apply to the Public Works Director for an adjustment. The applicant shall, by affidavit and supporting testimony, show that the fee is discriminatory, unreasonable or unfair. The fee shall be deemed to be nondiscriminatory, reasonable and fair if the following percentage of water supplied to the premises on an annual basis enters a public sewer:

Use Of Premises	Percentage
Residential	40 or more
Commercial	60 or more
Industrial	60 or more
Other	40 or more
Measured discharge	100

B. Investigation; Findings: The Public Works Director shall conduct an investigation and make findings of fact from which he shall determine whether the fee is fair and reasonable. If he determines that the fee is excessive, he shall adjust the fee so that it is fair, reasonable and nondiscriminatory. If the fee has already been paid, he shall order a refund of the excess paid during the twelve (12) months or any portion thereof immediately preceding the date of application for adjustment. Fees which are delinquent for more than ninety (90) days shall not be subject to adjustment. (Ord. 1093, 1-20-1987)

12-7-10: DEBT; PENALTY FOR NONPAYMENT:

The sewer use fee imposed by this Chapter shall constitute a debt owed to the City and, in the event suit is brought to recover such fee, shall be subject to a delinquent penalty of twenty five percent (25%). (Ord. 1093, 1-20-1987)

APPENDIX E
RESOLUTION 3448

RESOLUTION NO. 3448

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL SEGUNDO, CALIFORNIA, ESTABLISHING RULES AND REGULATIONS FOR SEWAGE AND INDUSTRIAL WASTE PURSUANT TO TITLE 7 OF THE EL SEGUNDO MUNICIPAL CODE.

WHEREAS, it is necessary due to current regional, state and federal regulations, to adopt and establish rules and regulations for the administration and enforcement of the provisions of Title 7 of the El Segundo Municipal Code; and

WHEREAS, the Director of Public Works pursuant to Title 7 of the El Segundo Municipal Code has prescribed and recommended for adoption by the City Council, certain rules and regulations which the Director of Public Works deems necessary for the administration and enforcement of the provisions of Title 7 of

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF EL SEGUNDO, CALIFORNIA, that the following rules and regulations are hereby adopted and established for the administration and enforcement of the provisions of Title 7 of the El Segundo Municipal Code;

SECTION 1. TABLE OF CLASSIFICATIONS. To identify the classification of the industrial waste discharge and enforcement of quality surcharge provisions contained in Sections 7.20.120 and 7.20.130, respectively, of the El Segundo Municipal Code, the following table will be used. This table is based upon the characteristics of the waste, receiving system, and on the degree of treatment required. For industries having multiple processes, the highest classification will apply. This table shall also be used as a guide for determining the classification of other industries and commercial operations not listed. The minimum number of annual surveillance inspections shall be equal to the permit classification number.

TABLE 1

SIC	IC	Industry or Waste Process	Permit Required	Classification No. 1	2	3	4	5	12	Mean SS mg/l	Mean BOD mg/l
3585	001	Air Cond. & Refrig. Equip. Mfg. (2b)	Yes	x							
3721,24,28	002	Aircraft Mfg. Serv. & Maint.	Yes					x		331	1383
0742	003	Sm. Animal Hospital & Kennels (3)	Yes					x			
6513	004	Apartments	See Individual Process for Permit Requirement								
2851	005	Asphalt & Asphalt Prod. Mfg.	Yes					x		487	117
3711,7538	006	Auto Mfg. Serv. Maint.	Yes					x		1164	1262
7542	007	Auto Laundry	Yes			x				283	252
2051,52	008	Bakeries	Yes			x				2538	3021
6512	009	Banks	See Individual Process for Permit Requirement								
7241	010	Barber Shops	No								
5813	011	Bars	No								
3691,92	012	Batteries Mfg. & Serv.	Yes						x		
7231	013	Beauty Salons	No								
2086,87	014	Beverage Mfg.	Yes				x			130	541
3861	015	Blueprinting Equip. Supplies	Yes		x						
3433,3443	016	Boiler Mfg. & Serv.	Yes			x					
2891	017	Bonding Mtls.	Yes					x		1134	1310
2082	018	Breweries	Yes					x			
3713,7538	019	Bus. Mfg. Repair, Serv.	Yes					x		1164	1262
6512	020	Private Buildings	See Individual Process for Permit Requirement								
6512	021	Public Buildings	See Individual Process for Permit Requirement								
2065,66,67	022	Candy Mfg. & Confectioners	Yes			x				2538	3021
2271,72,79	023	Carpet & Rug Cleaning & Dyeing	Yes			x				617	153
5812	024	Caterers	Yes			x				429	1122
3251,53,55	025	Ceramic & Clay Prod. Mfg.	Yes					x		487	117
2812,16	026	Chemical Mfg. & Packaging	Yes					x		599	298
8661	027	Churches	No								
7216	028	Cleaners & Dyers	Yes		x						
2813	029	Comp. Gases - Mfg., Handling	Yes					x			
3271-75	030	Concrete Products Mfg.	Yes					x		487	117
0000	031	Cooling Water (Single Pass)	Yes	x							
2449	032	Cooperage	Yes						x		
8059	033	Convalescent Homes	See Individual Process for Permit Requirement								
2841,44	034	Cosmetic Mfg.		x						443	153
0241	035	Dairies, Dairy Barns, Stables	Yes					x		323	151
2021,24,26	036	Dairy Products Mfg.	Yes					x		323	151
2085	037	Distilleries	Yes					x			
2735,54	038	Etchers & Engravers	Yes						x	294	86
		Film Processing:									
7395	039	Studio	Yes	x							
7395,7819	040	Laboratory	Yes						x		

TABLE 1 (Continued)

SIC	IC	Industry or Waste Process	Permit Required	Classification No. 1	2	3	4	5	12	Mean SS mg/l	Mean BOD mg/l
0000	041	Filter Cleaning	Yes			x				1164	1262
		Food Processing:									
2033	042	Citrus	Yes					x		2327	3716
2017	043	Egg	Yes		x					1453	2213
2091	044	Fish	Yes					x		1453	2213
2032	045	Fruit	Yes					x		1453	2213
2011	046	Meat	Yes					x		740	1155
2033	047	Olives	Yes					x		1453	2213
2035	048	Pickles	Yes					x		1453	2213
2016,17	049	Poultry	Yes					x		740	1155
2099	050	Tortila & Tamale, Mfg.	Yes					x		1453	2213
2032,35	051	Vegetable	Yes					x		1453	2213
3321,22	052	Foundries	Yes			x				487	117
3915	053	Grinding (Minerals)	Yes						x	757	318
2033,2092 5141,5411 8062,63,69	054	Grinding & Disposal (Market Waste, Food Plant Waste, Hospital Waste)	Yes					x			
??	055	Heliport	Yes			x					
8062,63	056	Hospitals	See Individual Process for Permit Requirement								
7011	057	Hotels	See Individual Process for Permit Requirement								
2879	058	Insecticide Mfg.	Yes					x		599	298
7631	059	Jewelry - Repair & Cleaning	Yes						x		
		Laboratories:									
7391	060	Analytical	Yes		x					114	300
8071	061	Biological	Yes		x						
8072	062	Dental	Yes		x					373	74
8071	063	Medical	Yes		x					151	339
8071	064	Pharmaceutical	Yes		x					101	252
7391	065	Soil & Foundation	Yes		x					1889	130
8071	066	X-Ray	Yes		x						
3011	067	Latex & Rubber Products	Yes			x				312	80
7215	068	Laundries - Self Serv. (2c)	Yes			x					
7213	069	Laundries - Linen & General	Yes			x				368	550
7218	070	Laundries - Towel & Uniform	Yes					x		660	570
0000	071	Liquid Waste Disposal	Yes					x			
2491	072	Lumber Treating	Yes					x			
		Markets (Fish, Meat, Food, etc.):									
5411	073	Retail	Yes		x						
5141,49	074	Wholesale	Yes		x						
331,3443 348	075	Metal Fabrication (Weld)	Yes						x		
3471,79	076	Metal Finishing & Plating	Yes						x		
3398	077	Metal Treating	Yes						x		
3211,21	078	Mirror Mfg. & Glass Treatment	Yes					x		757	31
7251	079	Mortuaries	See Individual Process for Permit Requirement								
7011	080	Motels	See Individual Process for Permit Requirement								

TABLE 1 (Continued)

SIC	IC	Industry or Waste Process	Permit Required	Classification No. 1	2	3	4	5	12	Mean SS mg/l	Mean BOD mg/l
8011	081	Medical-Dental Office	See Individual Process for Permit Requirement								
8351	082	Nurseries	Yes	x							
1311,5171	083	Oil Producers	Yes					x			
2911	084	Oil Refineries	Yes					x			
		Oils:									
2992	085	Mfg. & Packaging	Yes					x			
2911	086	Fuel & Heating	Yes					x			
2992	087	Lubricating	Yes					x			
2911	088	Mineral	Yes					x			
2079	089	Olive	Yes					x		1453	221
2911	090	Reclaimed	Yes					x			
2992	091	Re-Refined	Yes					x			
2076	092	Vegetable	Yes					x		1453	221
2621	093	Paper Mfg.	Yes					x		493	67
2851	094	Paint Mfg.	Yes						x	1134	131
2851	095	Paint Remover, Mfg. Serv.	Yes			x				1134	131
0000	096	Paint Spray Booths	Yes						x	1134	131
2641	097	Paper Products Mfg.	Yes					x		493	67
2831	098	Pharmaceutical Prod. Mfg.	Yes					x			
3652	099	Phonograph Record Mfg.	Yes					x			
2753	100	Photo Engraving & Etching	Yes						x	394	86
3494	101	Pipe Cutting & Threading	Yes					x			
3079	102	Plastics	Yes			x					
		Printing:									
2751	103	Glass-Metal-Plastic	Yes		x					1134	131
7333	104	Silkscreen	Yes		x					1134	131
2751,52	105	Textile	Yes		x					1134	131
2751,2791	106	Type-Setting	Yes		x						
3743	107	Railroad Equip. Repair & Mfg.	Yes						x	1164	126
5812	108	Restaurants	Yes	x						429	112
2077	109	Rendering Plants	Yes					x			
8059	110	Sanitariums	See Individual Process for Permit Requirement								
8211,49	111	Schools	See Individual Process for Permit Requirement								
5541	112	Service Stations	Yes	x						1176	195
3731	113	Shipbuilding & Repair	Yes					x		1164	126
4463,60	114	Ship Cleaning & Washing	Yes					x		1164	126
		Steam Cleaning:									
7538	115	Auto	Yes			x				1164	126
0000	116	Commercial	Yes			x				1164	126
0000	117	Industrial	Yes			x				1164	126
7399,7999	118	Swimming Pools-Public	Yes	x							
4742	119	Tank Car Cleaning	Yes					x		1164	126
3111	120	Tanning	Yes					x			
2211	121	Textiles	Yes						x	119	71
7832	122	Theaters	See Individual Process for Permit Requirement								
3011,7534	123	Tire Mfg. & Serv.	Yes					x		312	8

TABLE 1 (Continued)

SIC	IC	Industry or Waste Process	Permit Required	Classification No. 1	2	3	4	5	12	Mean SS mg/l	Mean BOD mg/l
3713	124	Truck & Trailer Mfg.	Yes					x		1164	1262
7538	125	Truck Repair & Serv.	Yes					x		1164	1262
7542	126	Truck Washing & Steam Cleaning	Yes					x		1164	1262
2842	127	Wax Mfg.	Yes			x				272	122
7399	128	Water Treating & Serv. Equip.	Yes					x			
2084	129	Wineries	Yes					x			
	199	Storm Drain or Other Than Sewer Discharge	Yes	x							
	200	County Sewer/Exempt from Surcharge Fees	Yes								
			See Individual Process for Permit Requirement								
	201	City Sewer from County Location	See Individual Process for Permit Requirement								

NOTES:

1. An Industrial Waste Permit is required for any discharge to other than the sanitary sewer system.

2. An Industrial Waste Permit is not required for the following discharge to the sanitary sewer system:

   (a) Restaurants with seating capacity less than 150.

   (b) Bleed off or blowdown from cooling towers, evaporation condensors or other recirculating water devices with rated capacity of 25 tons or less.

   (c) Self-service laundries with washing machines of 20 pounds maximum capacity, with further allowance that individual self-service laundries may have a maximum of two machines with maximum of 50 pound capacity.

   (d) Discharges from establishments wherein the industrial discharge is less than 200 gpd and pretreatment is not required.

3. An Industrial Waste Permit is required for small animal hospitals and kennels.

SECTION 2. DISCHARGE LIMITATIONS:

A. All dischargers shall meet the following effluent limits relative to physical and chemical characteristics established pursuant to Section 7.24.020 of the El Segundo Municipal Code. However, the Director of Public Works may establish individual requirements on wastewater characteristics for each discharge after an evaluation of the proposed discharge.*

CONSTITUENT	UNITS	VALUE EXISTING SOURCES MAXIMUM
Arsenic	mg/l	3
Cadmium	mg/l	15
Chromium-total	mg/l	10
Copper	mg/l	15
Lead	mg/l	5
Mercury	mg/l	Essentially None
Nickel	mg/l	12
Zinc	mg/l	25
Silver	mg/l	5
Cyanide-Total	mg/l	10
Cyanide-Free	mg/l	2
Oil and Greas-Total		
Dispersed	mg/l	600
Floatable	mg/l	None Visible
Phenol	mg/l	**
Chlorinated Hydrocarbons	mg/l	Essentially None
Selenium	mg/l	**
Dissolved Sulfides	mg/l	0.1
pH Ranges		5.5-11
Temperatures		140°F

* Required as part of El Segundo's contractual obligation to the City of Los Angeles.

** Values for Phenol and Selenium and other constituents not shown, such as Fluoride, Boron, Aluminum, Iron, Tin, Cobalt, etc., have not been established for general application. They are not critical constituents at this time for existing sources. The Board of Public Works of the City of Los Angeles will impose such limits as it may find necessary to insure compliance with treatment plant discharge limits and more restrictive pretreatment standards for NEW sources prescribed by the Environmental Protection Agency (EPA).

The above limitations shall not apply where more restrictive limitations are imposed by permit or National Categorical Pretreatment Standards.

B. In addition to the concentration limits for heavy metals and toxicants in Section 2(A), the discharge shall also comply with the maximum allowable daily mass emission rate and the maximum allowable monthly mass emission rates.

(1) The daily mass emission rate for each constituent shall be calculated from the total waste flow occurring in each specific day, and the maximum concentration limit. The mass emission rate of the discharge during any 24-hour period shall not exceed the product of the proposed daily average discharge in million gallons per day, maximum concentration limit, and a constant 8.34.

(2) The monthly mass emission rate for each constituent shall be calculated from the total waste flow occurring in each specific month, and the average concentration limit or the maximum concentration limit, if average concentration limit is not prescribed. The mass emission rate of the discharge during any month shall not exceed the product of proposed monthly average discharge in million gallons per month, average concentration limit, or the maximum concentration limit, if average concentration limit is not prescribed, and a constant 8.34.

C. The pH of wastes discharged shall at all times be within the range of 5.5 to 11.

D. The temperature of the wastes discharged shall not exceed 140°F.

E. Radioactivity in the effluent shall not exceed the limits specified in Title 17, Chapter 5, Subchapter 4, Group 3, Article 5, Section 30287, of the California Administrative Code.

F. In addition to those wastes described in Section 7.24.010 of the El Segundo Municipal Code, discharge of the following wastes into public sewer system is prohibited.

(1) Any solids or viscous substances of such size or in such quantity that may cause obstruction to the flow in the sewer or to be detrimental to proper wastewater treatment plant operations.

These objectionable substances include, but are not limited to, asphalt, dead animals, offal, ashes, sand, mud, straw, industrial process shavings, metal, glass, rags, feathers, tar, plastics, wood, whole blood, bones, hair, coffee grounds, egg shells, seafood shells, flashings, entrails, paper dishes, paper cups, milk containers, or other similar paper products either whole or ground.

(2) Any water added for the purpose of diluting wastes which would otherwise exceed applicable maximum concentration limitations.

(3) Any non-biodegradable cutting oil commonly called soluble oil, which form persistent water emulsions.

(4) Any wastes with excessively high BOD, COD or decomposable organic contents.

(5) Any strongly odorous waste or waste which can create odors in receiving waters of sewerage system.

(6) Any excessive amounts of organic phosphorous type compounds.

(7) Any excessive amounts of deionized water, steam condensate or distilled water.

(8) Any waste containing substances that may precipitate, solidify or become viscous at temperatures 50°F and 100°F.

(9) Any waste producing excessive discoloration of wastewater or treatment plant effluent.

(10) Any blow-down or bleed-off water from cooling towers or other evaporation coolers exceeding one-third of the makeup water.

(11) Any single pass cooling water.

(12) Any rainwater, storm water, groundwater, street drainage, surface drainage, roof drainage, yard drainage, water from the yard fountains, or lawn sprays, or any other uncontaminated water.

SECTION 3. GENERAL DISCHARGE [illegible]S:

A. The industrial waste discharger shall provide, install and operate a clarifier of 750 gallons capacity, or of a size capable of providing a minimum thirty minute flow detention time at the peak flow rate, whichever is larger, and at a location prior to connection with the public sewer, unless it is waived by the Director of Public Works. Approval for the size, type and location of clarifier shall be obtained prior to installation by the Director of Public Works.

B. Sanitary wastes from rest rooms, lavatories, drinking fountains, showers, etc., shall be segregated from the process wastewaters, until necessary pretreatment and/or clarification, flow, and quality monitory steps are completed.

C. Cleansers utilized in wastes discharged into the public sewer shall be limited to soap, similarly acting biodegradable synthetic detergents, and/or sodium or potassium compounds of phosphates, polyphosphates, silicates, sulfates, carbonate, bicarbonate, or hydroxide. No organic solvents shall be discharged into the public sewers.

D. A copy of the industrial waste discharge permit shall be maintained at the facilty so as to be available at all times to operating personnel.

E. Any change in the process or a change in volume of wastes requires submission of a new industrial waste discharge permit application and the issuance of a new permit from the Director of Public Works before initiation of the proposed change in the waste discharge.

F. In the event of any change in name, ownership, or control of the company, the discharger shall notify the Director of Public Works of such change, and shall notify the succeeding

owner or operator of the existence of this permit by letter, copy of which shall be forwarded to the Director of Public Works, at least 30 days prior to such change.

G. The top of the pretreatment facilities, clarifier and inspection chamber shall be at least one inch above the ground level when provided in an unroofed area. Provisions shall also be made to divert storm water away from the pretreatment facilities, clarifier and inspection chambers.

H. If changes should occur in plumbing layout subsequent to the issuance of an industrial waste permit, the discharger shall submit as built plumbing plans of building showing clearly the origin of wastewater, identifying the process creating the wastewater, and listing accurately for each wastewater discharge point the total daily flow in gallons and the peak flow rate in gallons per minute including location and details of pretreatment facilities, clarifier and its connection to the public sewer system.

I. The discharger shall notify the Director of Public Works, by telephone, immediately prior to start-up of the discharge, and obtain approval.

SECTION 4. STANDARD PROVISIONS:

A. Permits issued pursuant to Sections 7.20.010 and 7.24.060 of the El Segundo Municipal Code do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from his liabilities under federal, state, or local law, nor guarantee the discharger a capacity right in the receiving waters.

B. The discharge of any radiological, chemical, or biological warfare agent or radiological waste is prohibited.

C. The discharger shall comply with applicable toxic and pretreatment standards promulgated in accordance with Sections 307 and 308 of the Federal Water Pollution Control Act, or amendments thereto. The discharger shall submit periodic

amendments thereto. The discharger shall submit periodic notices (over intervals not to exceed three months) of progress toward compliance with applicable toxic and pretreatment standards developed pursuant to the Federal Water Pollution Control Act, or amendments thereto.

D. The discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the discharger to achieve compliance with the permit requirements.

E. All wastes which are prohibited from discharging into public sewers, including but not limited to chemical solutions, acids, caustic wastes, solvents, oil and grease, screenings, sludges, and other solids removed from liquid wastes, etc., shall be held in impervious containers and disposed of at a legal point of disposal, and in accordance with the provisions of Division 7.5 of the California Water Code. For the purpose of this requirement, a legal point of disposal is defined as one for which waste discharge requirements have been prescribed by a Regional Water Quality Control Board, and which is in full compliance therewith.

F. The discharger shall submit a quarterly industrial waste hauler's report by the 15th day of the month following the reporting quarter. If no wastes are hauled during the reporting period, a statement to that effect shall be submitted to the Director of Public Works.

G. If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Federal Water Pollution Control Act, or amendments thereto, for a toxic pollutant which is present in the discharge authorized by the permit, and such standard or prohibition is more stringent than any limitation upon such pollutant in the

permit, the Director of Public Works shall revise or modify the permit in accordance with such toxic effluent standard or prohibition, and so notify the discharger.

H. In the event the discharger is unable to comply with any of the conditions of industrial waste discharge permit due to:

(a) Breakdown of waste treatment equipment;

(b) accidents caused by human error or negligence; or

(c) other causes such as acts of nature,

the discharger shall notify the Director of Public Works, by telephone, as soon as he or his agents have knowledge of the incident, and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the non-compliance, and shall indicate what steps were taken to correct the problem, and the dates thereof, and what steps are being taken to prevent the problem from recurring.

SECTION 5. SELF-MONITORING AND REPORTING PROGRAM:

A. The Director of Public Works, at his discretion, may require the industrial waste discharge permit holder to implement a self-monitoring and reporting program. The nature of sampling and frequency of analysis and reporting will be based on the size of discharge and type of industrial operation.

B. The Director of Public Works, at his discretion, may also require the discharger to install, use and maintain at his expense adequate continous monitoring equipment or methods.

C. The discharger shall retain for a minimum period of three years records of monitoring activity and results including all original strip charts, calibration, and maintenance records. The period of retention shall be extended during the course of any unresolved administrative enforcement action or litigation regarding the discharge of pollutants by the discharger when requested by the Director of Public Works.

representative responsible for the overall operation of the facility from which discharge originates. In the case of a partnership, by the general partner, in case of a sole proprietorship, by the proprietor.

E. Each report shall contain the following declaration:

"I declare under penalty of perjury that the foregoing is true and correct.

"Executed on the _____ day of _____ at _____.

Signature_____

Title_____"

Revised

~~SECTION 6. ANNUAL INSPECTION FEE.~~ Every person granted an industrial waste permit under Title 7 of the El Segundo Municipal Code shall pay an annual fee to the City for inspection and control pursuant to the following schedule:

Class 1	$ 55.00
Class 2	110.00
Class 3	165.00
Class 4	220.00
Class 5	275.00
Class 12	660.00

These classifications shall be based on the minimum number of inspections per year which the Director of Public Works determines to be necessary for the proper enforcement of Title 7 of the El Segundo Municipal Code.

SECTION 7. ANNUAL QUALITY SURCHARGE FEE. The City Council hereby establishes the charge for each pound of suspended solids as required by Section 7.20.130 of the El Segundo Municipal Code at $0.056; and for each pound of biochemical oxygen demand as required by Section 7.20.130 of said Code at $0.041.

SECTION 8. SEWER CONNECTION FEE. The City Council hereby establishes the sewer connection fee at:

Residential - $580 per dwelling unit.

Commercial - $1276 per 1000 square feet.

INSPECTION TYPE	NEW FEE SCHEDULE	MODIFICATION
UNDERGROUND TANK FEE		
Operating Permit Application Fee (New/Renew)	N/A	
	N/A	
Annual Permit Maintenance	$570.00	**Increase**
(Fee combines operating permit and annual permit)	$30.00 for each additional tank	**Increase**
Operating Permit Transfer	$85.00	**Decrease**
New Construction Plan Clearance	$725.00	**Increase**
	$275.00 for each additional tank	**Increase**
Closure Application	$725.00	**Increase**
	$310.00 for each additional tank	**Increase**
Complex Site Investigation (new fee)	$1,200.00	**New**
Permit Addendum	$85.00	**Decrease**
Voluntary cleanup oversight	$300.00	**Decrease**
	Fee/hour $75.00	**Decrease**
Secondary Containment Testing Oversight (new fee)	$460.00 base fee	**New**
	$220.00 for each additional tank	**New**
INDUSTRIAL WASTE PERMIT		
Permit Application New (Sewer)	$219.00	**No Change**
Permit Application New (Off-site)	$323.00	**No Change**
Permit Application New (On-site)	$342.00	**No Change**
Permit Application Revision (Sewer)	$143.00	**No Change**
Permit Application Revision (On-site)	$206.00	**No Change**
Permit Application Revision (Off-site)	$195.00	**No Change**
Plan Review New Sewer (1)	$331.00	**No Change**
Plan Review New Sewer (2)	$414.00	**No Change**
Plan Review New Sewer (3)	$519.00	**No Change**
Plan Review New Sewer (4)	$572.00	**No Change**
Plan Review New Sewer (5)	$837.00	**No Change**
Plan Review New Sewer (6)	$1,074.00	**No Change**
Plan Review New On-site (1)	$448.00	**No Change**
Plan Review New On-site (2)	$560.00	**No Change**
Plan Review New On-site (3)	$715.00	**No Change**
Plan Review New On-site (4)	$793.00	**No Change**
Plan Review New On-site (5)	$1,168.00	**No Change**
Plan Review New On-site (6)	$1,510.00	**No Change**
Plan Review New Off-site (1)	$361.00	**No Change**
Plan Review New Off-site (2)	$444.00	**No Change**
Plan Review New Off-site (3)	$560.00	**No Change**
Plan Review New Off-site (4)	$619.00	**No Change**
Plan Review New Off-site (5)	$915.00	**No Change**
Plan Review New Off-site (6)	$1,174.00	**No Change**
Plan Review Revision Sewer (1)	$258.00	**No Change**
Plan Review Revision Sewer (2)	$317.00	**No Change**
Plan Review Revision Sewer (3)	$400.00	**No Change**
Plan Review Revision Sewer (4)	$444.00	**No Change**

INSPECTION TYPE	NEW FEE SCHEDULE	MODIFICATION
Plan Review Revision Sewer (5)	$644.00	**No Change**
Plan Review Revision Sewer (6)	$825.00	**No Change**
Plan Review Revision On-site (1)	$348.00	**No Change**
Plan Review Revision On-site (2)	$431.00	**No Change**
Plan Review Revision On-site (3)	$548.00	**No Change**
Plan Review Revision On-site (4)	$607.00	**No Change**
Plan Review Revision On-site (5)	$902.00	**No Change**
Plan Review Revision On-site (6)	$1,162.00	**No Change**
Plan Review Revision Off-site (1)	$258.00	**No Change**
Plan Review Revision Off-site (2)	$317.00	**No Change**
Plan Review Revision Off-site (3)	$400.00	**No Change**
Plan Review Revision Off-site (4)	$444.00	**No Change**
Plan Review Revision Off-site (5)	$644.00	**No Change**
Plan Review Revision Off-site (6)	$825.00	**No Change**
Closure Inspection	$114.00	**No Change**
Site Remediation/Hr.	$60.00	**No Change**
Off-Hours Inspection/Hr.	$98.00	**No Change**
Inspection Special	$170.00	**No Change**
Additional Plan Review/Hr.	$60.00	**No Change**
Wastewater Sampling	$170.00	**No Change**
ANNUAL INSPECTION FEE		
Class 1	$114.00	**No Change**
Class 2	$227.00	**No Change**
Class 3	$340.00	**No Change**
Class 4	$453.00	**No Change**
Class 5	$681.00	**No Change**
Class 12	$1,359.00	**No Change**
Class X	$170.00	**No Change**
HAZARDOUS MATERIALS RESPONSE	**ACTUAL COST**	**Added from R 3881; Omitted in R 4209**

NOTE:

* Category I inspections include all apartments with 5 or more units

**On inspection categories I & II, there will be no charge for first re-inspection; this is an incentive for business to correct all violations by the first re-inspection. Subsequent re-inspections shall be at the fees identified

*** All hours approximated

**** Five Percent (5%) reduction in hazardous waste permit fees will be reflected for any business that maintains a Source Reduction Assessment Plan and reduces hazardous waste by more than five percent (5%)

APPENDIX F
FATS, OILS, AND GREASE CONTROL PROGRAM MANUAL

CITY OF EL SEGUNDO
FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM MANUAL

December 2014

Prepared For:

The City of El Segundo
Department of Public Works
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California 90245

Prepared By:

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Santa Ana, California 92705
EEC Project No: W-2008

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Section 1
Introduction

The City of El Segundo's (City) Fats, Oils, and Grease (FOG) Control Program has been developed to reduce the amount of FOG discharge to the sanitary sewer system. The reduction of FOG discharge will also minimize the potential for FOG-related sanitary sewer overflows (SSOs). In May of 2006 the State Water Resources Control Board of California (SWRCB) issued Statewide *General Waste Discharge Requirements* (GWDR 2006-0003). One of the requirements of the GWDR is for collection system agencies to prepare a Sewer System Management Plan (SSMP) including a FOG Control Program.

The FOG Control Program's goal is to reduce the amount of FOG discharge to the sanitary sewer system and reduce or eliminate FOG-related SSOs. These SSOs are usually attributable to the accumulation of cooking grease discharged from Food Service Establishments (FSEs)[1], multi-family housing, and single family homes in sewer pipes that create FOG obstructions in sanitary sewer collection systems. These FOG obstructions, located in the property owner's sewer lateral or the public sanitary sewerage system, can lead to SSOs, which can cause untreated sewage to flow onto streets and travel to storm drains, creeks, and other surface waters. Untreated sewage on private property or in the street is a nuisance and poses an obvious human health risk. If this sewage reaches the ocean, it often results in habitat degradation, beach closures, and the associated potential human health risks.

To achieve the goal of reducing the amount of FOG discharged to the sanitary sewer system (and thus reducing FOG-related SSOs), the WDR has identified key requirements for a FOG Control Program. The plan requirements are as follows:

Key Requirement	FOG Manual Section
Public education outreach for proper disposal of FOG	Section 5
Provisions for disposal of FOG	Section 4.5
Legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages	Section 4.1
Requirements for installation of grease removal devices and provisions for design standards, Maintenance, BMP, record keeping and reporting requirements	Sections 4.3.3 and 4.4
Authority to inspect and enforce	Section 4.1.1
Provisions for identification of sanitary sewer system sections subject to FOG blockages (i.e, accelerated line maintenance locations[2]), and establishment of a cleaning maintenance schedule for each section	Section 3.3
Source control measures for sewer line accelerated maintenance locations	Section 3.4

[1] Food Service Establishments (FSEs) are those establishments primarily engaged in preparing or serving food to the public such as restaurants, hotels, commercial kitchens, bakeries, caterers, schools, prisons, correctional facilities, and care institutions.
[2] Known problem areas in the sanitary sewer system that require more frequent cleaning and maintenance.

These requirements are the key issues that were addressed in the development of the City's FOG Control Program. The City's Municipal Code (Code), a copy of which can be found in Appendix A, provides the legal authority and outlines the provisions required by the 2006 WDR.

The City is considering implementation of FOG control regulations applicable to FSEs. These Rules and Regulations may address, in greater detail than the City Code, such items as:

- General Waste Discharge Prohibitions
- Kitchen Best Management Practices (BMP) Requirements
- Grease Interceptor Operation and Maintenance Requirements
- Grease Trap Operation and Maintenance Requirements
- Notification Requirements
- Record-Keeping Requirements
- Drawing Submittal Requirements
- Monitoring Facilities Requirements
- Monitoring and Reporting of Conditions Requirements

The intent of these rules and regulations will be to reduce FOG discharge from FSEs. Section 12-2-2 of the Code states that the Public Works Director may prescribe rules and regulations that are reasonably necessary for the lawful and efficient operation of the City sewer system.

Section 2
FOG Control Program Background and Overview

2.1 Service Area

The City provides water and sewer service to a population of approximately 16,500 through 56 miles of sanitary sewer lines, 9 lift stations, and 1 siphon. The City's service area includes approximately 3,494.4 acres (5.46 square miles). The service area stretches from LAX on the north to Manhattan Beach on the south and from Aviation Blvd on the east to the Pacific Ocean on the west.

2.2 Sanitary Sewer Overflows

The City has adopted a Sewer Overflow Emergency Response Plan (SSO ERP) to ensure that any reported spill is responded to immediately to protect the public health and safety, and to protect the beneficial uses of the waters of the United States. The SSO ERP identifies the response procedures, the notification and reporting requirements, and the follow-up requirements. SSOs from 2007 to the present can be found in the California Environmental Protection Agency State Water Resources Control Board's California Integrated Water Quality System Project (CIWQS) database. This database can be accessed at: https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServlet?reportAction=criteria&reportId=sso_overview.

Since implementation of online reporting of SSOs utilizing the CIWQS database, one Category-1 SSO occurred (root related) and one private SSO (grease related) occurred in the City.

2.3 Historical FOG Control Activities

The City assumed control and responsibility of the FOG Control Program from Los Angeles County in 1999.

2.4 Overview of FOG Control Program

The FOG Control Program is based on existing FOG control data, FOG control program elements from similar sewering agencies, and the requirements of the 2006 WDR. The key elements of the program are: 1) sewer line maintenance activities associated with FOG-related accelerated maintenance locations, 2) the Code, and 3) an inspection process to minimize the discharge of FOG from existing and new FSEs.

Section 3
Sewer Line Maintenance

3.1 Overview of Sewage Collection System

The City's sewage collection system consists of a network of sewer pipe segments and manholes which conveys sewage generated within the City's service area to trunk sewers for treatment at Hyperion Wastewater Treatment Plant, in Los Angeles, the Los Angeles County Sanitation District No. 5 Treatment Plant, and/or the District's Carson Treatment Plant. The system consists of approximately 56 miles of collection system mainline piping ranging in size from 8 inches to 24 inches.

3.2 Routine Sewer Line Cleaning

A Vacon truck is primarily used to clean the sewer mains. A 12-month schedule for cleaning of small diameter sewers (12-inch and smaller) has historically been the centerpiece of the City's sewer maintenance program. Sewer lines larger than 12 inch and smaller than 24 inch diameters are generally cleaned once every two years. Cleaning methods include hydraulically washing (hydrojetting) the sewer lines. The City owns one Vacon truck that is manned full time by City staff to implement this program. Sewer lines 24 inches or larger are not on a routine cleaning schedule.

The City staff also performs planned maintenance tasks, such as lift station maintenance, at scheduled intervals. These maintenance intervals are established based on experience and available information to minimize risk of blockages, or equipment failure, which could possibly lead to an SSO.

3.3 Accelerated Line Maintenance Identification, Prioritization and Cleaning

Accelerated line maintenance locations or specific reaches of sewer pipe that have a history of problems or pose higher than normal risk of an SSO are cleaned more frequently than described in section 3.2. Accelerated line maintenance locations are typically identified by maintenance staff during normal maintenance of the collection system. The cleaning frequency for accelerated line maintenance locations ranges from once every two months to once every six months depending on the severity of the problem and the cleaning effectiveness.

Many issues in the sanitary sewer system can contribute to accelerated line maintenance locations, each with varying degrees of severity. Management of this information for each accelerated line maintenance location is necessary to identify effective solutions and to prioritize resources. Sewer line characterization is the process of classification and prioritization of accelerated line maintenance locations in the City's sanitary sewer system. It is important to

note that while there are other reasons and causes for accelerated line maintenance locations, the focus of the FOG Control Program is the FOG-related locations.

3.4 Sewer Line Characterization and Source Identification

The sewer line characterization process consists of collecting all known (or perceived) factors associated with each accelerated line maintenance location from the sewer maintenance staff to identify critical information. Factors related to pipe conditions and potential sources are identified and documented. When it is determined that an FSE is a potential source of FOG in an accelerated line maintenance location, that information is forwarded from the Wastewater Supervisor to the FOG Program Manager. The FOG Program Manager will, in turn, inspect and educate the source FSE.

The potential solutions may also include evaluation of structural issues that impact accelerated line maintenance locations. The accelerated line maintenance location is evaluated to determine if repair may minimize grease accumulation and potentially resolve the accelerated line maintenance locations.

3.5 Accelerated Line Maintenance Data Management

Accelerated sewer line maintenance cleaning and data management are the responsibility of the Wastewater Supervisor.

Accelerated line maintenance locations are placed on an “Accelerated Line Maintenance” list and entered into Microsoft Outlook for tracking and notifications. A copy of the accelerated line maintenance location list can be found in Appendix B. Cleaning is performed at pre-determined intervals depending on field observations and historical data. Accelerated line maintenance locations include a siphon and line segments that have a history of blockage or diminished flow due to issues such as grease and roots.

Section 4
FSE FOG Control Program

4.1 Legal Authority

All dischargers to the sanitary sewer system, including FSEs, are required to meet general rules and regulations set forth in Public Sewer Facilities Regulations, Title 12 of the City Municipal Code. Key elements of these regulations include:

- General prohibition of liquid wastes that cause damage to structures, create nuisances such as odors, menace to public health, or impose unreasonable collection, treatment or disposal costs on the City.

Pursuant to Title 12, Chapter 4, FSEs with greater than 150 seats must meet Rules and Regulations for Sewage and Industrial Waste (Resolution 3448) that establish appropriate FOG discharge requirements and limitations to prevent blockages of sewer lines resulting from discharges of FOG. Key elements of the Rules and Regulations applicable to FSEs are:

- Installation, operation and maintenance of an approved type and adequately sized grease control device; and
- Notification, record keeping and reports.

Additionally, as an element of City Ordinance 1329, Standard Urban Storm Water Mitigation Plan Implementation, all FSEs are required to implement Best Management Practices (BMPs) which include installation of a grease trap (hydromechanical grease interceptors) where cleaning of equipment is preformed indoors.

4.1.1 Authority to Inspect and Enforce

For proper FOG Program management, the City must conduct FSE inspections and levy enforcement if necessary. Sections 12-2-6, 12-6-1 of the Code, and 6.28.200 of Ordinance 1329 afford the legal authority to conduct inspections and administer penalties. In administrating and enforcing provisions of the Code, the Public Works Director and such officers as the Director may designate, shall at any reasonable hour enter upon any premises, subject to approval of the occupant. Inspection of every facility involved with the discharge of wastewater to the City sewer system may be made by the Public Works Director. Inspections may be conducted to determine whether an FSE complies with the City Code.

4.2 Food Service Establishments (FSEs)

An FSE is generally categorized as commercial use and includes facilities such as restaurants, hotels, and hospitals. These facilities must adhere to general

discharge requirements of the Code. When the seating capacity of such a facility exceeds 150, the FSE is classified as a Class 1 industrial discharger and must also adhere to industrial waste regulations. The City will reevaluate the current 150 seat standard to determine if the FOG program would be better served by lowering this threshold.

The FSEs identified within the City range from sandwich shops to full service restaurants. A list of FSEs in the City's service area can be found in Appendix C and an up to date list of FSEs can be obtained from the FOG Source Control Program Manager.

4.3 Wastewater Discharge Requirements

The Public Sewer Facilities Regulations, Title 12 of the City Municipal Code, prohibits FSEs from discharging liquid wastes that cause damage to structures, create nuisances such as odors, menace to public health, or impose unreasonable collections, treatment or disposal costs on the City.

4.3.1 EFFLUENT LIMITATIONS & DISCHARGE REQUIREMENTS

Effluent limitations and discharge requirements are specified in the Code and include prohibitions. All dischargers shall meet the effluent limits set forth in Section 2, Discharge Limitations, of Resolution No. 3448. In addition to these discharge limitations, the following apply:

1. The temperature of waste discharged shall not exceed 140° F, per Section 2 of Resolution No. 3448.
2. Any waste containing substances that may precipitate, solidify, or become viscous at temperatures between 50° F and 100° F is prohibited, per Section 2 of Resolution No. 3448.

4.3.2 KITCHEN BEST MANAGEMENT

Upon implementation of City FOG Program Rules and Regulations Kitchen Best Management Practices (BMPs) will be specified and may include collection, storage and disposal for waste cooking oil; disposal of waste into trash rather than sinks or floor drains; employee training; signage; and availability of spill kits.

4.3.3 PRETREATMENT REQUIREMENTS

General pretreatment requirements are specified in Section 3 of the Resolution 3448 as follows:

Restaurants classified as industrial discharges shall provide, install, and operate a clarifier of 750 gallons capacity, or of a size capable of providing a minimum 30 minute flow dentition time at peak flow rate, whichever is larger, and at a location prior to connection with public sewer.

Additionally, the current edition of the California Plumbing Code (2007) has been adopted by the City and includes other GGI design criteria. Proposed FSE plumbing plans are delivered to the FOG Program Manager from the City's Plumbing Plan Check Department to evaluate specific pretreatment requirements. The FOG Program Manager is also notified of new FSEs from the City's Business Services Division.

4.3.4 NOTIFICATION, RECORD-KEEPING, & REPORTING REQUIREMENTS

The Municipal Code contains specific notification, recordkeeping and reporting requirements.

4.4 Gravity Grease Interceptors

4.4.1 OPERATION

Gravity grease interceptors (referred to as clarifiers in the Code) are underground or in-ground grease collection devices that separate FOG (or grease), solids, and water based on the principle of Stoke's Law. Stoke's Law describes the rising or settling of a particle in a fluid (water in this case). Under non-turbulent conditions in a GGI given enough time, particles that are lighter than water (grease) will rise to the surface and particles that are heavier than water (solids) will settle to the bottom. A typical conceptual GGI design is illustrated in Figure 4-2.

The proper plumbing and placement of baffles will provide the non-turbulent conditions. The proper dimensions and volume of the GGI will provide sufficient retention time to allow the particles to fully rise or settle before they pass-through to the outlet of the GGI. Over time, the grease and solids layers thicken and will eventually fill the first chamber if they are not removed. If the grease and solids are not removed regularly, the GGI no longer functions as intended, and grease will be carried into the sewer system. Emulsified or partially emulsified particles will rise or settle slower, which is why soaps and other emulsifiers may cause some grease or solids to pass-through a GGI and collect downstream of the GGI.

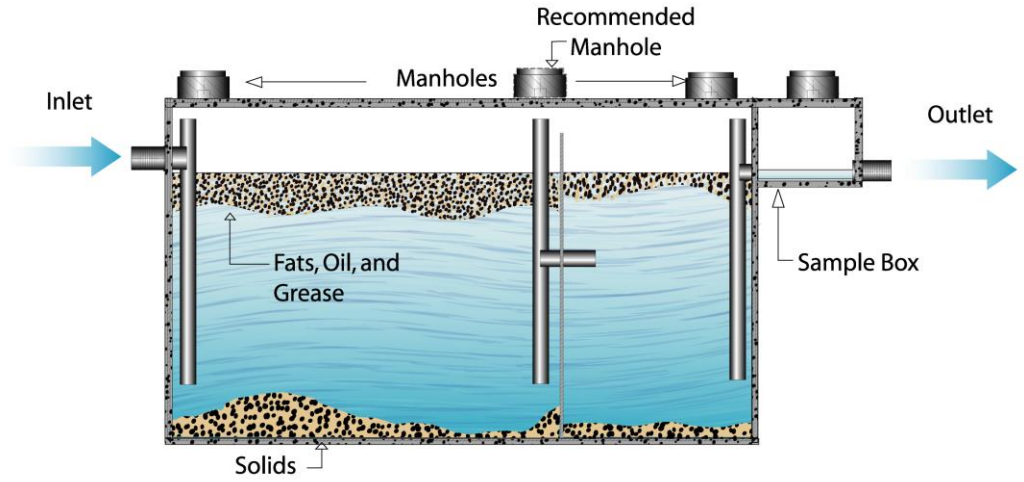


Figure 4-2 Typical Conceptual Gravity Grease Interceptor Design – Side View

Since a GGI is not self-cleaning or free of maintenance, it is critical that a GGI be suitably designed with manholes in the right locations to facilitate maintenance and that it be cleaned and pumped at a frequency that maintains its designed removal efficiency.

4.4.2 SIZING

The City's Building Division reviews and approves the sizing and installation of GGIs with input from the FOG Source Control Program Manager as a part of the building permit process. The FOG Source Control Program Manager adheres to a minimum 30 minute flow detention time requirement for GGI sizing, which is consistent with the current plumbing code for sizing requirements.

4.4.3 MAINTENANCE & INSPECTIONS

Section 4 of Resolution 3448 includes details with respect to pretreatment facility maintenance and inspections. The requirements include:

1. The pretreatment facility shall be maintained in good working order and operate as efficiently as possible in accordance with manufacturer's specifications

4.5 Waste Hauler Requirements

Proper disposal of waste grease collected either from grease traps and interceptors or through kitchen practices is essential to a successful FOG control program. To ensure that FSEs properly dispose of their waste FOG and that haulers and disposal/recycling sites are properly operated, the hauler documentation should be completed and provided to the FSE prior to departing the FSE. The FSE is required to maintain copies of the hauling documentation. The recommended information on the hauler's record includes:

- Name of hauling company,
- Name and signature of operator performing the pumpout,
- Documentation of full pumpout with volume of water and FOG removed (e.g., 1500 gallons),
- Documentation of the level of floating FOG and Settable Solids (to determine if volume exceeds 25% capacity of the grease removal equipment),
- Documentation if repairs to the grease interceptor are required, and
- Identification of the facility where the hauler is planning to dispose of the waste.

Haulers may dispose of waste collected within the City's service area at several private processing plants in Los Angeles County. The private plants include:

- Baker Commodities Inc. 4020 Bandini Blvd. Vernon, Ca 90058. P: (323) 268-2801, F: (323) 268-5166
- Darling International. 2626 E. 25th St Los Angeles, CA 90058. P: (323) 583-6311, F: (323) 583-8613
- Southwest Processors, Inc. / Southwest Treatment Systems, Inc. 4120 Bandini Boulevard Vernon, California 90058. P: (800) 900-3366, F: (323) 780-3170

4.6 FSE Education

The City provides FSE FOG Control education to FSEs during all FSE inspection events. In this process, the FSE is provided a poster that demonstrates general requirements, a copy of which can be found in Appendix D.

4.7 FSE Inspections

To ensure compliance with wastewater discharge requirements, the City utilizes different types of FSE Inspections. These inspections and their purpose are as follows:

Industrial Wastewater Disposal Inspection

The City of El Segundo conducts inspections of FSEs as a part of their Industrial Source Control Program. These inspections are conducted approximately once per year and typically include the following:

- Evaluation of Grease Control Device operation and maintenance,
- Discuss general BMPs such as plate/dish scraping,
- Identification of food grinders.

Follow-up inspections are performed as necessary.

Storm Water Facility Inspection	The City conducts inspections of all FSEs two times every five years to verify and discuss key BMPs to prevent storm water pollution. As an element of these inspections, other FOG related BMPs are reviewed with each facility including: • Plate/dish scraping practices • Equipment washing
Follow-up Inspections	These inspections are conducted where it is determined by the FOG Source Control Program Manager that a follow-up inspection is required. These follow-up inspections are used as an additional opportunity to educate the FSEs on the impact of their grease discharges, what they can do to minimize grease discharges, and how the City's Regulations could potentially impact them.
Enforcement Inspections	These inspections are conducted when elevated enforcement is required (e.g., following an SSO).

Attachment E includes the Industrial Wastewater Disposal and Storm Water Facility Inspection forms.

4.8 Enforcement

The City of El Segundo Municipal Code, Title 12, Chapter 6, provides legal authority for enforcement. In general, deficiencies identified during inspections are re-inspected to confirm compliance. A written notice is issued stating the nature of the violation and a reasonable time limit for correction of the deficiency (See Attachment C for FSE Inspection Forms). If the violation continues, the code provides for escalation to fines, loss of wastewater discharge permit, and, if necessary, disconnection of the discharger from the sewer system.

4.8.1 CORRECTIVE ACTION REQUIREMENTS

Chapter 6 of the City's Code specifies the process for providing written notice to persons found to be violating any provisions of the Chapter. This section of the ordinance includes provisions for recovering costs and provides the Public Works Director the power to temporarily shut off any premises from the use of the public sewage system.

4.8.2 ADMINISTRATIVE HEARINGS & APPEALS

Any discharger affected by the action or determination of the FOG Source Control Program Manager or Notice of Violation may file an appeal or protest as outlined in Chapter 6 of the Code. The City Council may conduct a hearing or may appoint one or more examiners or designate one or more of its members to

serve as hearing examiners and to conduct a hearing to address the appeal or protest. At such hearing, the discharger may appear personally or through counsel, cross-examine witnesses and present evidence in the discharger's behalf.

4.9 FSE FOG Program and Data Management

The FOG Control Program, including inspection and enforcement activities, is managed by the City's Environmental Safety Manager (FOG Program Manager) in coordination with the Wastewater Supervisor.

In some cases, and when a violation may lead to a potential health risk, the City may call upon the Los Angeles County Health Care Department for assistance.

Section 5
Residential Education and Outreach

Currently, the City has not implemented a Residential Outreach and Education program. Historically, there have been few FOG related problems in the residential areas of the City and currently, there are no accelerated line maintenance locations in residential areas. The City is evaluating the benefits of providing residential education and outreach material through their website.

Should residential FOG become problematic, the City will re-evaluate its residential Education and Outreach efforts.

ATTACHMENT A

Municipal Code

ATTACHMENT B

List of Accelerated Line Maintenance Locations

ID	Location	CleaningFreq	MHFrm	MHTo	Cause
ALM-1	Franklin Standard	Bi-monthly	7-132	7-133	Grease
	Franklin Standard		7-136	7-133	
	Franklin Standard		7-132	7-131	
	Franklin Standard		7-139	7-136	
ALM-2	Imperial	Semi-Annual	1-32	1-24	Roots
	Imperial		1-24	1-23	
	Imperial		1-25	1-22	
	Imperial		1-23	1-22	
ALM-3	Sycamore	Semi-Annual	1-13	1-12	Grease
ALM-4	Maple	Semi-Annual	12-55	12-54	Grease
ALM-5	Pine	Semi-Annual	5-4	5-1	Roots
	Oregon		5-4	5-3	
	Nevada		5-7	5-6	
ALM-6	Center	Semi-Annual	5-19	5-12	Roots
ALM-7	Clarifier and car wash	Semi-Annual			N/A
ALM-8	Main/Standard	Semi-Annual	7-132	7-131	Grease
ALM-9	Oak Street Siphon	Semi-Annual	7-155	7-154	Sand
ALM-10	Franklin	Semi-Annual	7-133	7-132	Grease
ALM-11	Palm	Semi-Annual	7-161	7-160	Roots
	Palm		7-162	7-163	
	Palm		7-161	7-163	
ALM-12	Franklin Standard	Bi-monthly	7-132	7-133	Grease
	Franklin Standard		7-136	7-133	
	Franklin Standard		7-139	7-136	
ALM-13	Whiting	Semi-Annual	7-176	7-175	Roots
ALM-14	Concord	Semi-Annual	7-195	7-196	Roots
	Pine		7-203	7-194	
ALM-15	Grand	Semi-Annual	7-120	7-113	Sand
ALM-16	Whiting	Semi-Annual	7-176	7-175	Roots
ALM-17	Standard	Semi-Annual	7-136	7-133	Grease
	Grand		7-120	7-113	
ALM-18	Mariposa	Semi-Annual	7-63	7-61	Roots
ALM-19	Concord	Semi-Annual	7-195	7-196	Roots/ Grease
	Pine		7-203	7-194	
	Pine		7-201	7-203	
	Pine		7-194	7-192	
ALM-20	Eucalyptus	Semi-Annual	2-59	2-54	Roots
ALM-21	Sierra	Semi-Annual	7-16	7-15	Roots
	Sierra		7-17	7-16	
	Maple		7-18	7-17	
	Maple		7-19	7-18	
ALM-22	Rosecrans	Semi-Annual	CS - 204-a	CS -203	Grease
	Rosecrans		CS-204-a	CS-204	
	Rosecrans		CS -204	CS-201	
	Rosecrans		CS-537	CS535	

ID	Location	CleaningFreq	MHFrm	MHTo	Cause
ALM-23	California	Semi-Annual	5-108	5-51	Roots/ Grease
	Imperial		5-88	5-87	
	Imperial		5-90	5-88	
	Center		5-91	5-90	
	Oak		6-7	6-4	
ALM-24	Loma Vista	Semi-Annual	SH-37	SH-32	Roots
	Loma Vista		SH-37	SH-36	
ALM-25	Sheldon/Eucalyptus	Semi-Annual	63	62	Roots
	Sheldon/Penn		62	61	
	Penn		61	60	
	Sheldon		7-62	7-72	

ATTACHMENT C

List of FSEs

	City FSEID	FSE	ADDRESS	GRE Status
1	015-ES	100 W. IMPERIAL PLAZA	100 W IMPERIAL AVE	Interceptor
2	018-ES	150 SEPULVEDA PLAZA	150 S SEPULVEDA BLVD	Interceptor
3	034-ES	AEROSPACE	2320 E EL SEGUNDO	Interceptor
4	045-ES	BREAD BAR	701 EL SEGUNDO	Interceptor
5	044-ES	CARL'S JR.	639 SEPULVEDA BLVD	Interceptor
6	037-ES	CHIPOTLE	307 N SEPULVEDA BLVD	Interceptor
7	029-ES	COZYMEL'S	2171 ROSECRANS AVE	Interceptor
8	036-ES	DENNY'S	2555 E EL SEGUNDO	Interceptor
9	026-ES	EL SEGUNDO FISH CO.	210 E GRAND AVE	Interceptor
10	032-ES	FLEMINGS	2301 E ROSECRANS AVE	Interceptor
11	017-ES	GOOD STUFF	131 W GRAND AVE	Interceptor
12	038-ES	HANABI JAPENESE GRILL	310 E GRAND AVE	Interceptor
13	027-ES	HILTON GARDEN INN	2100 E MARIPOSA	Interceptor
14	048-ES	IHOP	755 E EL SEGUNDO	Interceptor
15	022-ES	L.A.A.F.B (BX)	200 N DOUGLAS	Interceptor
16	020-ES	L.A.A.F.B (THE CLUB & CHILD CARE)	200 N DOUGLAS	Interceptor
17	021-ES	L.A.A.F.B (THE COMMISSARY)	200 N DOUGLAS	Interceptor
18	046-ES	LA SIRENA CANTINA AND GRILL	710 ALLIED WY	Interceptor
19	040-ES	LAKES @ EL SEGUNDO	400 S SEPULVEDA BLVD	Interceptor
20	024-ES	MARMALADE CAFÉ	2014 PARK PL	Interceptor
21	023-ES	MARRIOTT	2000 E MARIPOSA	Interceptor
22	039-ES	MATTEL	333 CONTINENTAL BLVD	Interceptor
23	028-ES	MC CORMICK & SCHMICKS	2101 ROSECRANS AVE	Interceptor
24	016-ES	MCDONALD'S	101 S SEPULVEDA BLVD	Interceptor
25	030-ES	NOAH'S BAGELS	2231 ROSECRANS AVE	Interceptor
26	049-ES	NOAH'S BAGELS	821 N DOUGLAS	Interceptor
27	033-ES	NY FOOD CO.	2320 ALASKA	Interceptor
28	041-ES	RALPHS	500 N SEPULVEDA BLVD	Interceptor
29	035-ES	ROMANO'S MAC GRILL	2321 ROSECRANS AVE	Interceptor
30	025-ES	SALT CREEK GRILL	2015 E PARK PL	Interceptor
31	043-ES	SIZZLER'S	600 N SEPULVEDA BLVD	Interceptor
32	031-ES	STARBUCKS	2231 ROSECRANS AVE	Interceptor
33	042-ES	TELEDYNE CAFETERIA	501 CONTINENTAL BLVD	Interceptor
34	047-ES	THE VEGGIE GRILL	720 ALLIED WY	Interceptor
35	019-ES	THERESA'S MOSAIC CAFÉ	150 S SEPULVEDA BLVD	Interceptor
36	050-ES	WHOLE FOODS	760 S SEPULVEDA BLVD	Interceptor
37	002-ES	CAPISTRANO'S	1440 E IMPERIAL HWY	Trap
38	008-ES	CHICKEN DIJON	251 MAIN ST	Trap
39	006-ES	DAILY GRILL	2121 ROSECRANS AVE	Trap
40	005-ES	EL TARASCO	210 MAIN ST	Trap
41	010-ES	FARM STAND	422 MAIN ST	Trap
42	011-ES	HACIENDA HOTEL	525 SEPULVEDA BLVD	Trap
43	007-ES	HAVANA	229 MAIN ST	Trap
44	004-ES	P.F. CHANGS	2041 ROSECRANS AVE	Trap
45	003-ES	RAYTHEON (EUREST DINING)	2000 E EL SEGUNDO	Trap
46	001-ES	SIAM BAY	130 E GRAND AVE	Trap

	City FSEID	FSE	ADDRESS	GRE Status
47	009-ES	TACO TIME	310 E GRAND AVE	Trap
48	058-ES	DOMINOES	130 E GRAND AVE	None
49	067-ES	AEROSPACE	200 N AVIATION	None
50	088-ES	AEROSPACE	2330 E EL SEGUNDO	None
51	089-ES	AEROSPACE	2380 E EL SEGUNDO	None
52	014-ES	AL DINER'S	324 W EL SEGUNDO	None
53	107-ES	BIG MIKE'S	507 MAIN ST	None
54	125-ES	BOB'S UNOCAL	770 N SEPULVEDA BLVD	None
55	070-ES	BOEING (S-26)	2006 E IMPERIAL HWY	None
56	079-ES	BON APETIT @ BT	2160 E GRAND AVE	None
57	061-ES	BURGER'S ETC.	130 MAIN ST	None
58	065-ES	CAFÉ NICOLES	1960 E GRAND AVE	None
59	104-ES	CANTON LOW	439 MAIN ST	None
60	103-ES	CHEF HANNES	411 1/2 MAIN ST	None
61	120-ES	CHILE VERDE	630 N SEPULVEDA BLVD	None
62	128-ES	COFFEE BEAN	909 N SEPULVEDA BLVD	None
63	059-ES	COLD STONE'S	130 E GRAND AVE	None
64	093-ES	COOKE'S	300 RICHMOND ST	None
65	086-ES	DELUCA TRATTORIA	225 RICHMOND ST	None
66	075-ES	DOUGHBOY'S DONUTS	204 E IMPERIAL HWY	None
67	113-ES	EL POLLO LOCO	630 N SEPULVEDA BLVD	None
68	012-ES	EL SEGUNDO SANDWICH AND GRILL	310 E GRAND AVE	None
69	097-ES	EMILY'S CAFÉ	360 SEPULVEDA BLVD	None
70	056-ES	ES CAR WASH	118 E IMPERIAL HWY	None
71	117-ES	EXPRESS CHINESE FOOD	630 N SEPULVEDA BLVD	None
72	102-ES	FANTASTIC CAFÉ	410 MAIN ST	None
73	051-ES	GRANDMA BLAIR'S KITCHEN	100 W IMPERIAL AVE	None
74	101-ES	HANA HARU SUSHI	409 MAIN ST	None
75	071-ES	HANK'S PIZZA	202 E IMPERIAL HWY	None
76	074-ES	HUMMUS FACTORY	204 E GRAND AVE	None
77	080-ES	INDIAN SUMMER	219 MAIN ST	None
78	130-ES	L&L BAR-B-QUE	954 MAIN ST	None
79	108-ES	LA PAZ	514 CENTER ST	None
80	055-ES	LITTLE GOURMET	117 MAIN ST	None
81	133-ES	LUCKY'S DONUTS	964 MAIN ST	None
82	083-ES	M&I CAFÉ	2222 E IMPERIAL HWY	None
83	105-ES	MAIN ST. CAFÉ	450 MAIN ST	None
84	106-ES	MAIN ST. CAFÉ	450 MAIN ST	None
85	081-ES	MAKY'S BAKERY	219 W GRAND AVE	None
86	090-ES	MANDY'S FAMILY RESTAURANT	241 MAIN ST	None
87	115-ES	MEGA WRAPS	630 N SEPULVEDA BLVD	None
88	124-ES	MELT GELATO & CREPE CAFÉ	730 ALLIED WAY	None
89	096-ES	O SHUN SUSHI	357 MAIN ST	None
90	085-ES	OASIS CAFÉ	2240 E IMPERIAL HWY	None
91	063-ES	OCCASIONS	142 RICHMOND ST	None
92	054-ES	OLD TOWN PATIO	115 RICHMOND ST	None

	City FSEID	FSE	ADDRESS	GRE Status
93	132-ES	PACHANGA MEXICAN GRILL	962 MAIN ST	None
94	127-ES	PACIFIC THEATER	831 NASH	None
95	052-ES	PAGODA	100 W IMPERIAL AVE	None
96	122-ES	PETIT CAFÉ	630 N SEPULVEDA BLVD	None
97	068-ES	PINKBERRY	2004 PARK PL	None
98	077-ES	QUIZNO'S	2041 ROSECRANS AVE	None
99	110-ES	QUIZNO'S	530 N SEPULVEDA BLVD	None
100	073-ES	RAYTHEON	2030 MAPLE	None
101	095-ES	RINALDI'S	323 MAIN ST	None
102	109-ES	ROBEKS	530 N SEPULVEDA BLVD	None
103	078-ES	ROSECRANS TRIMANA	2121 ROSECRANS AVE	None
104	118-ES	SANSAI	630 N SEPULVEDA BLVD	None
105	084-ES	SECOND CITY BISTRO	223 RICHMOND ST	None
106	100-ES	SIMON'S CUPS AND CONES	407 MAIN ST	None
107	121-ES	SMARCOS	630 N SEPULVEDA BLVD	None
108	066-ES	SMS FOODS INC.	200 CENTER ST	None
109	072-ES	SNAX BURGERS	202 E IMPERIAL HWY	None
110	013-ES	STARBUCKS	310 E GRAND AVE	None
111	069-ES	STARBUCKS	2005 PARK PL	None
112	087-ES	STARBUCKS	2263 E MAPLE	None
113	111-ES	STARBUCKS	530 N SEPULVEDA BLVD	None
114	123-ES	STICK & STEIN	707 N SEPULVEDA BLVD	None
115	098-ES	STUFT PIZZA	400 MAIN ST	None
116	099-ES	SU CASA	403 MAIN ST	None
117	114-ES	SUBWAY	630 N SEPULVEDA BLVD	None
118	131-ES	SUBWAY	960 MAIN ST	None
119	060-ES	SUSHI AVENUE	130 E GRAND AVE	None
120	129-ES	TACONE GRILL	909 N SEPULVEDA BLVD	None
121	076-ES	TAIKO	2041 ROSECRANS AVE	None
122	057-ES	TAVERN ON MAIN	123 MAIN ST	None
123	091-ES	THE DONUT	247 MAIN ST	None
124	116-ES	TRI CLEANERS	630 N SEPULVEDA BLVD	None
125	092-ES	TRIMANA GRILL	300 CONTINENTAL BLVD	None
126	112-ES	UNION 76	603 SEPULVEDA BLVD	None
127	062-ES	VENICE BAKING/ANDIAMO	134 MAIN ST	None
128	064-ES	VINNY'S	143 MAIN ST	None
129	082-ES	VISTA CAFÉ	222 N SEPULVEDA BLVD	None
130	053-ES	WENDY'S PLACE CAFÉ	107 W GRAND AVE	None
131	119-ES	WIKIWIKI HAWAIIAN BBQ	630 N SEPULVEDA BLVD	None
132	094-ES	YOGURTBERRY	310 E GRAND AVE	None
133	126-ES	ZPIZZA	829 N DOUGLAS	None

ATTACHMENT D

FSE Inspection Forms

El Segundo Fire Department Environmental Division
314 Main Street, El Segundo, CA 90245-3887
Telephone: 310-524-2395

Site _____ File _____
Application No. _____
Permit _____

APPLICATION FOR INDUSTRIAL WASTE PERMIT

Check One:
❑ New Permit ❑ Permit Revision ❑ Change of ownership (Effective Date ____/___/___) ❑ Non-use permit

PERMITTEE (OPERATOR) _____ (___) _____
(Legal Company Name) ( ) Corporation ( ) Partnership ( ) Individual Telephone

LOCATION ADDRESS _____ _____
Street City State Zip FAX

MAILING ADDRESS _____
Street City State Zip

TYPE OF INDUSTRY _____ _____
(General Description) (Federal SIC No.)

PROPERTY OWNERS/ADDRESS _____

ASSESSORS PARCEL IDENTIFICATION: Map Book_____ Page _____ Parcel# _____ (From tax bill)

NUMBER OF EMPLOYEES (Full Time) _____ (Part Time) _____ Lot Size (SQ. FT.) _____

GENERAL DESCRIPTION – Describe for each disposal methods. Multiple disposal methods may require separate permits. Attach additional sheets if necessary. A minimum of four sets of engineered plans are required.

Method of disposal: ❑ Public sewer, ❑ Private underground disposal system, ❑ Surface waters, stream or storm drain,
❑ Haul to legal disposal point, ❑ Other (describe) _____

Raw materials used (attach MSDS where appropriate) _____

Wastewater producing operations _____

Constituents of waste discharge _____

Hours of plant operation _____ AM/PM to _____AM/PM; Days per week M T W Th F Sa Su
(Circle days)

Average daily wastewater flow rate (gal. per day) _____ Time of discharge _____AM/PM to _____AM/PM

Estimated five-minute peak wastewater flow rate (gal. per. min.) _____ Days per week M T W Th F Sa Su
(Circle days)

Indicate any daily, monthly, and seasonal variation, if any: _____

As a condition of the issuance of the permit herein applied for, the applicant agrees to submit additional information as may be required by the El Segundo Fire Department, Environmental Safety Division. Permits may be subject to additional conditions and limitations. An inspection fee may be required upon permit issuance.

PERSON RESPONSIBLE FOR WASTE DISCHARGE:

NAME (Please print) _____ TITLE _____ TELEPHONE _____

I AFFIRM THAT ALL INFORMATION FURNISHED IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

SIGNATURE _____ DATE _____

RETURN THIS APPLICATION, REQUIRED PLANS, SUPPORTING INFORMATION AND AN APPLICATION/PLAN REVIEW FEE OF $ _____ PAYABLE TO:	CITY OF EL SEGUNDO 314 MAIN STREET EL SEGUNDO, CA 90245-3887

White – Fire Department Yellow – Applicant Pink - Wastewater

ESD-80
1/03

CITY OF EL SEGUNDO FIRE DEPARTMENT
ENVIRONMENTAL SAFETY DIVISION
Storm Water Facility Inspection/Site Report Form

Last Inspection Date _____

☐ First Inspection ☐ Second Inspection ☐ New Facility ☐ Response to Complaint ☐ Follow up ☐ Other _____

Facility Name: _____ SiteAddress: _____ El Segundo Zip 90245

Owner Name: _____ Operator Name: _____

Contact Name: _____ Phone: _____

SIC: _____ _____ _____ _____

Narrative SIC Description: _____

Is the facility covered under any other permits? (Check all that apply) ☐ None ☐ Industrial Waste
☐ Air Quality ☐ Hazmat business plan ☐ Underground Storage Tanks ☐ Aboveground storage tanks
☐ Fire Dept. (Storage) ☐ Hazardous waste generator ☐ Other: _____

Is the facility covered under a storm water permit? ☐ Does not need coverage ☐ No, refer to RWQCB to determine
☐ Individual NPDES ☐ General (filed NOI) Does the facility have a SWPPP? ☐ Yes ☐ No
Facility's WDID # : _____ Onsite ☐ Yes ☐ No

CRITICAL SOURCES TACKING SYSTEM FACILITY CLASSIFICATIONS: EPA Facilities: ☐ USEPA Phase I (Tier 1 & 2)
Commercial: ☐ Restaurants* ☐ Automotive Services* ☐ Retail Gasoline Outlet (RGO) / Auto Dealerships*
Federally Mandated Facilities: ☐ Municipal Landfill ☐ Hazardous Waste Treatment /Recovery Facilities ☐ SARA Title III
*- Must use additional BMPs noted on Critical Source Supplement

Type of Weather at time of inspection: ☐ Sunny ☐ Cloudy ☐ Drizzle ☐ Steady Rainfall

CORRECTIVE ACTION REQUIRED

This report is furnished to the facility representative as a measure to evaluate the implemented BMP's at your facility to prevent storm water pollution. Your facility may be subject to an enforcement action if the noted deficiencies are not corrected by _____

Upon completion of corrective actions, contact the undersigned at (310)_____ for compliance verification.

Additional Notice attached: ☐ Notice to Comply ☐ Notice of Violation

Facility Representative Signature: _____ Date: _____

Print name of Facility Representative: _____ Inspector: _____

ORIGINAL – FIRE DEPARTMENT YELLOW – SITE COPY

El Segundo Fire Department
Environmental Safety Division
Industrial Wastewater Disposal
Inspection Report

Business Address: _____ Telephone: _____

Business Name: _____

Site Contact: _____ Industrial Waste Permit #: _____

Business Owner: _____ Telephone: _____

Inspection Date: _____ Inspected By: _____

Contact Signature: _____ Permitting Consent to Inspect

An inspection of your industrial wastewater pretreatment system has been performed. Following are violations of the El Segundo Municipal Code identified during the inspection. All violation must be corrected within 30 days to prevent enforcement actions.

VIOLATIONS

☐ Clarifier/Grease Interceptor not maintained. ESMC 12-1-8

To Correct: _____

☐ Access denied to perform inspection. ESMC 12-2-6

To Correct: _____

☐ Industrial wastewater system does not have an access point to collect wastewater samples. ESMC 12-2-9

To Correct: _____

☐ Facility does not have a method to shut off liquid chemicals, process solutions or spent process solutions from entering the City sewer system. ESMC 12-2-10

To Correct: _____

☐ Industrial wastewater system not accessible. ESMC 12-2-11

To Correct: _____

☐ Industrial Waste discharged into city sewer/storm drain without permit. ESMC 12-4-1

To Correct: _____

☐ Industrial wastewater sampling not performed. ESMC 12-4-15

To Correct: _____

☐ Food waste processed or ground with rated horsepower of one horsepower or more not permitted. ESMC 12-4-16

To Correct: _____

☐ Industrial wastewater discharged at a temperature of 140° F or greater. ESMC 12-4-17

To Correct: _____

☐ Hazardous, flammable toxic or poisons substance released to city sewer system. ESMC 12-5-1

To Correct: _____

☐ _____

_____

_____

_____

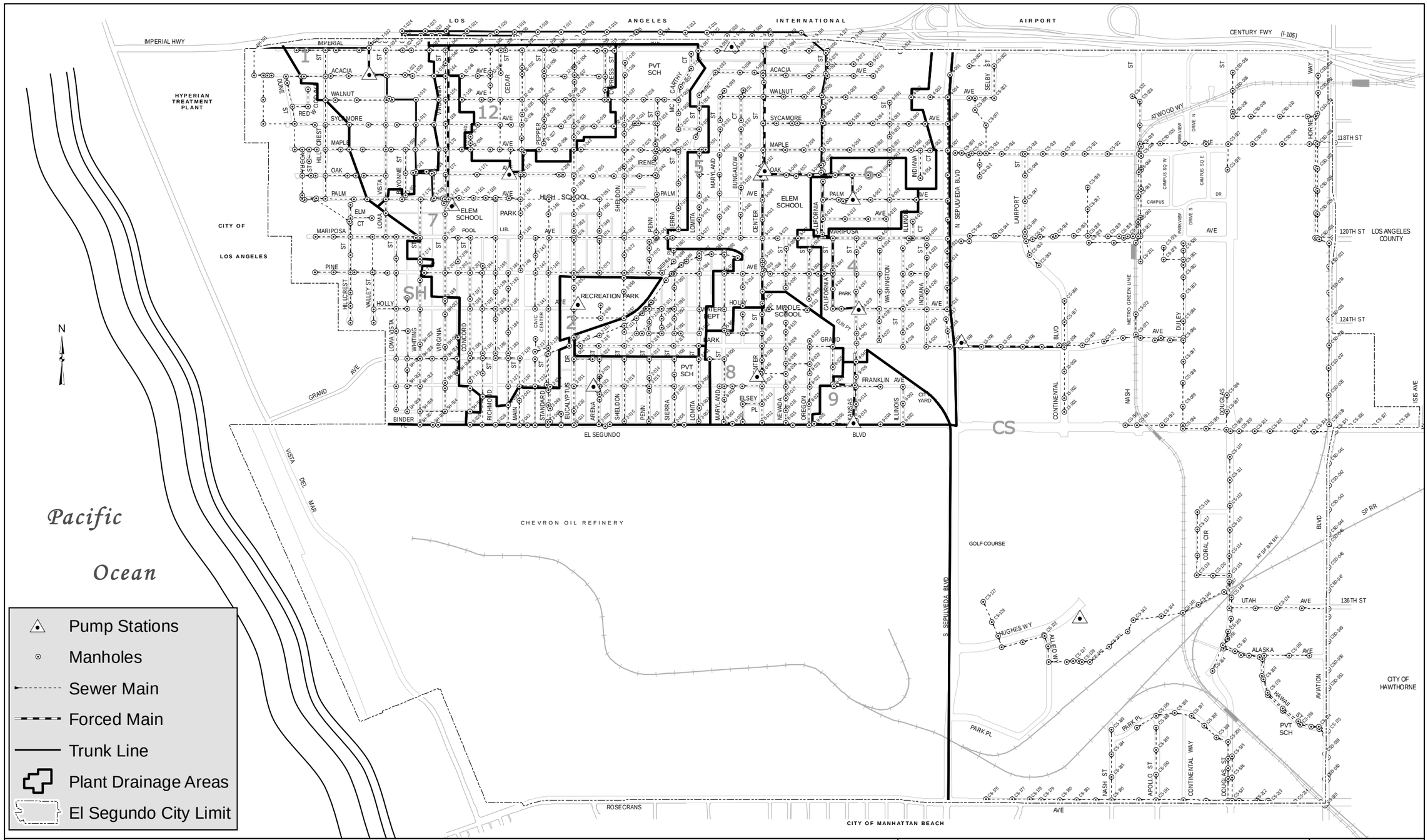
_____

Sample Taken ☐ **Photo Taken** ☐

Report received by: _____ **Date:** _____

Original – Fire Department Yellow – Site Copy

APPENDIX G
ATLAS SAMPLE



CITY OF EL SEGUNDO

Wastewater System

REVISIONS

GIS\map_proj\pub_works\wastewater_may09

Example of the facilities map.

APPENDIX H
OPERATION AND MAINTENANCE MANUAL

2014

Sewer System Operation & Maintenance Program

City of

El Segundo

December 2014

Attachments

Section 1
Preface

The City of El Segundo's Sewer System Operation & Maintenance Program (SSOMP) is just one part of the complete Sewer System Management Plan (SSMP) designed by the City. The SSOMP was developed, in part, to serve as a reference or guide to City staff with the purpose of increasing efficiency, consistency, and overall effectiveness of the Wastewater programs.

The City's Wastewater Division recognizes that the items being addressed in the SSOMP serve as a general description of what the City's sewer operations are and how they are performed. It includes not only a description of the program but also an overview of preventive and corrective maintenance activities and the equipment involved in those processes.

Section 2
City of El Segundo Sewer System Resources

2.1 How a Typical Sewer Collection System Works

All communities generate wastes in solid, liquid, and gaseous forms. Liquid waste, known as wastewater, is water after it has been used for a variety of applications from industrial uses to washing dishes to flushing the toilet. Wastewater includes both the liquid and water-carried solids that are generated by the community. The community's sewer collection system has been put in place to transfer wastewater from homes, businesses, and institutions to a wastewater treatment facility.

Wastewater is collected from private property through a private sewer lateral that discharges into a public sewer main (typically located in the middle of the street). Sewer mains branch out throughout the community collecting wastewater from all the private laterals. The sewer mains transfer wastewater to larger regional trunk line sewers that then transfer all wastes to a wastewater treatment plant. The wastewater treatment plant removes wastes from the water and releases clean water to rivers, lakes and the ocean.

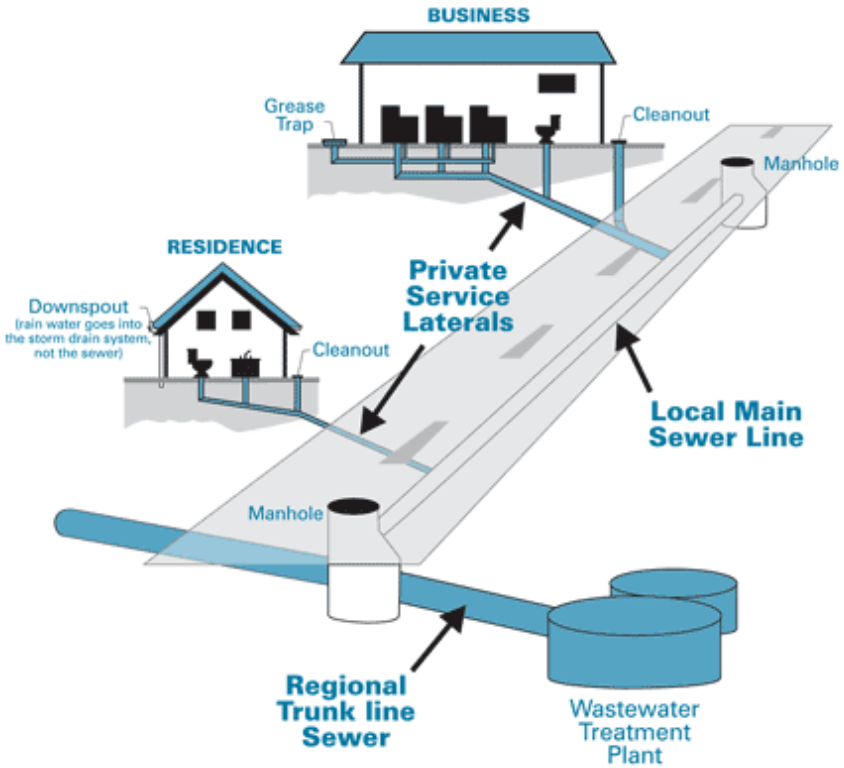


Figure 1. Typical sewer collection system.

It is important to note that unlike pressurized drinking water distribution systems, wastewater collection systems are almost entirely gravity driven, operating on the principal that water flows downhill. The sewer system is designed to go “downhill” until it reaches a treatment plant.

The “downhill” design is not always possible due to terrain or other infrastructure obstacles. From time to time wastewater must be sent “uphill”. This is done using wastewater pump and holding tank systems known as lift stations. The lift station will pump wastewater “uphill” until it reaches a point high enough in elevation where it can then be allowed to flow downhill toward the treatment plant. When possible the use of lift stations in a system is avoided because they require extensive routine maintenance and can cause sewage spills if they malfunction.

2.2 El Segundo’s Sewer Collection System

The City of El Segundo operates a sewer collection system totaling 56 miles of sewer main, 763 access structures, 9 sewer lift stations, 18 pumps and 1 siphon. The majority of the City’s sewer mains range from 8”-12” in diameter. The sewer mains west of Sepulveda Boulevard feed the area’s wastewater to the larger Hyperion trunk lines, which convey the wastewater to the Hyperion Wastewater Treatment Plant, in Los Angeles. The City contracts with the Hyperion treatment plant for treatment of this wastewater. The sewer mains east of Sepulveda Boulevard convey wastewater to Los Angeles County Sanitation district trunk lines for treatment at the County Sanitation District’s Carson Treatment Plant.

The City generally cleans sewer mains, 12 inch diameter or less, once a year and inspects on an as-needed basis using closed circuit inspection (CCTV). Sewer mains larger than 12 inches in diameter are cleaned on an as-needed basis. New sewer main construction and sewer main repairs are performed as needed and when resources are available. Sewer lift stations are maintained routinely to prevent malfunctions. The full preventative maintenance and corrective maintenance (repairs) programs are discussed in detail in further sections.

The Chevron Refinery and El Segundo Power, LLC are two significant dischargers to the City’s wastewater collection system. These facilities have been issued separate NPDES wastewater permits by the Regional Water Quality Control Board.

2.3 Equipment Overview

2.3.1 Vacuum Truck

The City owns 1 Vacon Truck which is a combination hydro-jet/vacuum truck used primarily for sewer main cleaning. A Vacon Truck is shown in the photo to the right. The 4 major components of a Vacon truck are its water tank, high pressure hose, vacuum pump, and wastewater tank. The Vacon truck is operated by a two man crew whose job is to pressure wash (clean or hydrojet) and vacuum sewer mains. The pressure hose can be equipped with a variety of nozzles to perform distinct functions such as root cutting or grease removal. Figures 3 and 4 below are examples of the line cleaning function.

Figure 2. Example of a Vacon truck.

Sewer main cleaning consists of hydro-jetting sewer mains to dislodge accumulated debris from pipe walls and flush all waste and debris in the pipe. This process may include inserting a vacuum hose into the downstream manhole to collect debris and waste, to prevent blockages further downstream

In the event of a sanitary sewer overflow (SSO), the Vacon truck is utilized to both clear the sewer blockage (if any) and vacuum up sewage that overflowed into the street or storm drain system. El Segundo has developed a Sewer Overflow Emergency Response Plan. This document states, in detail, the steps and procedures to undertake in the event of an SSO.

Figure 3. Jetting an exposed pipe.

Figure 4. Jetting a sewer main.

Section 3
Sewer System Mapping

3.1 Sewer Atlas

The City has generated a composite map of manually drafted map sheets (Figure 5). A copy of the map is available through the Engineering Division. The map is updated as changes are made to the sewer system. Field personnel make a copy of areas that need work from the master map document. As work is completed, the map is manually updated.

The City's sewer map shows the location of sewer mains, manholes and lift stations. The sewer mains are labeled with their size, length, material (where data is available), and flow direction. Pressure or force mains are also identified on the map. The sewer manholes are labeled with invert depth to grade data, (where available) and unique manhole IDs.

The City has also created and maintains a Geographic Information Systems (GIS) Geodatabase. This database contains digitized data of all sewer system features and is used to by the Wastewater department to assist line maintenance and cleaning.

City sewer maintenance staff members recognize the link between a sewer spill and the potential contamination in a storm drain system. The City educates its staff to understand the storm drain network and capture a spill before it has entered the storm drain system.

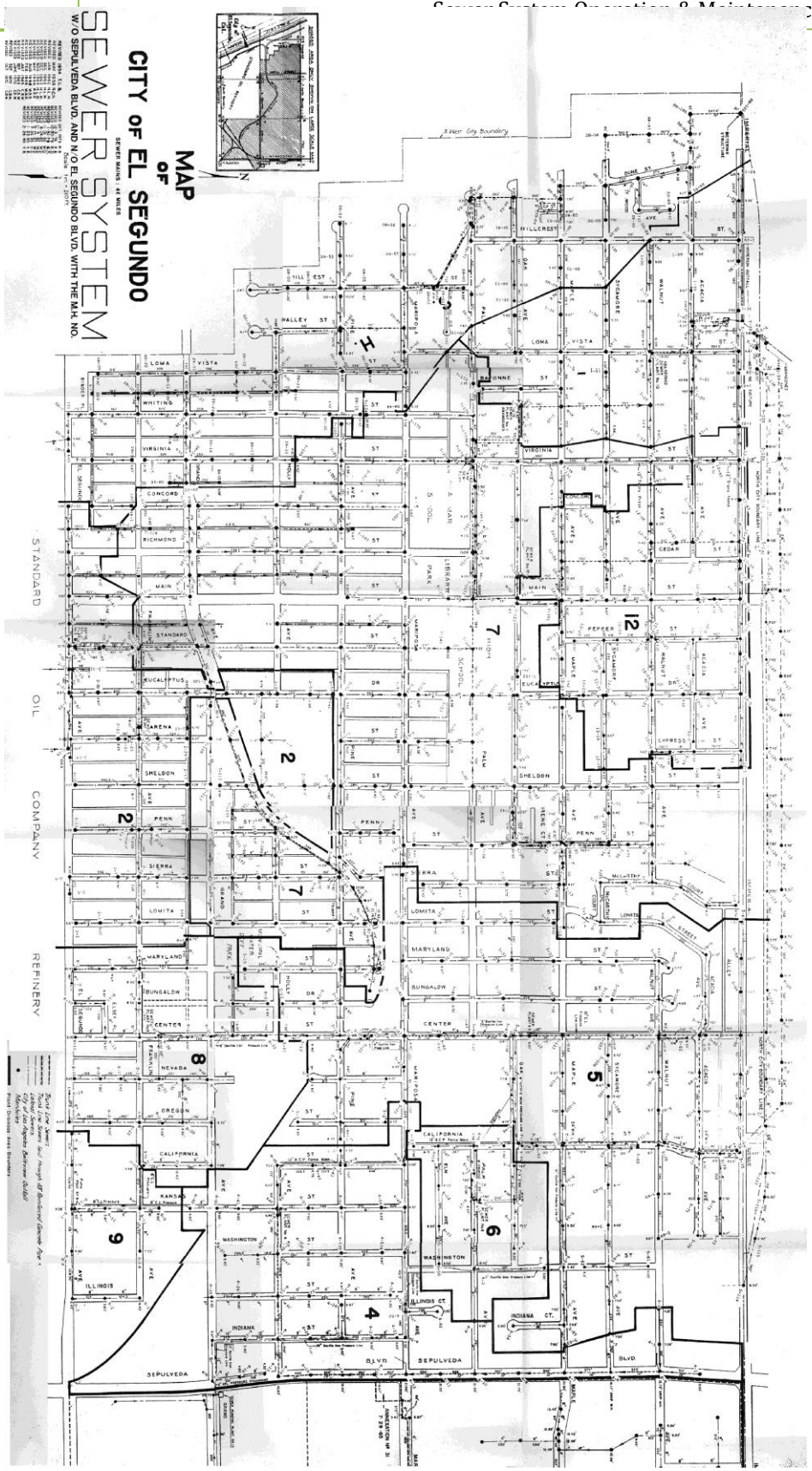


Figure 5. Example of the facilities map.

Section 4
Preventative Maintenance

4.1 Sewer System Cleaning

4.1.1 Overview

The City of El Segundo manages a gravity sewer system of over 56 miles in length made up of manhole structures and their connecting pipeline segments. The system also contains nine sewage lift stations. Sewer laterals that drain each privately owned parcel or property are owned and maintained by the property owners. The City offers lateral cleaning service to property owners when their laterals are impacted by City trees.

City staff performs planned maintenance tasks at scheduled frequencies. Maintenance frequencies are established based on field observations and historical data to minimize risk of blockages, or equipment failure, which could possibly lead to SSOs.

4.1.2 Sewer Line Cleaning

Experience has shown that smaller diameter gravity sewers (from 8" to 12") are more prone to blockages than large diameter sewers. A 12-month schedule for production cleaning of small diameter sewers has historically been the centerpiece of the City's sewer maintenance program. Effective cleaning methods utilize combination cleaning with a Vacon truck capable of hydraulically washing the pipe walls, with the capability to capture or vacuum debris at the downstream manhole. The vacuum truck is manned by full time City staff to implement this program.

Accelerated line maintenance frequency locations are placed on an "Accelerated Line Maintenance" list and entered into Microsoft Outlook for tracking and notifications. Cleaning is performed at pre-determined intervals (every six months or less) depending on field observations and historical data. Accelerated Line Maintenance areas include a siphon and line segments that have a history of blockage or diminished flow due to issues such as grease and roots.

General Sewer Mainline Cleaning Process:

1. Access the downstream manhole of the sewer main to be cleaned
2. Insert the pressure hose into the mainline with the appropriate nozzle/head attached. A variety of nozzles are available to perform specific activities such as root cutting or grease removal.
3. Insert a screen trap to capture debris and waste to prevent blockages in downstream pipelines.
4. Begin mainline pressure washing, adjust the pressure as needed for effective cleaning (high pressures should not be used in shallow sewer mains as this may cause backsplash).

5. In some cases, as the mainline is being jetted, the Vacon truck's vacuum is used to collect waste and debris.
6. Record the activity performed as well as any pertinent observations (roots, grease etc.)

4.2 Lift Station Maintenance

The City has nine sewer lift stations. These stations are maintained, in part, by the City's Wastewater Staff 2-4 times a year for mechanical preventative maintenance. An outside contractor is also utilized two times a year for additional preventative maintenance activities.

4.3 System Monitoring

The City has implemented the use of a Supervisory Control and Data Acquisition (SCADA) system to monitor and control key lift station functions. The SCADA system is configured to issue warning and alarm messages to the Maintenance Supervisor and Maintenance staff, allowing preemptive or corrective measures to be applied prior to an overflow or catastrophic system failure.

The City has also installed water level monitors (SmartCovers) in wet wells and key sewer system mains throughout the service area. The SmartCover data is available and monitored through a third party web-based application that is configured to issue warning or alarm messages to the Maintenance Supervisor Maintenance staff. The water level data provided through this system enables Maintenance staff to identify and address potential problems before they develop into an overflow or spill.

Section 5
Rehabilitation and Replacement

CCTV inspection of the entire collection system was conducted by the City in 2000. Significant defects identified were repaired or included in the Capital Improvement Plan (CIP) for repairs/replacement prioritization.

During routine system maintenance and/or emergency response activities, City staff identify problem areas and when warranted, will conduct CCTV inspection. Significant defects are reviewed and prioritized for repairs/replacement based on pipe condition ranking and flow deficiencies, pursuant to the Sewer Master Plan. Through the current rehabilitation and replacement program, El Segundo has identified projects that are not immediately required, but have been budgeted for.

Replacement equipment operations are included in the CIP and funding is generated through the Enterprise Fund and sewer fees. The CIP also includes costs associated with planning design, construction, and construction inspection. Additionally, the October 2009/September 2010 Capital Improvement Plan includes a provision to CCTV the entire collection system. Significant defects identified will be repaired or added to the CIP plan for repairs/replacement prioritization.

Section 6
Training

The City of El Segundo has a history of hiring and retaining dedicated Staff at all levels and is aware of the significance of ensuring that the staff is qualified and properly trained. Currently and on a regular basis, City Staff participate in documented technical training and on-the-job training programs. In addition, Staff are required to obtain a minimum, Grade 1 CWEA certification. This certification is required to be maintained through on-going contact hour opportunities. Staff are also encouraged to attend applicable vendor demonstrations. The City has also established safety training requirements. A list of training programs and required certifications are provided in Appendix A.

Section 7
Contingency Equipment and Replacement Inventories

The City has identified locations throughout its service area that are critical to maintaining uninterrupted service. These locations have been included in an extensive bypass procedure plan developed by the City. With the bypass procedures and necessary equipment, each of these locations could be bypassed in case of emergency or equipment failure, to maintain service integrity. The bypass procedures are included in Appendix A

The City has taken measures to identify which spare parts are critical for maintaining uninterrupted service and stores these parts at a central location. El Segundo also maintains spare parts that are necessary for maintenance vehicles and equipment. For parts that are not maintained in the spare parts inventory, El Segundo has arrangements with readily available suppliers. As a precaution and a means to ensure uninterrupted service, the City has back-up power generation for lift stations.

ATTACHMENT A

List of Accelerated Line Maintenance Locations

ID	Location	CleaningFreq	MHFrm	MHTo	Cause
ALM-1	Franklin Standard	Bi-monthly	7-132	7-133	Grease
	Franklin Standard		7-136	7-133	
	Franklin Standard		7-132	7-131	
	Franklin Standard		7-139	7-136	
ALM-2	Imperial	Semi-Annual	1-32	1-24	Roots
	Imperial		1-24	1-23	
	Imperial		1-25	1-22	
	Imperial		1-23	1-22	
ALM-3	Sycamore	Semi-Annual	1-13	1-12	Grease
ALM-4	Maple	Semi-Annual	12-55	12-54	Grease
ALM-5	Pine	Semi-Annual	5-4	5-1	Roots
	Oregon		5-4	5-3	
	Nevada		5-7	5-6	
ALM-6	Center	Semi-Annual	5-19	5-12	Roots
ALM-7	Clarifier and car wash	Semi-Annual			N/A
ALM-8	Main/Standard	Semi-Annual	7-132	7-131	Grease
ALM-9	Oak Street Siphon	Semi-Annual	7-155	7-154	Sand
ALM-10	Franklin	Semi-Annual	7-133	7-132	Grease
ALM-11	Palm	Semi-Annual	7-161	7-160	Roots
	Palm		7-162	7-163	
	Palm		7-161	7-163	
ALM-12	Franklin Standard	Bi-monthly	7-132	7-133	Grease
	Franklin Standard		7-136	7-133	
	Franklin Standard		7-139	7-136	
ALM-13	Whiting	Semi-Annual	7-176	7-175	Roots
ALM-14	Concord	Semi-Annual	7-195	7-196	Roots
	Pine		7-203	7-194	
ALM-15	Grand	Semi-Annual	7-120	7-113	Sand
ALM-16	Whiting	Semi-Annual	7-176	7-175	Roots
ALM-17	Standard	Semi-Annual	7-136	7-133	Grease
	Grand		7-120	7-113	
ALM-18	Mariposa	Semi-Annual	7-63	7-61	Roots
ALM-19	Concord	Semi-Annual	7-195	7-196	Roots/ Grease
	Pine		7-203	7-194	
	Pine		7-201	7-203	
	Pine		7-194	7-192	
ALM-20	Eucalyptus	Semi-Annual	2-59	2-54	Roots
ALM-21	Sierra	Semi-Annual	7-16	7-15	Roots
	Sierra		7-17	7-16	
	Maple		7-18	7-17	
	Maple		7-19	7-18	
ALM-22	Rosecrans	Semi-Annual	CS - 204-a	CS -203	Grease
	Rosecrans		CS-204-a	CS-204	
	Rosecrans		CS -204	CS-201	
	Rosecrans		CS-537	CS535	

ID	Location	CleaningFreq	MHFrm	MHTo	Cause
ALM-23	California	Semi-Annual	5-108	5-51	Roots/ Grease
	Imperial		5-88	5-87	
	Imperial		5-90	5-88	
	Center		5-91	5-90	
	Oak		6-7	6-4	
ALM-24	Loma Vista	Semi-Annual	SH-37	SH-32	Roots
	Loma Vista		SH-37	SH-36	
ALM-25	Sheldon/Eucalyptus	Semi-Annual	63	62	Roots
	Sheldon/Penn		62	61	
	Penn		61	60	
	Sheldon		7-62	7-72	

ATTACHMENT B

Bypass Procedures

GENERATOR STARTUP INSTRUCTIONS

1. Determine the voltage of the station to be bypassed.

Station #1	480 volts
Station #2	480 volts
Station #4	480 volts
Station #5	240 volts
Station #6	480 volts
Station #7	480 volts
Station #8	480 volts
Station #9	480 volts
Station #13	480 volts

2. Check to make sure the voltage selector switch is on 277 / 480 volts if it is a 480 volt station or 120 / 208 volts if it is a 240 volt station. Also make sure that the breakers on both sides of the generator are turned off.

3. Place the station's transfer switch in the "center" or "off" position and connect either the 480 volt or 240 volt generator cable to the plug depending on the voltage of the lift station.

4. Turn on the “control power” switch (chrome switch to the right of the display). The control panel will light up and an alarm will sound. Press the “up” and “right” arrows simultaneously to reset the generator. When the alarm sound stops, press the “run” button to start the generator.

5. Once the generator is running, pressing the “left” or “right” arrows will toggle through the different displays. Select the display that shows the voltage on each phase. The correct display shows voltages for “Vab, Vbc, and Vca”. Use a screwdriver to increase or decrease the “voltage adjust” to the correct voltage for the lift station (either 240 or 480 volts). Once the correct voltage has been set, turn on the breaker for the generator cable and then place the transfer switch in the emergency or generator position.

6. Check the lift station for power and proper operation. The panels are protected by phase monitors from improper voltage so do not just check lighting. If the pumps are not running, turn one pump on by hand to verify that everything is set correctly.

Bypass Setup for Sewer Lift Station #1

625 W. Acacia Ave.

Bypass Instructions:

1. Turn off power to the station using the main breaker or transfer switch at the above ground panel
2. Close both Valve #1 and Valve #2
3. Install the Hydrant on the Bypass Stand
4. Set the portable pump at the curb with the suction hose in Manhole #1
5. Connect the portable pump discharge hose to the Hydrant and open the hydrant's valve
6. Open Valve #1
7. Begin Pumping

Disassembly:

1. Shut down the portable pump and close Valve #1
2. Disconnect the discharge hose and drain the liquid back into Manhole #1
3. Remove the Hydrant from the Bypass Stand and bolt the cover back onto the flange
4. Open both Valve #1 and Valve #2
5. Turn on power to the station

Bypass Setup for Sewer Lift Station #2

327 East Franklin Ave.

Bypass Instructions:

1. Turn off power to the station using the main breaker or transfer switch at the above ground panel
2. Install the Hydrant on the Bypass Stand
3. Set the portable pump at the curb with the suction hose in the Wet Well Manhole
4. Connect the portable pump discharge hose to the Hydrant and open the hydrant's valve
5. Open the Bypass Valve
6. Begin Pumping

Disassembly:

1. Shut down the portable pump and close the Bypass Valve
2. Disconnect the discharge hose and drain the liquid back into Wet Well Manhole
3. Remove the Hydrant from the Bypass Stand and bolt the cover back onto the flange
4. Turn on power to the station

Bypass Setup for Sewer Lift Station #4

400 Kansas Street.

Bypass Instructions:

1. Turn off power to the station using the main breaker at the above ground panel
2. Close Valve #3
3. Install the Hydrant on the Bypass Stand
4. Set the portable pump at the curb with the suction hose in the Wet Well Manhole
5. Connect the portable pump discharge hose to the Hydrant and open the hydrant's valve
6. Open both Valve #1 and Valve #2
7. Begin Pumping

Disassembly:

1. Shut down the portable pump and close both Valve #1 and Valve #2
2. Disconnect the discharge hose and drain liquid back into the Wet Well Manhole
3. Remove the Hydrant from the Bypass Stand and bolt the cover back onto the flange
4. Open Valve #3
5. Turn on power to the station

Bypass Setup for Sewer Lift Station #5

735 Center Street

Bypass Instructions:

1. Turn off power to the station using the main breaker or transfer switch at the above ground panel
2. Close Valve #2
3. Install the Bypass Adapter on the Bypass Stand
4. Set the portable pump on the curb with the suction hose in the Wet Well Manhole
5. Connect the portable pump discharge hose to the Hydrant and open the hydrant's valve
6. Open Valve #1
7. Begin Pumping

Disassembly:

1. Shut down the portable pump and close Valve #1
2. Disconnect the discharge hose and drain liquid back into the Wet Well Manhole
3. Remove the Bypass Adapter from the Bypass Stand and bolt the cover back onto the flange
4. Open Valve #2
5. Turn on power to the station

Bypass Setup for Sewer Lift Station #6

1465 East Palm Ave.

Bypass Instructions:

1. Turn off power to the station using the main breaker or transfer switch at the above ground panel
2. Close Valve #1
3. Install the Hydrant on the Bypass Stand
4. Set the portable pump next to the wet well with the suction hose in the Wet Well Manhole
5. Connect the portable pump discharge hose to the Hydrant and open the hydrant's valve
6. Open Valve #2 on the Bypass Stand
7. Begin Pumping

Disassembly:

1. Shut down the portable pump and close Valve #2 on the Bypass Stand
2. Disconnect the discharge hose and drain liquid back into the Wet Well Manhole
3. Remove the Hydrant from the Bypass Stand and bolt the cover back onto the flange
4. Open Valve #1
5. Turn on power to the station

Bypass Setup for Sewer Lift Station #7

640 Virginia Street

On Palm Ave., 100ft west of Virginia

View inside 18" Overflow Manhole

Bypass Instructions:

1. Set the portable pump at the curb with the suction hose in the Wet Well
2. Run the portable pump discharge hose to the 18” overflow line located 100 feet west of the intersection

3. Place discharge hose inside the 18” overflow opening shown in the above photo
4. Start pump and begin Pumping

Disassembly:

1. Shut down the portable pump
2. Disconnect the discharge hose and drain liquid into the 18” overflow manhole

Bypass Setup for Sewer Lift Station #8

219 Center Street

Bypass Instructions:

1. Turn off power to the station using the main breaker or transfer switch at the above ground panel
2. Close Valve #2
3. Install the Hydrant on the Bypass Stand
4. Set the portable pump at the curb with the suction hose in the Wet Well
5. Connect the portable pump discharge hose to the Hydrant and open the hydrant's valve
6. Open Valve #1
7. Begin Pumping

Disassembly:

1. Shut down the portable pump and close Valve #1
2. Disconnect the discharge hose and drain liquid back into the Wet Well
3. Remove the Hydrant from the Bypass Stand and bolt the cover back onto the flange
4. Open Valve #2
5. Turn on power to the station

Bypass Setup for Sewer Lift Station #9

101 Kansas Street

Bypass Instructions:

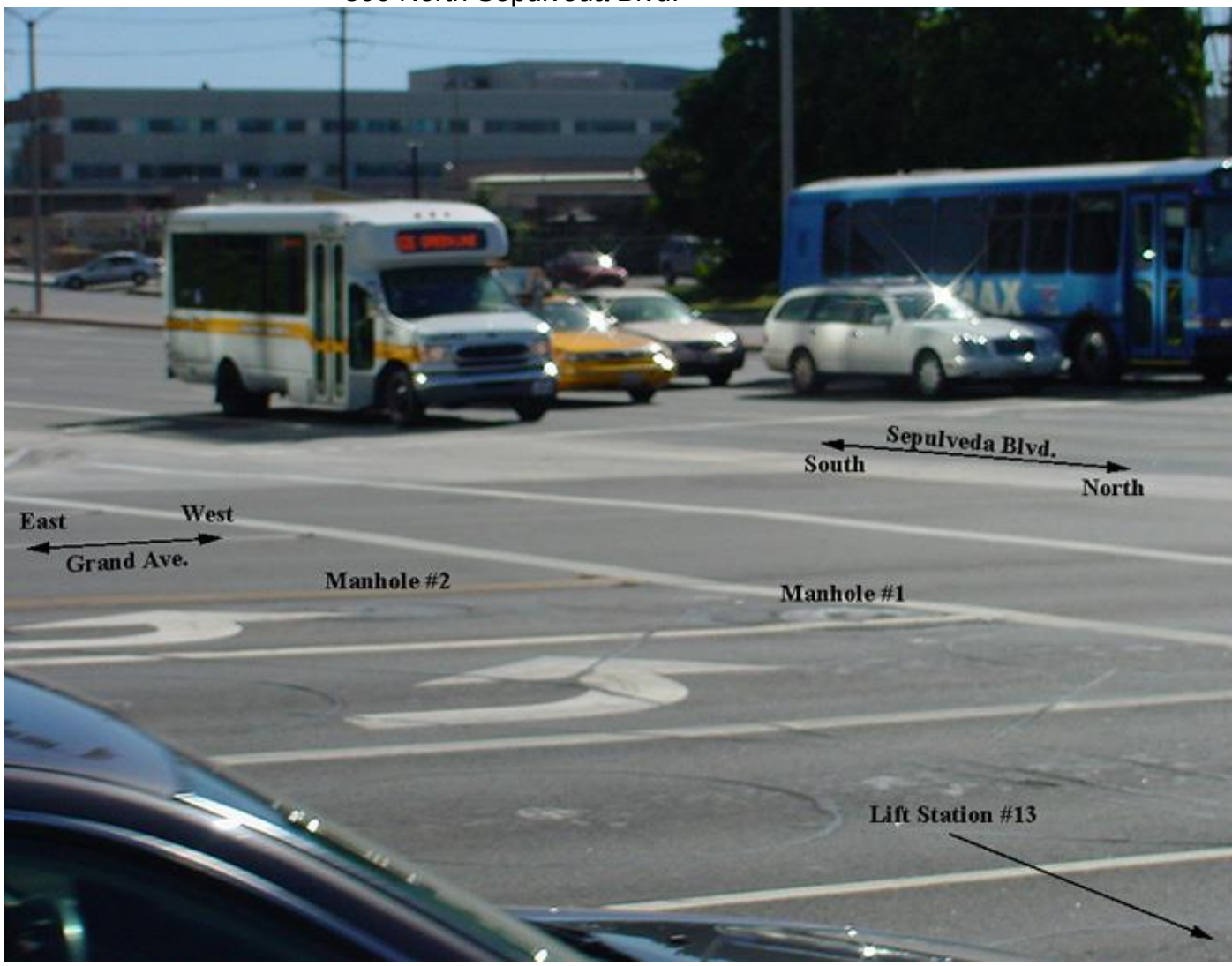
1. Turn off power to the station using the main breaker or transfer switch at the above ground panel
2. Close Valve #2
3. Install the Hydrant on the Bypass Stand
4. Set the portable pump at the curb with the suction hose in the Wet Well
5. Connect the portable pump discharge hose to the Hydrant and open the hydrant's valve
6. Open Valve #1
7. Begin Pumping

Disassembly:

1. Shut down the portable pump and close Valve #1
2. Disconnect the discharge hose and drain liquid back into the Wet Well
3. Remove the Hydrant from the Bypass Stand and bolt the cover back onto the flange
4. Open Valve #2
5. Turn on power to the station

Bypass Setup for Sewer Lift Station #13

300 North Sepulveda Blvd.



Bypass Instructions:

1. Turn off power to the station using the main breaker or transfer switch at the above ground panel
2. Install the Hydrant on the Bypass Stand located in Manhole #2
3. Set the portable pump in the left turn lane with the suction hose in Manhole #1
4. Connect the portable pump discharge hose to the Hydrant and open the hydrant's valve
5. Begin Pumping

Disassembly:

1. Shut down the portable pump
2. Disconnect the discharge hose and drain liquid back into Manhole #1
3. Remove the Hydrant from the Bypass Stand and bolt the cover back onto the flange
4. Turn on power to the station

APPENDIX I
SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

APPENDIX J
ORDINANCE 1329

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF EL SEGUNDO, CALIFORNIA, IMPLEMENTING THE STANDARD URBAN STORM WATER MITIGATION PLAN OF THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD FOR THE LOS ANGELES REGION BY AMENDING THE EL SEGUNDO MUNICIPAL CODE TO REPEAL CHAPTER 6.28 AND ENACT NEW CHAPTER 6.28, "STANDARD URBAN STORM WATER MITIGATION PLAN IMPLEMENTATION"

WHEREAS, The 1972 amendments to the Federal Water Pollution Control Act (referred to as the Clean Water Act or "CWA"), 33 U.S.C. §§ 1251-1387, prohibit the discharge of any Pollutant to navigable waters of the United States from a point source unless the discharge is authorized by a permit issued pursuant to the National Pollutant Discharge Elimination System ("NPDES") required by CWA § 402, 33 U.S.C. §§ 1342; and

WHEREAS, Municipal separate storm sewer systems ("MS4s") which convey urban runoff, including, but not limited to Storm Water runoff, are within the definition of point sources under the CWA; and

WHEREAS, Pursuant to the CWA, the United States Environmental Protection Agency ("US EPA") has defined the term "Municipal separate storm sewer system" to mean a conveyance, or system of conveyances, including roads with drainage systems, municipal streets, curbs, gutters, catch basins, and storm drains owned or operated by a city, used for collecting Storm Water; and

WHEREAS, The US EPA, under the National Urban Runoff Program ("NURP") has funded and guided studies of water quality from MS4s which drain residential, commercial and light industrial sites; and

WHEREAS, NURP and other studies (cited at, among other places, 55 Fed.Reg. 47900) demonstrate the presence of Pollutants in urban runoff discharged to receiving waters through MS4 systems; and

WHEREAS, CWA § 402(p) requires that the City obtain a permit for Storm Water and urban discharges through the City's MS4; and

WHEREAS, Section 402(p) of the CWA further provides that NPDES permits shall require controls to reduce the discharge)(3)(B) of Pollutants to the maximum extent practicable, including management practices and such other provisions as appropriate for the control of Pollutants; and

WHEREAS, the US EPA, in partial implementation of § 402(p) of the federal Clean Water Act, 33 U.S.C. § 1344(p); has adopted final rules, known as the "Phase I and Phase II Storm Water Regulations" at several places in Parts 9, 122, 123, and 124 of the Code of Federal Regulations ("CFR"), and

WHEREAS, the State Water Resources Control Board ("SWRCB") has developed a plan to implement the requirements of section 402(p), § 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 ("CZARA") and certain parts of the California Water Code, and

WHEREAS, in partial implementation of § 402(p) of the federal Clean Water Act, 33 U.S.C. § 1344(p); the Phase I Storm Water Regulations, the requirements of section 402(p), § 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 and the California Water Code, the California Regional Regional Water Quality Control Board – Los Angeles ("RWQCB-LA") issued a National Pollutant Discharge Elimination System ("NPDES") permit and Waste Discharge Requirements for Municipal Storm Water and Urban Runoff Discharges within the County of Los Angeles, Regional Board Order No. 96-054, NPDES No. CAS614001 (the "Permit"), on July 15, 1996 to each City in Los Angeles County, including the City of El Segundo; and

WHEREAS, pursuant to the Permit, and in partial implementation of § 402(p) of the federal Clean Water Act, 33 U.S.C. § 1344(p); the Phase I and Phase II Storm Water Regulations, the requirements of section 402(p), § 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 and the California Water Code, the RWQCB-LA Board adopted Resolution No. R-00-02, approving and directing the Executive Officer of the RWQCB-LA to issue a Standard Urban Storm Water Mitigation Plan for Municipal Storm Water And Urban Runoff Management Programs in Los Angeles County ("SUSMP") setting forth the requirements to be implemented by all jurisdictions discharging storm water under the Permit, and

WHEREAS, on March 8, 2000, the Executive Officer of the RWQCB-LA issued a Final Approved STANDARD URBAN STORM WATER MITIGATION PLAN FOR LOS ANGELES COUNTY AND CITIES IN LOS ANGELES COUNTY (the "SUSMP") setting forth the requirements to be implemented by all jurisdictions discharging storm water under the Permit, and

WHEREAS, the State Water Resources Control Board, in Order WQ 2000-11, modified the SUSMP by revising the definition of "Redevelopment," excluding Retail Gasoline Outlets from certain design standards, deleting the applicability of the SUSMP to "Environmentally Sensitive Areas," limiting the applicability of the SUSMPs to discretionary development and redevelopment in specified categories, limiting the applicability of the SUSMP to Redevelopment projects only if they result in creation or addition of 5,000 square feet of impervious surfaces, deleting the requirement for funding by project proponents who receive waivers, and extended the effective date deadline to February 15, 2001; and

WHEREAS, this City is a permittee under the Permit and therefore is required by federal and state law to implement all requirements of the Permit, including the SUSMP, and

WHEREAS, this City has authority under Article 11, section 7 of the California Constitution to adopt ordinances needed to implement these requirements, and

WHEREAS, this City also has authority under the California Water Code to adopt and enforce ordinances conditioning, restricting, and limiting activities that might degrade the quality of the waters of the State of California,

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF EL SEGUNDO HEREBY ORDAINS THAT:

SECTION 1. The El Segundo City Council hereby finds, determines and declares as follows:

Title 6 of the El Segundo Municipal Code is amended to add new Chapter 6.28, "STANDARD URBAN STORM WATER MITIGATION PLAN IMPLEMENTATION," to take effect on February 15, 2001 and to read in its entirety as follows:

"CHAPTER 6.28

STANDARD URBAN STORM WATER MITIGATION PLAN IMPLEMENTATION

Sections:

6.28.210 FEES
6.28.220 WAIVER

§ 6.28.010. Limits of Chapter

Nothing in this Chapter shall be interpreted to:

(a) infringe any right or power guaranteed by the California Constitution, including any vested property right; or

(b) require any action inconsistent with any applicable and lawfully adopted General Plan, Specific Plan, Plan Amendment, or Building Code that conforms to the laws of California and the requirements of this Chapter; or

(c) restrict otherwise lawful land use except as authorized by the laws of California, subject to the limitations of this Chapter.

§ 6.28.020. Scope of Chapter

This Chapter shall take effect on February 15, 2001 and shall apply only to approval of discretionary (within the meaning of the California Environmental Quality Act, Public Resources Code §§ 21000 *et seq.*) New Development or Redevelopment projects in the following categories (as those terms are defined in this Chapter):

(a) single-family residences on graded Hillside sites;

(b) 100,000 square foot Commercial Developments;

(c) Automotive Repair Shops (SIC codes 5013, 5014, 5541, 7532-7534, 7536-7539);

(d) Retail Gasoline Outlets;

(e) Restaurants (SIC code 5812);

(f) Home subdivisions of ten or more dwelling units;

(g) Parking Lots 5,000 square feet or more or with 25 or more parking spaces and potentially exposed to storm water runoff, as defined in this Chapter.

§ 6.28.030. Definitions

For the purposes of this Chapter the following words and phrases shall have the meanings respectively ascribed to them by this Chapter unless clearly inapplicable. Words and phrases not ascribed a meaning by the "STANDARD URBAN STORM WATER MITIGATION PLAN FOR LOS ANGELES COUNTY AND CITIES IN LOS ANGELES COUNTY" approved by the Executive Officer of the California Regional Water Quality Control Board for the Los Angeles Region, on March 8, 2000, as modified by the State

Water Resources Control Board in Order WQ 2000-11, if defined therein, and if not, by the regulations implementing the National Pollutant Discharge Elimination System, Clean Water Act § 402, and Division 7 of the California Water Code, as they may be amended from time to time, if defined therein, and if not, to the definitions in an applicable permit issued by the California Regional Water Quality Control Board - Los Angeles, as such permits may be amended from time to time.

"100,000 square foot Commercial Development" means "any Commercial Development that creates at least 100,000 square feet of impermeable area, including, but not limited to parking areas. (See "Commercial Development" as defined below.)

"Automotive Repair Shop" means a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534 or 7536-7539.

"Best Management Practice" ("BMP") means "any schedule of activities, prohibition of practices, maintenance procedure, program, technology, process, siting criteria, operational methods of measures, or other management practices or engineered systems, which when implemented prevent, control, remove, or reduce pollution.

"Commercial Development" means any development on private land that is not residential or a site of an industrial activity, as defined in 40 C.F.R. § 122.26(b)(14). "Commercial Development" includes, but is not limited to, hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, multi-apartment buildings, car wash facilities, mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses and other light industrial complexes not within the scope of 40 C.F.R. § 122.26(b)(14)

"Directly Connected Impervious Area" ("DCIA") means a land area made impermeable to water from which runoff may enter a storm drainage system without first flowing across a permeable land area.

"Greater Than Nine Unit Home Subdivision" means any subdivision where at least ten (10) single-family or multi-family dwelling units are to be developed.

"Hillside" means a parcel in an area with known erosive soil conditions, where the development will require grading on any natural slope which is twenty-five per cent (25%) or greater.

"New Development" means the subdivision of land, or the construction of structures, or other impervious surfaces, or both.

"Parking Lot" means an area or facility for the temporary parking or storage of motor vehicles used personally or for business or commerce, which contains 5,000 square feet, or more, or twenty-five (25) or more parking spaces, and which is potentially exposed to storm water.

"Redevelopment" means, on an already developed site, the creation or addition of at least 5,000 square feet of impervious surfaces. Redevelopment includes, but is not limited to: the expansion of a building footprint or addition or replacement of a structure; structural development including an increase in gross floor area and/or exterior construction or remodeling; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Where redevelopment results in an increase of less than fifty percent (50%) of the impervious surfaces of a previously existing development, and the existing development was not subject to these SUSMPs, the Design Standards apply only to the addition, and not to the entire development.

"Restaurant" means a stand-alone facility where prepared food and drinks are sold for consumption, including stationary lunch counters and refreshments stands selling prepared food and drinks for immediate consumption. (See SIC Code 5812). "Restaurant" does not include co-located stalls or food counters in general purpose establishments such as markets and grocery stores.

"Retail Gasoline Outlet" means any facility where gasoline and lubricating oils are sold.

"Source Control BMP" means any schedules of activities, prohibitions of practices, maintenance procedures, managerial practices or operational practices that aim to prevent storm water pollution by reducing the potential for contamination at the source of pollution.

"Storm Event" means a rainfall event that produces more than 0.1 inch of precipitation separated from the previous storm event by at least 72 hours of dry weather.

"Structural Control BMP" means any structural facility designed and constructed to mitigate the adverse impacts of urban runoff pollution (e.g., a canopy, structural enclosure). This category may include both Treatment Control BMPs and Source Control BMPs.

"Treatment" means the use of physical, chemical, or biological processes to remove pollutants. Such processes include, but are not limited to filtration, gravity settling, media absorption, biodegradation, biological uptake, chemical oxidation and UV radiation.

"Treatment Control BMP" means any engineered system designed to remove pollutants by simple gravity setting of particulate pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process.

§ 6.28.040. Rate of Discharge

No New Development shall increase the peak rate of discharge of storm water from the developed site if this increase would make downstream erosion more probable.

§ 6.28.050. Subdivision Design

Unless inconsistent with vested rights, the site design for all subdivisions subject to this Chapter, to the maximum extent practicable, shall:

(a) Concentrate or cluster New Development on portions of the site while leaving the remaining land in a natural undisturbed condition;

(b) Limit clearing and grading of native vegetation to the minimum extent practicable, consistent with the construction of lots, and to allow access and provide fire protection;

(c) preserve riparian areas and wetlands.

§ 6.28.060. Best Management Practices (BMP)

(a) On the date this Chapter takes effect, those Best Management Practices which are listed in Tables 1 and 2 of the "STANDARD URBAN STORM WATER MITIGATION PLANT FOR LOS ANGELES COUNTY AND CITIES IN LOS ANGELES COUNTY" approved by the Executive Officer of the California Regional Water Quality Control Board for the Los Angeles Region, on March 8, 2000, as modified by the State Water Resources control Board in Order WQ 2000-11, shall be deemed to be incorporated by reference and adopted by this City and shall remain in effect until the City Council shall adopt by resolution a guidebook prepared or recommended by the Director of Public Works (the "Director"), categorizing development and Best Management Practices for each category.

(b) The Director may from time to time revise the guidebook, and the City Council may adopt these revisions by resolution.

(c) No Best Management Practice other than a Structural or Treatment Control Best Management Practice shall be used in any development regulated under this Chapter, unless the guidebook recommends that practice.

(d) No Structural or Treatment Control Best Management Practice may be used in any development regulated under this Chapter unless the guidebook recommends that practice.

§ 6.28.070. Control of Erosion of Slopes and Channels

Best Management Practices used on slopes or channels in New Development or Redevelopment subject to this Chapter shall:

(a) convey runoff from tops of slopes;

(b) eliminate or reduce flow to natural drainage systems, and for flows which cannot be eliminated, utilize natural drainage systems, rather than artificial drainage systems, to the maximum extent practicable;

(c) stabilize soil at permanent channel crossings;

(d) vegetate slopes with native or drought tolerant species known to control erosion; and

(e) dissipate concentrated flows before they enter unlined channels.

§ 6.28.080. Signage of Storm Drains

In the project area of New Development or Redevelopment subject to this Chapter, a notice that dumping in storm drains and catch basins is illegal shall be:

(a) stenciled in paint or other permanent means at all storm drain inlets and catch basins within the project area;

(b) posted at all known public accesses to natural or artificial drainage channels within the project area; and

(c) maintained to preserve the sign.

§ 6.28.090. Outdoor Storage of Materials

(a) All materials stored outdoors in New Development or Redevelopment subject to this Chapter which, if exposed to storm water, may reasonably be expected to add pollutants to it, shall be thoroughly isolated from contact:

(1) with storm water, by enclosure in a structure; or

(2) with storm water, by a surrounding curb or other containment structure.

(b) The storage area must be completely covered:

(1) by impermeable paving and

(2) any structure by an overhead covering that adequately diverts precipitation away from the ground between the material and the surrounding containment structure.

§ 6.28.100. Outdoor Trash Storage Areas

Except where they serve only single-family residences, solid waste containers in New Development or Redevelopment subject to this Chapter shall be stored in areas that:

(a) are isolated from contact with storm water originating outside the storage area and

(b) are surrounded with a barrier sufficient to prevent all trash from being transported out of the storage area, except during collection.

§ 6.28.110. Maintenance of Best Management Practices

(a) Every person applying to the City for discretionary approval of any New Development or Redevelopment subject to this Chapter, as part of that application, in a signed writing, shall agree to maintain any Structural or Treatment Control Best Management Practice to be implemented in that development through means such as a covenant running with the land (such as covenants, conditions and restriction, commonly known as CC&Rs), CEQA mitigation measures, Conditional Use Permit or other legal agreement (collectively "Agreement").

(b) The Agreement described in subsection (a) of this section shall remain in force until ownership of the developed property has been entirely transferred, and upon transfer, shall be binding on the new owner(s).

§ 6.28.120. Design Standards for Best Management Practices

Except as this Chapter may specifically exempt, every Structural or Treatment Control Best Management Practice implemented pursuant to this Chapter in New Development or Redevelopment subject to this Chapter, for the area contributing to that practice:

(a) shall be adequate to protect from flooding those parts of the contributing area adjacent to drainage channels, according to design criteria the (City Public Works or Engineering Agency) may establish;

(b) shall be adequate

(1) for the volume of storm water that, as determined by the formula recommended in "ASCE Manual of Practice No.87 (1998)," may be collected from the contributing area during a 24-hour period in which the total storm water runoff exceeds 85% of all runoff volumes that have been measured for 24-hour periods for that same area; or

(2) to treat, by the method recommended in "California Storm Water Best Management Practices Handbook—Industrial/Commercial (1993)," and as determined there, 80% or more volume treatment of the annual volume of storm water runoff from the contributing area or

(3) for the volume of storm water runoff from the contributing area produced by a storm event of 0.75 inches.

(c) Subsection (b) of this section shall not apply to any land area of less than 5,000 square feet being developed or redeveloped for use by any Restaurant, or any Retail Gasoline Outlet.

(d) Where redevelopment results in an increase of less than fifty percent (50%) of the impervious surfaces of a previously existing development, and the existing development was not subject to these SUSMPs, the Design Standards apply only to the addition, and not to the entire development.

§ 6.28.130. Loading Docks

In any 100,000 square foot Commercial Development or in any Automotive Repair Shop, the design of any outdoor loading dock area in New Development or Redevelopment subject to this Chapter shall:

(a) use an overhead covering that prevents the entry of storm water or

(b) prevent the entry of storm water by diverting it away and

(c) not conduct storm water from any truck well directly into a storm drain system.

§ 6.28.140. Repair and Maintenance Bays

In any 100,000 square foot Commercial Development or in any Automotive Repair Shop, in New Development or Redevelopment subject to this Chapter the design of any repair or maintenance bay shall:

(a) prevent the entry of storm water by diverting it away or by locating such bays indoors and

(b) use a drainage system that collects all water from washing and from leaks or spills and stores it in a sump for disposal and

(c) does not conduct storm water from the bay directly to a storm drain system.

§ 6.28.150. Wash Areas

The design of any wash area for motor vehicles or equipment in New Development or Redevelopment subject to this Chapter shall use:

(a) an adequate overhead covering and

(b) a device that clarifies or otherwise pretreats all wash water and

(c) a drain conducting all treated wash water to a sanitary sewer.

§ 6.28.160. Restaurants

The design of any Restaurant subject to this Chapter shall include an area for the washing or cleaning of equipment, which:

(a) if indoors, shall

(1) be self-contained

(2) use a grease trap and

(3) use a drain conducting all waste water to a sanitary sewer; and

(b) if outdoors, shall

(1) use an overhead covering adequate to prevent contact with storm water;

(2) be covered with impermeable paving;

(3) be surrounded by a curb or other containment; and

(4) use a drain conducting all waste water to a sanitary sewer.

§ 6.28.170. Retail Gasoline Outlets

All fuel dispensing areas in any Retail Gasoline Outlet subject to this Chapter shall:

(a) be covered by a structure that

(1) extends outward at least as far as the grade break at all points and

(2) diverts all storm water away from the fueling area.

(b) be paved with a material, other than asphaltic concrete, that is impermeable to water and has a smooth surface with a slope of not less than two per cent (2%) but not more than four per cent (4%);

(c) be separated from the rest of the site by a grade break that, to the maximum extent practical, prevents storm water from entering the fueling area;

(d) extend outward at least six and one-half feet (6.5') from the outermost corner of any fuel dispenser, or a distance one foot (1') greater than the combined length of the dispensing hose and nozzle, whichever distance is less;

§ 6.28.180. Parking Lots

To the maximum extent practical, all Parking Lots subject to this chapter shall minimize offsite transport of pollutants by using the following design criteria and BMPs:

(a) minimizing impervious land coverage;

(b) providing for effective treatment or infiltration of storm water before it is discharged into storm drains; and

(c) Use of operational and maintenance measures to remove heavy metals, oil and grease and polycyclic aromatic hydrocarbons.

§ 6.28.190. Violations

(a) Violation of any provision of this Chapter shall be both a misdemeanor and a public nuisance.

(b) The remedies specified in this Chapter shall not exclude any other legal remedy that may be available to the City.

§ 6.28.200. Inspections

(a) The Director of Public Works and such officers as the Director may designate shall enforce the provisions of this Chapter.

(b) As necessary, these officers may, at a reasonable time and in a manner authorized by the laws of California, enter and make inspections on any property regulated under this Chapter.

§ 6.28.210. Fees

The City Council may establish and fix the amount of fees for services provided under this Chapter, as authorized under sections 66016 and 66018 of the California Government Code.

§ 6.28.220. Waiver

(a) Any person required under this Chapter to implement a Structural or Treatment Control Best Management Practice may petition to the City Council to waive that requirement as impractical, provided the petitioner has in good faith considered and rejected as not feasible all such practices available.

(b) The City Council may waive a Structural or Treatment Control Best Management Practice as impractical if:

(1) inadequate space for treatment exists on a redevelopment project or

(2) soil conditions strongly disfavor the use of infiltration or

(3) the natural land surface where the BMP would be located lies:

(A) above a known unconfined aquifer or

(B) less than ten (10) feet above an existing or potential source of drinking water.

(c) Any petition for waiver not falling within the foregoing categories shall be forwarded to the Regional Board for consideration.

SECTION 2. Severability. If any section, subsection, subdivision, sentence, clause, phrase, or portion of this Ordinance, is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have adopted this Ordinance, and each section, subsection, subdivision, sentence, clause, phrase, or portion thereof, irrespective of the fact that any one or more sections, subsections, subdivisions, sentences, clauses, phrases, or portions thereof be declared invalid or unconstitutional.

SECTION 3. The City Clerk shall certify to the adoption of this Ordinance and shall cause the same to be published as required by law.

PASSED AND APPROVED this 16 day of January, 2001.

MIKE GORDON, MAYOR

ATTEST:

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) SS
CITY OF EL SEGUNDO)

I, Cindy Mortesen, City Clerk of the City of El Segundo, California, do hereby certify that the whole number of members of the City Council of said City is five; that the foregoing Ordinance No. 1329 was duly introduced by said City Council at a regular meeting held on the 19th day of December 2000, and was duly passed and adopted by said City Council, approved and signed by the Mayor, and attested to by the City Clerk, all at a regular meeting of said Council held on the 16th day of January, 2001, and the same was so passed and adopted by the following vote:

AYES: Gordon, Jacobs, Gaines, McDowell, Wernick

NOES: None

ABSENT: None

ABSTAIN: None

NOT PARTICIPATING: None

Cathy Domann, for
Cindy Mortesen, City Clerk

APPROVED AS TO FORM:

Mark D. Hensley, City Attorney