City Council Meeting: May 23, 2023 Santa Monica, California

RESOLUTION NUMBER 11527 (CCS)

(City Council Series)

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SANTA MONICA APPROVING THE CITY'S SEWER SYSTEM MANAGEMENT PLAN (SSMP) UPDATE AND CERTIFYING IT IS CONSISTENT WITH STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS (WDRs) FOR SANITARY SEWER SYSTEMS

WHEREAS, on May 2, 2006, the State Water Resources Control Board (SWRCB) adopted Order No. 2006-003, the Statewide General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems; and

WHEREAS, these WDRs are the regulatory mechanism for all public agencies that own or operate sanitary sewer collection systems greater than one mile in length and that collect and convey untreated or partially treated wastewater to a publicly owned treatment facility; and

WHEREAS, the Statewide General WDRs for Sanitary Sewer Systems requires the development and implementation of a system-specific Sewer System Management Plan (SSMP); and

WHEREAS, on September 8, 2009, Council adopted the initial SSMP document; and

WHEREAS, on August 13, 2014, and August 8, 2019, the City re-certified the SSMP through the SWRCB's regulatory database, California Integrated Water Quality System (CIWQS).

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SANTA MONICA DOES HEREBY RESOLVE AS FOLLOWS:

SECTION 1. The Recitals above are incorporated herein by this reference.

SECTION 2. The Sewer System Management Plan Update is consistent with Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

SECTION 3. The City Clerk shall certify to the adoption of this Resolution of the City Council, and thenceforth and thereafter the same shall be in full force and effect.

APPROVED AS TO FORM:

DocuSigned by:
DOUGLAS SLOAN
61C02D0CAE84432...

DOUGLAS SLOAN
City Attorney

Adopted and approved this 23rd day of May 2023.

DocuSigned by:
Gleam Davis
8FE4004DAD0B40B...

Gleam Davis, Mayor

I, Denise Anderson-Warren, City Clerk of the City of Santa Monica, do hereby certify that Resolution No. 11527 (CCS) was duly adopted at a meeting of the Santa Monica City Council held on the 23rd day of May 2023, by the following vote:

AYES: Councilmembers Zwick, Parra, Brock, Torosis, de la Torre
Mayor Davis

NOES: None

ABSENT: Mayor Pro Tem Negrete

ATTEST:

DocuSigned by:
Denise Anderson-Warren
E2F85B056A714C3...

Denise Anderson-Warren, City Clerk

City of Santa Monica

2023

CITY OF SANTA MONICA
SEWER SYSTEM MANAGEMENT PLAN
WDID: 4SSO10431

Table of Contents

Introduction

The California State Water Resources Control Board ("SWRCB") promulgated a waste discharge requirement ("WDR") permit on May 2, 2006 to regulate sanitary sewer systems. This permit is known as SWRCB Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. On July 30, 2013, Attachment A to the Order was promulgated and became effective on September 9, 2013 and is known as Attachment A, SWRCB Order No. WQO 2013-0058-EXEC, amending the Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (together these documents constitute the "SSS WDR"). Recently, a reissuance of the General Order occurred to update the 16-year-old Order. Order 2022-0103-DWQ will be in effect as of June 5, 2023. This Sewer System Management Plan (SSMP) is intended to update the City's existing SSMP, in continued compliance with the WDR.

System Overview

The City of Santa Monica, Department of Public Works – Water Resources Division (WRD) provides wastewater collection services over 8.25 square miles in area and servces a resident population of approximately 91,105 (2021). In addition to collecting sewage from parcels within its corporate boundaries, the WRD also collects pass-through flow from the City of Los Angeles, via the Coastal Interceptor System (CIS) and unmetered locations, and conveys (via pumps and/or gravity collection) the sewage to the City of Los Angeles Hyperion Water Reclamation Plant for treatment and disposal.

The WRD is responsible for wastewater collection and pumping in the City, which consists of approximately 154 miles of sewer pipe ranging in diameter from 6-inches to 72-inches, over 2,800 maintenance manholes, two flow-monitoring and sampling stations, and the Moss Avenue Pumping Station (MAPS) that has a pump capacity of 26- million gallons per day (mgd). Sewage also enters Santa Monica from the City of Los Angeles through one metered location and from three unmetered locations and leaves Santa Monica for treatment at the City of Los Angeles Hyperion Water Reclamation Plant through one metered and six unmetered locations. The City of Santa Monica's 72-inch CIS connection to the City of Los Angeles was designed for the development sunset year of 2090 and has a capacity of approximately 52 mgd. The CIS is owned and maintained by the City of Los Angeles. Presently, the maximum peak instantaneous flow approaches 32.67 mgd and the annual daily averages flow is approximately 14.54 mgd. This flow rate includes all dry weather runoff diversions into the sanitary sewer systems. Long-term build out (e.g., 2020 Regional Housing Needs Assessment) and populaion density increases is evaluated through the City's WAter and Wastewater Master Plans that is updated every four to five years. Asthe City recognizes the importance of planning for all aspects of future development, water and sewer capacity and demand forecasts are reviewed regularly and updated as needed to keep abreast of changing conditions.

The WRD is also responsible for all water-related assets that support the safe treatment and distribution of potable and recycle water within the City, as well as the collection and conveyance of all sanitary and

stormwater, urban runoff to protect the community from sewer system overflows (SSOs), local flooding, and protect overall water quality in Santa Monica Bay. A overview of the City's wastewater collection system is provided in Figure 1.

Figure 1 CSMWRD Wastewater System

Figure 1 - Overview of City of Santa Monica's Wastewater System

A summary of the City's wastewater collection, by size and material of construction is provided in Table 1 and 2, respectively.

Table 1: Gravity Sewer Size Distribution

Diameter (in)*	Length (ft)*	Percentage of Total Length
6	41,253.89	5.03
8	518,875.06	63.30
10	72,054.33	8.79
12	38,133.43	4.65
14	2,818.07	0.34
15	32,107.62	3.92
18	28,503.67	3.48
20	2,624.18	0.32
21	12,456.51	1.52
24	18,159.43	2.22
27	6,653.15	0.81
30	15,565.15	1.90
33	1,634.32	0.20
36	6,269.00	0.76
39	5,315.01	0.65
42	467.11	0.06
48	798.99	0.10
54	6,242.00	0.76
60	7,923.00	0.97
72	172.00	0.02
Unknown	1,659.99	0.20
Total	**819,685.91**	**100.00**

Table 2: Gravity Sewer Materials of Construction

Pipe Material*	Length (ft)*	Percentage of Total Length
Polyvinyl chloride (C900)	4,181.69	0.51
Polyvinyl chloride (C905)	107.00	0.01
Concrete Cast	2,118.81	0.26
Ductile Iron Pipe	820.00	0.10
High Density Polyethylene	13,524.37	1.65
Polyvinyl chloride	80,324.57	9.80
Reinforced Concrete Pipe	15,711.99	1.92
S80	640.00	0.08
Vitrified Clay Pipe	684,035.32	83.45
VYLON	16,367.20	2.00
Unknown	1,854.96	0.23
Total	**819,685.91**	**100.00**

List of Abbreviations and Acronyms

APWA	American Public Works Association
ASSFC	Amalgamated Sewerage System Facilities Charge
CCTV	Closed Circuit Television
CIP	Capital Improvement Plan/Project
CIWQS	California Integrated Water Quality System
City/CSM	The City of Santa Monica
CIS	Coastal Interceptor Sewer System
CMMS	Computer Maintenance Management System
CSI	Construction Standards Institute
CSMWRD	City of Santa Monica Water Resources Division
ESRI	Environmental Systems Research Institute, Inc.
FEMA	Federal Emergency Management Agency
FOG	Fats, Oils, and Grease
GWRD	General Waste Discharge Requirements
GIS	Geographical Information System
LA	Los Angeles
MAPS	Moss Avenue Pumping Station
MGD	Million Gallons per Day
NOC	Notice of Correction
NOV	Notice of Violation
O&M	Operations and Maintenance
OERP	Overflow Emergency Response Plan
OES	Office of Emergency Services
POTW	Publicly Owned Treatment Works
RWQCB	Regional Water Quality Control Board
SGF	Sewer Generation Factor
SMMC	Santa Monica Municipal Code
SMURRF	Santa Monica Urban Runoff Recycling Facility
SSO	Sanitary Sewer Overflow
SOP	Standard Operating Procedure
SCADA	Supervisory Control and Data Acquisition
SWRCB	State Water Resources Control Board
WDID	Waste Discharger Identification
WDR	Waste Discharge Requirements
WQMP	Water Quality Management Plan
WRPP	Water Resources Protection Program
Yards	City Maintenance Yard

Element 1 – Goals of the SSMP

State Resources Water Control Board (SWRCB) Waste Discharge Requirement:

The purpose of the SSMP is to provide the necessary administrative elements to properly schedule, manage, operate, and maintain all parts of the City's sanitary sewer system in order extend the functional life of the system and to reduce and prevent Sanitary Sewer Overflows (SSOs), as well as mitigate any SSOs that do occur. The goals listed below support the purpose of the SSMP.

1.1 Goals

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

- Protect the City's investment in its collection systems and prolong the operational life of the system by performing preventative maintenance.
- Prevent public health hazards.
- Meet all applicable regulatory notification, monitoring and reporting requirements.
- Minimize the frequency and magnitude of SSOs.
- Prevent damage to public and private property that could result from SSOs.
- Ensure that funds available for sewer operations are utilized in the most efficient manner.
- Convey wastewater to treatment facilities with a minimum of infiltration, inflow and exfiltration.
- Provide adequate capacity to convey peak wastewater flows.
- Control corrosion and minimize odor release
- Perform all operations in a safe manner to avoid personal injury and property damage.

1.2 Element 1 Appendix

None

Element 2 - ORGANIZATION

SWRCB Waste Discharge Requirement:

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

2.1 Organizational Structure

The organization chart for the management, operation, and maintenance of the City's wastewater collection system is shown in Figure A-1 of Appendix A.

Authorized Representative

The City's Water Resources Manager, or their designee, is the legally responsible individual(s) for signing and certifying all applicable SSMP documents. The Water Resources Manager is also responsible for assigning staff from the division to implement the SSMP and all staff in the table below report to the Water Resources Manager. The chain of communication for responding to and reporting SSOs is contained Figure A-2 of Appendix A.

Table 2-1: Summary of Roles and Responsibilities within the City

Position	Roles and Responsibilities
City Council	**Enacts Ordinances.**
City Manager	**Is responsible for the effective operation of 12 City departments and for implementing City Council policies and priorities.**
City Public Works Director	**Oversees more than 430 staff members in Architecture Services, Custodial Services, Engineering & Street Services, Fleet Maintenance, Facilities Maintenance, Office of Sustainability & the Environment, Promenade Maintenance, Public Landscape, Resource Recovery & Recycling, Santa Monica Airport, Water Resources, and Woodlawn Cemetery.**
Public Works – Engineering Division	**Manages the construction phase of capital improvement projects (streets, water, sewer, bridges, drainage, storm drain, storm water**

	quality, streetlights, traffic, and pier infrastructure).
Water Resources Manager (LRO)	**Plans and directs the operation, construction, maintenance, and repair of the wastewater collection and conveyance system; included is also operation and maintenance of portions of the local storm drainage system within the city, as well as management of the Water Resources Protection group.**
Water/Wastewater Admin	**Administers/manages the day-to-day operation of the water and wastewater operation and maintenance unit. Responsible for enforcement of the City's industrial waste ordinances.**
Wastewater Supervisor	**Supervises and assists in the maintenance and repair of sewers and sewage pumping stations.**
Wastewater Crew Leader	**Leads, schedules, trains, and participates in the work activities of a crew engaged in installing, repairing, and maintaining the sewer lines and storm drain system in the City's wastewater system; oversees the operation of closed-circuit television video (CCTV) and related specialized equipment.**
Wastewater Collections Worker	**Repairs, maintains, and installs sewer lines and storm drains in the municipal wastewater collection system; and performs related work as required.**
Engineering Support Services Administrator	**Performs a variety of complex, specialized and professional level budgetary, analytical, and administrative duties within the Public Works Department. Leads, organizes, and reviews the work of assigned staff.**
Water Resources Protection Programs Coordinator (LRO)	**Develops and administers water protection, wastewater pretreatment, and pollution prevention programs related to storm drain and sewer systems; plans, directs, and coordinates the implementation of policies and programs impacting wastewater and urban runoff.**
Senior Water Resources Protection Programs Specialist (LRO)	**Implements and administers water protection, wastewater pretreatment, and pollution prevention programs related to storm drain and sewer systems.**
Water Resources Protection Programs Specialist (DS)	**Assists in administering water protection, wastewater pretreatment, and pollution prevention programs related to storm drain and sewer systems.**

Responsibilities within the SSMP

The following staff is responsible for implementing, managing, and updating the SSMP:

Table 2-2 – SSMP Implementation Roles and Responsibilities

ELEMENT	PROGRAM & POSITION	Name & Email Address
Goals	CSMWRD Manager	Sunny Wang Sunny.wang@santamonica.gov
Overflow Emergency Response	CSMWRD WRPP & W/WW Administrator	George Rodriguez George.rodriguez@santamonica.gov
Fats, roots, oils and grease	CSMWRD WRPP & W/WW Administrator	George Rodriguez George.rodriguez@santamonica.gov
Measures & Activities:	W/WW Administrator	Ralph Valencia – Ralph.valencia@santamonica.gov
Maps	GIS Section	Neda Peiravian Neda.peiravian@santamonica.gov
Resources and Budgets	Principal Public Works Analyst	Thomas Poon Thomas.poon@santamonica.gov
Preventive Operations & Maintenance	W/WW Administrator and Water Resources Engineer	Ralph Valencia Ralph.valencia@santamonica.gov
Rehabilitation and Replacement (Inspection and Condition Assessment)	W/WW Administrator and Water Resources Engineer	Ralph Valencia Ralph.valencia@santamonica.gov
Contingency Equipment & Replacement Parts	W/WW Administrator	Ralph Valencia Ralph.valencia@santamonica.gov
Training	CSMWRD WRPP & W/WW Administrator	George Rodriguez George.rodriguez@santamonica.gov
Outreach	CSMWRD WRPP	George Rodriguez George.rodriguez@santamonica.gov
Design and Construction Standards	Water Resources Engineer	
Capacity Management	Water Resources Engineer	
Monitoring Plan for SSMP	CSMWRD Manager	Sunny Wang Sunny.wang@santamonica.gov
Audits for SSMP	CSMWRD Manager	Sunny Wang Sunny.wang@santamonica.gov
Communications Program	CSMWRD Manager	Sunny Wang Sunny.wang@santamonica.gov

2.3 Element 2 Appendix A

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

- **Figure A-1** Organizational Chart of Wastewater Utility Staff
- **Figure A-2** Chain of Communication for responding to and reporting SSOs.

Element 3 – Legal Authority

SWRCB Requirements:

Each enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

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

3.1 City of Santa Monica Municipal Code

The City of Santa Monica Municipal Code (SMMC) is available online (https://library.qcode.us/lib/santa_monica_ca/pub/municipal_code) and describes the City's current legal authority to comply with Waste Discharge Requirements (WDRs). More specifically, authority is contained in Article 5 Sanitation and Health and Article 7 Public Works; authority is more generally contained in other SMMC Chapters listed in Table 3-1.

Table 3-1: Summary of Legal Authorities in Santa Monica Municipal Code

Requirement	SMMC Reference
Prevent Illicit Discharges	
Prevent unlawful discharges into its sanitary sewer system.	5.20.010
Limit the discharge of fats, oils, and grease and other debris that may cause blockages	5.20.040(a)(4)(7), 5.20.090, 5.20.110,
Control infiltration and inflow (I/I) from private service laterals.	7.68.160 Standards for utilities.
Proper Design and Construction	
Require that sewers and connections be properly designed and constructed	7.04.480, 7.04.490, 7.04.520; Chapter 8.12 –Building Code (California Building Code, International Building Code) Chapter 8.32 –Plumbing Code (California Plumbing Code and Uniform Plumbing Code)
Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency	7.04.620 Investigations on private property
Fog Source Control	

Requirement	SMMC Reference
Requirements to install grease removal devices (such as traps and grease interceptors)	5.20.080 Additional pretreatment measures
Design standards for the grease removal devices	5.20.080 Additional pretreatment measures
Maintenance requirements, BMP requirements, record keeping and reporting requirements for grease removal devices	5.20.310 Periodic compliance reports
Authority to inspect grease producing facilities	5.20.430 Inspection and sampling
Enforcement	
Enforce any violation of its sewer ordinances	5.20.490 – 5.20.620

3.2 Agreement with Satellite Agency

The City of Santa Monica does not have a large enough treatment plant to treat all of the wastewater generated in the city. For this reason, there is an agreement with the City of Los Angeles to accept wastewater from Santa Monica. The City of Los Angeles charges Santa Monica based on the amount and strength of flow that is sent to the Hyperion Water Reclamation Plant for final treatment and disposal. These measurements are taken at two outfalls just at the entrance of Santa Monica city limits and right before flow leaves the city.

The City of Los Angeles has tributary areas that combine with sewage from the City of Santa Monica. These tributaries feed into six different locations around Santa Monica that eventually pass through back into the LA sewer system. The largest amount of pass through comes via the Coastal Interceptor System (CIS) which transports flow from areas upstream of Santa Monica's service area.

3.3 Element 3 Appendix B

1. Agreement for Sewer Treatment Service with City of Los Angeles
2. Sewer Lateral Maintenance Outreach

ELEMENT 4 - OPERATIONS AND MAINTENANCE (O & M) PROGRAM

SWRCB Requirement:

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

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

4.1 Collection System Maps

The WRD ESRI-GIS database was initially based upon as-built record drawings and was limited to horizontal data. As time progressed, more field information (e.g., elevation and pipe slope) is added to the GIS database. Linear assets older than 75 years usually have limited construction data and the record as-built drawings associated with the assets provide the best engineering data. As the WRD's asset management plan grows, more information is incorporated including vertical pipe invert and soffit elevations, manhole rim elevations and pipe segment slopes. The database is continuously growing and is also tied to the WRD's maintenance management system.

The City also has limited copies of its older (1960) sewer atlas, which provides some additional data, and can be used to find appropriate as-built drawings. The last update of the sewer atlas occurred in 2000, at which time the City switched to the current GIS system.

As-built drawings are on file at the City's Department of Public Works – Engineering Division. The Engineering Division is also responsible for the construction of the collection system assets. The City is in the process of incorporating these drawings into the GIS format as funding and resources allows.

Collections system maps are revised as necessary when discrepancies are discovered in the field. Wastewater crew relay the changes to the supervisor who then passes the information to the Engineering division for revision in the GIS system. Field crews are equipped with hard copies of the maps, tablets for digital access, and access to the Hansen database for work order observations.

4.2 Preventative Maintenance

The elements of the City's sewer system operation and maintenance (O&M) program include:

- Preventative and corrective maintenance;
- Closed Circuit Television (CCTV) inspections in order to evaluate the condition of the gravity sewers;
- Routine sewer jetting to maintain gravity flow and minimize SSOs;
- Replacement and repair of sewers that are in poor condition.

4.2.1 Computer Maintenance Management Systems (CMMS)

To plan and track O&M activities, the City utilizes a computerized maintenance management system (CMMS). The CMMS (Hansen) is capable of tracking equipment and staff by work orders, assisting in the planning and prioritizing of O &M work based on past activity, and maintaining accurate work order and other maintenance documentation used in collection system analysis and reporting. The CMMS is also GIS compatible. The CMMS is the central location for asset history, work orders, and labor hours. The WRD is currently replacing the Hansen CMMS system with a new, modern system provided by MentorAPM that would increase functionality, including tracking vertical assets, asset age, performance, and criticality impacts.

4.2.2 Gravity Sewers

The Wastewater team clean all City-owned sewer pipes between 4-72 inches in diameter. The schedule of cleaning can be every 2 months, 4 months, 6 months, yearly, and every 3-5 years, depending on the condition of the line, operating history, and service area characteristics. The priority is to clean those lines that have a history of blockage or SSOs. Portions of the collection system with repeated SSOs are evaluated for immediate replacement or prioritization as part of the City's Capital Improvement Program (CIP), depending on the specific conditions present in the line.

The Wastewater team utilizes a hydro jetting truck and combo unit trucks to flush and jet sewer lines. One complete video-capable truck is available for immediate deployment 24 hours per day, and routine main jetting is conducted 5 days a week.

High frequency cleaning occurs in those areas that are known to have many food service establishments (FSEs) that generate FOG and those areas that are known to suffer from persistent root intrusion. These areas are maintained every 2-4 months. Lines that are larger than 15 inches are scheduled to be cleaned at least biennially.

Historical line cleaning results are provided in Table 4-1. Line connections and manholes are inspected at the time of cleaning. Any issues noted during the inspection are scheduled for repair. Either the City or a hired contractor conducts any repairs.

Table 4-1: Historical Line Cleaning Results

Year	Line Cleaning, Miles	Line Cleaning, Feet	Total Lines Inspected, Miles
2010	195.5	1,032,240	2.1
2011	195.5	1,032,240	2.1
2012	370.2	1,954,656	15.4
2013	436.3	2,303,664	3.3
2014	436.3	2,303,664	3.3
2015	327.6	1,729,728	3.2
2016	461.1	2,434,608	9.2
2017	292.8	1,545,984	13.2
2018	292.8	1,545,984	13.2
2019	396.7	2,094,576	11.2
2020	396.7	2,094,576	11.2
2021	396.7	2,094,576	11.2
2022	415.9	2,195,952	9.04
2023	293	1,547,040	9.04

4.2.3 Closed Circuit Television (CCTV) Inspections

The City conducts system-wide routine preventative maintenance activities, including closed circuit television (CCTV) reconnaissance of its collection system, utilizing experienced dedicated O &M staff to ensure efficient and reliable operation of the various components of the sewer system.

One complete video-capable truck is available for immediate deployment 24 hours per day, and routine main jetting is conducted 5 days a week. The priority is to clean those lines that have a history of blockage or SSOs. Portions of the collection system with repeated SSOs are evaluated for immediate replacement or prioritization as part of the City's CIP, depending on the specific conditions present.

The City previously utilized WinCam software for facilitating CCTV activities. Presently, Granite Net will be the new provider for the City's CCTV program. The City anticipates being able to CCTV every line in the service area within 3-5 years.

4.3 Rehabilitation and Replacement Program

The City has a long-term program to rehabilitate and replace lines in the system that may be deficient. The program has prioritized portions of the sewer system that have persistent issues, older line segments, and upsizing lines that are 6 inches. This work is included in the City's CIP process. CIPs are approved biannually. On average, the City replaces 1-2 miles of sewer pipes each year.

4.4 Training

The City encourages, and requires staff, to obtain professional certifications or licenses (e.g., California Water Environment Association). WRD staff receives training on a regular basis in sewer system O&M developments and techniques, and in work safety topics. In addition, many WRD staff maintains various professional certifications through related continuing education or professional participation credits. Confined space training

4.5 Equipment and Replacement Parts

Critical equipment and replacement part inventories are maintained at the City Maintenance Yard (Yards) Complex, located at 2500 Michigan Avenue in Santa Monica. Mechanical equipment and WRD trucks and support vehicles are fueled, serviced and repaired at the Yards, and many of the administrative functions related to the collection system are also housed in this central location.

4.6 Element 4 Appendix C

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

1. Map of Santa Monica Sewer Service Area

Element 5 – Design and Performance

SWRCB Waste Discharge Requirement:

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

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

5.1 Design Criteria for Installation, Replacement, and Repair

Sanitary sewer system design standards, Standard Specifications, and Standard Plans are maintained by the Civil Engineering Division of the Public Works Department. These plans extend to sewer mainlines, structures, structures and appurtenances like manholes, lift stations, and service laterals.

5.1.1 General

The City has standards established for new construction, replacement, and renewal regarding any work on the collections system. There is a periodic review of these standards by the Engineering Division. The last update was done in 2021. The most up-to-date version of Standards is available at the City website. Please see the link below.

Specifications subject to inspection during construction are Construction Standards Institute (CSI) based and are modified as applicable by the Standard Specifications for Public Works Construction (GREENBOOK), latest edition, which is jointly produced by representatives of the American Public Works Association (APWA), the Associated General Contractors of California, the Engineering Contractors Association, the Southern California Contractors Association and BNi Publications, Inc.

Complete versions of the City's Standards Specifications and Standard Plans are located at the City website. Please click through to:

https://www.santamonica.gov/standard-detail-and-specifications

5.1.2 Moss Avenue Pump Station

MAPS is a sewer pump station owned by the City. MAPS is a critical component of the Coastal Interceptor System (CIS), which moves sewage along the coast from northern Los Angeles, through Santa Monica, and eventually to the Hyperion Treatment Plant. MAPS is the City's single most critical sewer utility asset as it is in very close proximity to the Santa Monica Pier.

The pump station is equipped with two discharge force mains. To-date, this pump station has predominantly used a single force main for all discharge. Utilizing both force mains, MAPS' firm capacity (three duty pumps running) has been field measured at 27.6 MGD discharging through a dual force main

configuration. The maximum capacity (four pumps running) has been field measured as 36.9 MGD discharging through dual force mains as per the MAPS Evaluation Report 2015.

Detailed information for the MAPS, junction boxes, gauging stations and siphons was obtained from Operations and Maintenance and As-Built Drawings.

5.1.3 Authorized Pipe Materials

The City currently requires polyvinyl chloride pipe as the standard for authorized pipe material. Specifically, PVC SDR-26 is the type called out for usage in the City. For any pipe lining, cured-in-place-pipe (CIPP) is required.

5.1.4 Private Sewer Systems and Laterals

All private sewer systems and private sewer laterals are required to be design, installed, inspected and accepted per the Green Book and the City Adaptations to the Green Book. Private sewer laterals must also conform to the requirements of the California Plumbing Code.

5.2 Inspection and Testing Criteria

Wastewater construction inspection and testing criteria is based on the Green Book. Standards and specifications are reviewed before any job is put out to bid. Any additional technical requirements will be called out and added to any specific construction project. This criteria applies to new and rehabilitated gravity sewers and new and rehabilitated manholes.

These standards, which are based on Standard Specifications for Public Works Construction, are updated as required by CSMWRD staff and are made available to the public by the Civil Engineering Division upon request so that all engineering contractors and civil engineers are aware of the CSMWRD's standards for wastewater construction. Presently, City wastewater projects are designed by the Civil Engineering Division within the City, and each project's contract documents contain all wastewater specification standards, construction notes and details for the project. They are modified to be site-specific on a project-by-project basis. Contract documents are prepared in-house using consultant civil engineers for the plans and technical specifications.

Typically, because of historic development within the City, there are unique construction challenges presented by interfering utilities and confined rights-of-way, which require site or project specific modifications to existing standards. In those cases, the City usually depends upon construction applicants' private engineers to modify or design a new standard and will review and approve it for site-specific construction.

5.3 Element 5 Appendix

None

Element 6 Spill Emergency Response Plan

SWRCB Requirements:

a. Each Enrollee shall develop and implement an Spill Emergency Response Plan (SERP) that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:
b. Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
c. A program to ensure an appropriate response to all overflows;
d. Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g., health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the Monitoring and Reporting Program (MRP). All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;
e. Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
f. Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
g. A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

6.1 Purpose

The City's SERP serves as a guide for efficiently and appropriately responding to sewer spills. The SERP has directions for staff to follow regarding response, cleanup, and reporting of any sewer spills in the City's service area.

6.2 Sanitary Sewer Overflow Emergency Response Plan

An SSO is any overflow, spill, release, discharge, or uncontrolled diversion of untreated or partially treated wastewater from a sanitary sewer. SSOs may contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients and oil and grease and can adversely impact human health and the environment. In order to minimize the potential for health and environmental impacts, the City has developed the following plan and standard operation procedure (SOP) for responding to all SSOs.

SSO Emergency Response Plan:

City water resources and inspection staff have been trained to respond promptly upon receiving notification of an uncontrolled sewage discharge. An SSO can originate from residential structures, commercial facilities, or City related devices, (e.g., broken sewer lines, and/ or manhole covers). Time is of the essence in responding to SSO incidents to control and reduce the potential for impact to the storm drain system and waters of the State.

The SSO plan involves two basic steps.

Step# 1- Upon notification, City Wastewater staff (both Operations and Water Resources Protection Program (WRPP) inspector) responds and identifies the location of the overflow and its characteristics (i.e., apparent source, volume released, extent, and whether it is on private property etc.). They also determine the potential cause of the SSO and the responsible party. This information is recorded on the SSO Response Form. To ensure containment, CSM Wastewater Staff locate the nearest down gradient (down slope) storm drain and determine if the release has, or will, reach this drain. Based on site conditions, the onsite incident manager decides if immediate action or additional staff or equipment is needed to prevent the release from reaching this drain. If the SSO occurred because of a blockage at a main City sewer line, the onsite incident manager will direct CSM Wastewater Staff to immediately contain the discharge by completely berming the storm drain inlet and to clear the blockage. Once the nature and extent of the discharge are known, staff will begin immediate cleanup of discharges caused by a city-owned pipeline; typically by vacuuming the discharge for lawful disposal.

Staff also ensures the release area (all public areas) are cleaned and disinfected after the normal sewer flow is restored and the blockage relieved. If the release has reached the storm drain system, staff will routinely check a couple of storm drain catch basins downstream from the contaminated catch basin to verify how far the release has traveled down the storm drain line. Depending on the severity of the release, samples may be required to be taken from those catch basins and analyzed for pathogenic organisms. Sampling, if any, conforms to steps taken in the City's Water Quality Management Plan (WQMP).

If a release from a City-owned main has visibly impacted private property, the onsite staff will photo document all such impacts identified at the time of the release response. Staff also documents the contact information of the property owner and any notes regarding the potential impact in their field notebook. Questions regarding repair costs are directed to the **CSM Office of Risk Management at (310) 458-8910.**

Step # 2- If the SSO occurred because of a blockage or other problems within a privately owned lateral line resulting in a discharge to the ground surface and /or into the public right-of-way such as City streets, alleys or sidewalks, CSM Wastewater staff will contain and prevent further discharges into the Public Right- of- Way as described in Step #1, above. This is typically done by using a City vacuum truck. CSM staff then contact the subject property owner/manager and direct

them to immediately contact a private plumber to relieve the sewer blockage. In instances where there is no effective response from the property owner or manager to abate the SSO within a reasonable time frame (less than an hour), or at the discretion of the onsite incident manger or the WRPP Inspector, the water service may be temporarily turned off at the subject property after proper notifications are made by calling the CSM Water Division staff and requesting a temporary water service disruption.

Before attempting to turn off the water service, CSM Wastewater Staff will try to contact the property owner or manager. Wastewater Operations Staff will make notification if a WRPP Inspector is unavailable (i.e., after hours, weekends). Notification is made verbally and by posting a large placard in a common area and a door hanger on each unit or residence/ business. Each placard and door hanger has contact information for the CSM and the Los Angeles County DHS Public Health. If possible, door hanger notifications are placed on each tenant's door depending on access.

Note: The duration, and therefore volume, of the SSO discharge is estimated from when the SSO is first reported to the City, NOT when staff arrives to the site. Staff are required to accurately estimate the volume of the discharge and note how the estimate was derived in their field book. Photographs of the SSO site are also included in the incident file when damage to private property is known to have occurred.

Other agency contact/reporting include:

- **Office of Emergency Services (OES) at (800) 852-7550** to obtain an OES Control#. After business hours including weekends, CSM Wastewater staff makes the notification to OES and provides WRPP inspection staff with the OES Control #.

For logistics planning, staff has determined it typically takes 45-60 minutes for a private plumber to arrive and/ or relieve the sewer blockage on private property. Prior to the arrival of the plumber if the water is not shut down, City staff ensure that the property owner makes all efforts to contain sewer discharges on their property and not allow any discharges onto the public right-of-way. Any discharge that reaches the public right-of-way will be contained by City staff.

Wastewater Staff monitor the SSO site continuously to make sure the plumbing problem is corrected and sewage at the site has been cleaned up and the release area is disinfected. Wastewater Operations Staff will disinfect the impacted street and sidewalk (public areas) immediately in contact with the release using chlorine/water solution. Large discharges from private property requiring clean-up will be billed to the property owner for cost recovery of labor and equipment use. Once the sewer blockage is cleared, and the contaminated area cleaned and disinfected, the property owner/manager may call and request the Water Division to turn the water service back on, if needed.

If there is an extensive damage to privately owned properties because of an overflow and release of sewage due to a SSO, depending on the cause, staff will call or advise the property owner to

directly contact **LA County Dept. of Health Services (DHS) at 310-665-8484** to evaluate the health hazard and recommend detailed procedures for proper clean-up. Staff will also contact the CSM Office of Risk Management to evaluate any damages if the SSO is caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

It is important to remember that spills into the City storm drain system from SSO's typically are captured by one of the City diversion BMP projects such as SMURFF, Wilshire Blvd., Montana Ave., Rose Ave., Ashland Ave., Sunset-Canyon and Centinela-Pearl projects and therefore normally do not reach Santa Monica Bay as long as those diversion projects are operational at the time of the incident. Staff will confirm the operational status of the subject BMP project as part of the SSO response procedures.

Once the SSO response incident is concluded, WRPP Inspection Staff forward the required data to the **California Integrated Water Quality System (CIWQS)** by visiting the agency database at: http://ciwqs.waterboards.ca.gov and entering on-line the requested information about the SSO. WRPP Inspection Staff also retain a copy of all completed reports about an SSO incident in a folder designated for SSO records.

SSO Equipment and Training

Typical equipment required for response to an SSO, depending on location and size of the release, includes, but is not limited to, personal protective gear, reporting forms, traffic control devices such as cones or barricades, absorbent materials, sampling equipment, disinfectant solutions, pipe snake, vacuum trucks, backhoe, replacement pipe, and street sweepers.

The City conducts regular training to familiarize staff with health and safety issues, standard response procedures, and regulatory and technological developments. The City also encourages staff to recommend more efficient ways of completing work tasks based on staff field experience.

Moss Avenue Pump Station (MAPS) Emergency Response

CSM staff monitors MAPS through SCADA alarm system during and after hours. Upon discovery or notification of an SSO at the facility, staff would respond to the MAPS to make necessary SSO assessment. Staff would check the generator, wet well operation, pumps, and force mains. For SSOs that occur because of MAPS or force mains, notifications to proper regulatory agencies and response procedures apply that are discussed as part of this SOP.

Specific procedures include:

Wet Well

- Observe SCADA screen and PLC panel to confirm proper wet well level
- If SCADA and PLC not operational, emergency notification to Plant Operator, Supervisor and Senior WRD staff and SCADA technician.
- Call emergency pump contractor for emergency pump/bypass equipment set-up at facility.

- Call emergency clean-up/truck pumping services vendor.
- Inspect upstream manholes for SSOs.
- Notify SMPD, SMFD, and Cal Trans.

Force Main Pumps

- Observe SCADA screen, PLC panel, and VFD to verify proper operation.
- Identify pumps not working.
- If plugged, remove obstruction, test and put pump back into service.
- Call emergency pump contractor for technical and operational assistance, if required.

Force Main Pipeline

- Inspect force main manifolds in pump room, above ground force mains, and in ground segments leading Seaview Terrace terminus.
- Isolate force main if damaged; turn off pumps associated with force main.
- Call emergency clean-up/truck

6.3 Goals

- Protect public health and the environment.
- Achieve timely responses to any spills.
- Minimize and prevent any adverse impacts on the public and the environment.
- Mitigate any adverse impacts.

Emergency Contacts:

SCADA Systems Analyst – Tim Vosecky – (310)-487-3197

CSM ISD Joseph Contreras- (310) 458-2261

CSM Engineer – Vacant (310) 458-8286

CSM Engineer – Selim Erin – (310) 437-9898 (Cell)

Emergency Generator/Pump Vendor – Xylem, Godwin – Nate Warren (310)-830-3636

Emergency Cleanup/Truck Pumping Services Vendors

- Clean Earth- Shaun Russel (310)- 415-0247

Pump Contractor – Mike Woodward (Pumpman) – (626) 664-9078 (Cell), (626) 939-0300

Electrical Contractor- Darren Roesh (LEED Electric) – (626) 692-3330

Water Treatment Plant Supervisor (Arcadia) – Gary Richinick (213)709-1888 (Cell)

Water Resources Division Standby – (310) 628-9378 (Cell)

Wastewater Supervisor – Danny Gomez – (310) 629-9436 (Cell)

Wastewater Plant Operator – Jeff Grooms – (310) 883-8350 (Cell)

Wastewater Plant Operator- Joe Felix – (310) 877-5338 (Cell)

Water Resources Manager – Sunny Wang – (424) 330-9636

WRPP Coordinator – George Rodriguez – (310) 901-7069

6.4 Element 6 Appendix D

1. City of Santa Monica Overflow Emergency Response Plan

2. City of Santa Monica Water Quality Management Plan

Element 7 – Fats, Oils, and Grease (FOG) Control Program

SWRCB Requirements:

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

a. An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
b. A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
c. The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
d. Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
e. Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;
f. An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
g. Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.

7.1 FOG Control Elements

The City's FOG source control program, managed by the WRD, includes the following elements:

- A public education outreach program that promotes proper disposal of FOG;
- The legal authority to issue permits, prohibit discharges to the system (article 5.20.040 (a)(16) SMMC) and identify measures to prevent SSOs and blockages caused by FOG;
- Requirements (article 5.20.080 SMMC) to install grease removal devices (such as traps or interceptors) design standards for the grease removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
- Authority to inspect grease producing facilities and enforce requirements (article 5.20.500 SMMC);
- Operations and Maintenance and operations (O& M) procedures which assist in the identification of sewer system sections subject to FOG blockages, based on operational history and inspection, and;
- Other source control measures, as appropriate, for all sources of FOG discharged to the sewer system.

7.2 Scope and Scale of FOG Problem

Table 7-1 lists all of the FOG-related mainline SSOs that the City had between 2007 and 2022. As of March 2023, the City has experienced only two FOG-related SSOs in the last five year.

Table 7-1: Historical FOG-related SSOs in Mainlines

Calendar Year	SSOs caused by FOG
2022	0
2021	0
2020	1
2019	0
2018	0
2017	2
2016	0
2015	0
2014	0
2013	1
2012	1
2011	3
2010	1
2009	2
2008	7
2007	0

7.3 FOG Control Program

The City has determined that a FOG control program is necessary per SSMP requirements. There are approximately 474 food service facilities located within City limits and discharge to City sewers. Operations and maintenance staff have also noted the tendency for grease buildup in specific sewer lines due to proximity to sources or hydraulic conditions. This section discusses measures the City takes to control FOG.

The City's FOG control program consists of focused cleaning and maintenance as well as source control. The following subsections discuss identification and cleaning of grease-prone areas, legal authority to prohibit grease discharge or require a grease removal device, facility inspection, and public outreach.

Water Resources Protection Program and Source Control

The City of Santa Monica Water Resources Protection Program (WRPP) facilitates the FOG Source Control Program and ensures compliance with federal, state, and local regulations for wastewater pre-treatment standards prior to discharge into the City's wastewater collection system. WRPP Staff oversees all industrial and business customers that have the potential to adversely affect the CSM wastewater system by the issuance of Industrial Wastewater permits every year, inspections, and applicable unannounced sampling events for approximately 870 businesses requiring pre-treatment and/or regular monitoring for toxic substances, such as inorganic toxic substances, such as acids &

metals, fats from grease and oil producing food-related operations, and other oil and grease producing operations, such as automotive uses, prior to connection and discharge to the wastewater system. For FOG control, there are 474 permittees subject to inspection. For instances of non-compliance with sewer limitations and prohibited discharge standards as specified in the Santa Monica Municipal Code, the WRPP relies on various escalating enforcement actions such as the issuance of Notices of Correction (NOC), Notices of Violation (NOV), administrative citations, and referral to the City Attorney's office for prosecution. Every permittee inspection is stored in a Hansen 8 computer database as well as a hard copy file. WRPP is also in constant contact with CSM Wastewater staff about any significant findings in the collections system. The WRPP also advises residential customers through outreach information and in tandem with the City's Household Hazardous Waste Program, the proper disposal methods for toxic materials (such as mercury), waste cooking oil, and other household hazardous waste. In addition, the WRPP has distributed education material on the importance of preventing FOG from entering the sanitary sewer system and brochures on roots and how they adversely affect the wastewater system to the residents of Santa Monica. This information is also distributed to residents at the City of Santa Monica Festival, which is held yearly.

The City also requires the installation of pretreatment devices such as clarifier and grease interceptors for new and remodeled facilities and requires pretreatment devices to be installed in other older facilities that have caused SSOs.

The City also has an annual inspection and random sampling program and keeps records of all permits with proof of regular maintenance of all pretreatment devices by the permit holder.

Wastewater Operations Program

The Wastewater Operations Staff is responsible for the cleaning, monitoring and maintenance of the City's wastewater collection system. Maintenance consists of four (4) full-time crews, five to six days a week jetting and cleaning the local collection system and the CIS. Wastewater Operations also maintains the City's Moss Avenue Pumping Station (MAPS), end of line diversions into the sewer system. The City completed replacing and/or lining 80% of its sewer mains and manholes in 2002. Areas of concern based previous experience are tracked on the City GIS system and are cleaned more frequently. Together with the CSM Civil Engineering & Architecture Division problem-prone pipelines having both structural and flow capacity issues are prioritized for replacement to minimize the potential for serious SSO incidents.

7.4 GWRD Requirements Response

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

Response: The City regulates FOG through WRPP's Source Control Program and with regular, proactive sewer cleaning. Areas that have a high density of FSEs tend to have higher cleaning frequencies. FSEs are also inspected routinely by WRPP. Finally, public outreach regarding FOG issues is provided for businesses as well as the general public.

Requirement (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.

Response: There are grease disposal sites available in Los Angeles County that accept spent grease from nearby commercial disposal companies. The City provides FSEs with a vendor list of California Registered Inedible Kitchen Grease Commercial Transporters. No vendor is recommended or preferred by the City.

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

Response: Santa Monica Municipal Code provides the legal basis for the City's Source and FOG control program. This is noted in Element 3. More specifically, SMMC 5.20.110 provides requirements for grease disposal and FSE BMPs. SMMC 5.20.080 provides requirements for grease interceptor installation.

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

Response: The City's WRPP team meets this requirement as described in Requirement (c). Also, WRPP observes FSE BMPs and record keeping during routine inspections.

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

Response: WRPP conducts regular inspections of FSEs and is granted authority to inspect and enforce via SMMC 5.20.

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

Response: The City's Wastewater team prioritizes areas of high FSE concentration and areas where there may be high FOG discharger for more frequent cleaning of connected sewer lines. Wastewater is flexible and will tend to any area that may have become problematic.

Requirement (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.

Response: Similar to the response to (f), WRPP supports the Wastewater team and follows up on those FSEs that are discharging significant amount of FOG.

7.2 Element Appendix E

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

1. Example Restaurant Inspection form
2. Example Public Outreach Brochure

Element 8 –Capacity Assurance Plan

SWRCB Requirements:

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

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

8.1.1 System Capacity Evaluation

Evaluation of a sanitary sewer collection system during dry and wet weather conditions involves evaluation of both capacity and general operational issues. The capacity of the system is primarily controlled by population and significant commercial/industrial dischargers. Operational issues that may lead to inadequate level of service system performance include roots, fats, oils and grease. The hydraulic model is an important utility management tool to assist in identifying locations of capacity constraints or velocity concerns that may exist in the existing system or are projected to arise under future dry or weather flows.

Depth of flow in relation to pipe diameter, or depth-to-diameter (d/D) ratio is an element of the City's existing design criteria and is used herein to identify potential capacity problems within the system, which may result in sewer overflows. A wet weather assessment of the sanitary sewer system is focused on the elimination of wet weather overflows for a particular design storm event. Design storms are primarily defined by their duration and the return period. Duration is the amount of time over which a rain event occurs, where the return period is a measurement of the likelihood a particular event will

occur. For example, a 5-year storm will theoretically occur once every 5 years. Since the selection of the design storm can have a significant impact on determining the adequacy of system capacity, this design criteria driven level of service element of the Sanitary Sewer Master Plan had careful consideration in this planning effort. Based on discussions with City staff, the design storm selected to be incorporated in the hydraulic model simulation is a 10-year 24-hour event. This design criterion is also used by City of Los Angeles, the regional wastewater conveyance and treatment provider, in the assessment of its sewer system hydraulic capacity analysis programs to contain peak wet weather flows in the sewer design to avoid SSOs.

8.1.2 Existing Conditions Collection System Evaluation

The purpose of a sanitary sewer system is to collect sewer flow from various origins in the City and convey these flows to a designated point of discharge. The maximum and minimum flow rates in any given day can vary, but generally follow some typical daily diurnal patterns for residential and non-residential customers. The sanitary sewer system should be designed to carry the maximum rate within an acceptable range of velocity without the sewer system backing up during these peak daily flows. In contrast, the sewer system should also have adequate flows and velocity to convey the minimum flow without deposition of suspended solids during the minimum daily time periods, which is typically in the middle of the night. The City's hydraulic model was developed to effectively simulate the system's hydraulic behavior at specific time period and analyze its performance under various flow conditions. The InfoSewer model uses steady-state simulations in its hydraulic analysis calculations for the analysis of utility sewer systems. For a steady-state analysis, all flows are assumed to accumulate in the system and discharge only at the outlets. This means that even if a pipe has a flow beyond its maximum capacity, the flow is still carried downstream including through pumps and force mains so that full/maximum flow conditions are carried through to all affected downstream facilities. The transition between gravity flow and pressurized flow is also ensured by assuming that all flows are transported through each force main, subject to the upstream hydraulic control. The hydraulic evaluation of the City's existing collection system was performed using the collection system model developed as described earlier and is explained in this section.

The existing system evaluation applies current sewage flows to applicable spatial locations in the system and incorporates current infrastructure configurations and applicable operational strategies, typically associated with pump stations, force mains and diversion structures. A sanitary sewer collection system has basically two main functions: to convey the designed peak discharge and to transport solids so that deposits are kept to a minimum. It is imperative; therefore, that the sanitary sewer has adequate capacity for the peak flow and that it functions at minimum flows without excessive maintenance and odor generation. The existing system scenario takes into consideration the current flows in the existing infrastructure, both under dry and wet weather conditions. The existing scenario incorporates all facilities in the existing sanitary sewer system including gravity mains 10-inch in diameter and greater (and all 8-inch mains directly upstream from 10-inch mains), maintenance holes, lift stations, pumps, force mains, and the outfall station located at SM-1. For the dry weather scenario, sewer flows are loaded to each node in the system based on the summation of account-level tributary sewer flows, as

derived from water consumption data. To simulate wet weather conditions stemming from infiltration and inflow, a peaking factor (PF) was applied to the dry weather loads at all nodes in the sewer system network. This wet weather PF is calculated as the ratio between the average day flows and the flows that occur on the day out of the year when the highest flows are recorded during a particular wet weather event.

An understanding of the hydraulic condition of the existing system is essential to identify existing system related capacity limitations and to help prioritize recommended system improvements resulting from the ultimate system capacity analysis. The InfoSewer hydraulic model developed as a part of the Sewer Master Plan was used to perform the capacity analysis of the existing collection system. The capacity analysis was performed for various existing flow scenarios including existing average, peak dry weather, and peak wet weather flow scenarios. Improvements are identified based on the evaluation of the existing system during the peak hours of wet weather conditions. The capacity analysis performed herein is consistent with generally accepted methods and is based on the consideration of the depth of flow with respect to the diameter of the pipe. A capacity limited section along a pipeline is identified as a potential capacity related improvement project if the depth to diameter (d/D) ratio exceeds the criteria established to define system performance during the designated wet weather flow scenario conditions. The hydraulic model constructed for this study was used to evaluate performance of the collection system using the criteria for d/D ratio and velocity for gravity pipes, and surcharge depth for maintenance holes. Under existing dry and wet weather flow conditions, a large majority of the City's sewer collection system pipelines have excess or reserve capacity. The existing hydraulic modeling simulation identified approximately 1 percent of the total sanitary sewer pipeline system had d/D ratios greater than the 0.75 criteria. This finding indicates the City's sewer system has available capacity in much of the local sewer system.

8.1.3 Background of InfoSewer Software Modeling

The City's sanitary sewer collection system was modeled using the InfoSewer Version 7.6 software by Innovyze. The InfoSewer software can simulate all aspects of the City's sanitary sewer collection system through a hydraulic model network. A hydraulic model network is a mathematical representation of the collection system represented by a series of nodes and links. Nodes represent maintenance holes, storage basins, wet wells, junction boxes, and outfalls. Links, as the name implies, represent any hydraulic structure connecting two nodes. Sanitary sewer pipelines, force mains, lift stations, weirs, and gates are all represented by links in this model. During the conduct of hydraulic simulations, the model considers the available storage at these hydraulic elements (through filling and draining) and can simulate unsteady state flow conditions under both open channel and surcharged conditions for varying time periods. Additionally, this model allows simulation of single path and multiple path flow networks, backwater curves, flow reversals, pumps, weirs, siphons, gates, orifices, parallel pipes, and other diversion structures necessary to simulate a sanitary sewer system, such as the City's.

8.2 Design Criteria

The City's wastewater construction standards are maintained by the Engineering Division of the Public Works Department. These standards are updated as required by City staff and are made available to the public by the Civil Engineering Division upon request so that all engineering contractors and civil engineers are aware of the City's standards for wastewater construction. Presently, public wastewater projects are designed by the Civil Engineering Division and each project's contract documents contain all wastewater specification standards, construction notes and details for the project. They are modified to be site-specific on a project-by-project basis. Contract documents are prepared in-house using consultant civil engineers for the plans and technical specifications. Specifications are Construction Standards Institute (CSI) based and are modified as applicable by the Standard Specifications for Public Works Construction (GREENBOOK), latest edition, which is jointly produced by representatives of the American Public Works Association (APWA), the Associated General Contractors of California, the Engineering Contractors Association, the Southern California Contractors Association and BNi Publications, Inc.

8.3 Capital Improvement Goals and Schedules

As part of the City's collection system CIP, land use and flow modeling are utilized to develop and prioritize five-year and 30-year CIP goals and schedules for consideration and approval by the City Council. The approved CIP projects are implemented as funds become available through a combination of Council-adopted incremental development financing (for increases in land use), Council-approved rate increases (for rate payers), and/or Council-approved increased Wastewater Capital Facility Fees.

The City of Santa Monica pays the City of Los Angeles an Amalgamated Sewerage System Facilities Charge (ASSFC) for upward changes in land use by building permit. Until July 2008, Santa Monica paid Los Angeles by utilizing the Santa Monica Wastewater Capital Facilities Fee collected at the time of permit issuance. This has left Santa Monica's CIP program at the same monetary level and funded through a combination of rates collected from rate payers and wastewater capital facility fee at building permit issuance or change of land use.

Currently, the City is on a 100-year sewer line replacement schedule and presently replaces 1 to 2 miles of sewer per year.

8.3.1 CIP Prioritization Criteria

In addition to the individual prioritization of capacity-related projects, other key factors have been integrated in the overall prioritization process. While some of these factors may be somewhat external to the performance of the City's Wastewater Enterprise, they will influence the timing and potential cost aspects of the program's implementation and have an influence on the level of community disruption and overall quality of life in Santa Monica. These implementation elements include spatial demand triggers that link to CIP requirements and associated development projects, inclusion of a broader infrastructure management perspective by coordinating the CIP with other projects (e. g., underground utility and paving projects) to minimize community disruption, consideration for cost segregation so that growth pays an

appropriate share of costs, and an effort to develop a leveled CIP to match the programmed improvements with capital budgeting and ratepayer affordability and acceptance.

8.4 Element 8 Appendix

None.

Element 9 – Monitoring, Measurement, and Program Modifications

SWRCB Waste Discharge Requirement:

The Enrollee shall:

a. Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
b. Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
c. Assess the success of the PM program;
d. Update program elements, as appropriate, based on monitoring or performance evaluations; and
e. Identify and illustrate SSO trends, including: frequency, location, and volume.

9.1 Performance Measures

Annual performance indicators that the City will use to measure the health of the wastewater collection system and the effectiveness of the SSMP are:

- SSOs: Total number, SSO rate, and number for each cause (e.g., roots, grease or FOG-related blockage, debris, line failure, capacity deficiency, storm flow exceeding design, lift station failure, or other);
- Total volume of SSOs and volume contained and returned to the system;
- Total volume and percentage of SSO volume that reached surface water; and
- Footage of main lines and percentage of system cleaned annually.

9.2 Monitoring and Measurement

Over the past three years the City's commitment to asset management and preventative O & M activities has resulted in fewer FOG related SSO incidents. The City regularly tracks and monitors the general effectiveness of preventative maintenance measures through work orders/service requests, number and location of reportable SSO reports, and required annual regulatory reports. Information collected includes cause and location of stoppages; number, cause, location, and volume of SSOs; stoppage response time; number and reason for customer complaints; and type of debris found. The City has selected these certain, specific parameters because they can be documented and compared on an annual basis in a simple format. In addition, experience has shown that these parameters are straightforward, quantitative, and are focused on results.

In addition to the City tracking and monitoring measures, all documented SSO events are reported through the California Integrated Water Quality System (CIWQS) database within the required timeframe.

9.3 Element 9 Appendix F

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

1. Graph of SSO incidents

Element 10 – SSMP Program Audit

SWRCB Waste Discharge Requirement:

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

10.1 SSMP Audits

Internal audits will be conducted by Wastewater Division staff with assistance from WRPP on a biannual (every 2 years) basis to determine the relevance and effectiveness of each element of the SSMP. In addition to reviewing each element of the SSMP, the audits will also include a review of schedule progress for measures implemented to correct any identified deficiencies from the prior version. Based on the findings of the audit process, the SSMP will be updated or modified accordingly. A copy of the audit report checklist and findings report will be retained in the file. The audit checklist was based on the City's knowledge and size of its system, and the number of FOG related SSO's. The Audit also incorporates the elements from example self-audits provided by the State Water Resources Control Boards Enforcement Division.

10.3 Element 10 Appendix G

1. SSMP Audit Checklist

Element 11 – Communication Program

SWRCB Waste Discharge Requirement:

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

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

11.1 Communication Program Discussion

The CSM maintains active public outreach and communication efforts with all its customers, the public-at-large and surrounding agencies to provide timely information on City projects, improvements, and emergency situations.

Communication outlets range from public meetings and hearings, representation at community groups, to time-critical posting of signage in emergency situations and updates, posting to the CSM public website (https://www.santamonica.gov/) and 24-hour telephone reporting systems. Also, part of the CSM website are links to agenda and minutes from City Council meetings. Additionally, newsletters and brochures are developed and distributed community-wide and staff regularly meets with other area agencies. Informational flyers are often included with customer bills to update the rate payers on system operations, proposed City projects and programs, and the City has public information staff and inter-governmental management staff to maintain routine contact with news and media outlets in a timely manner.

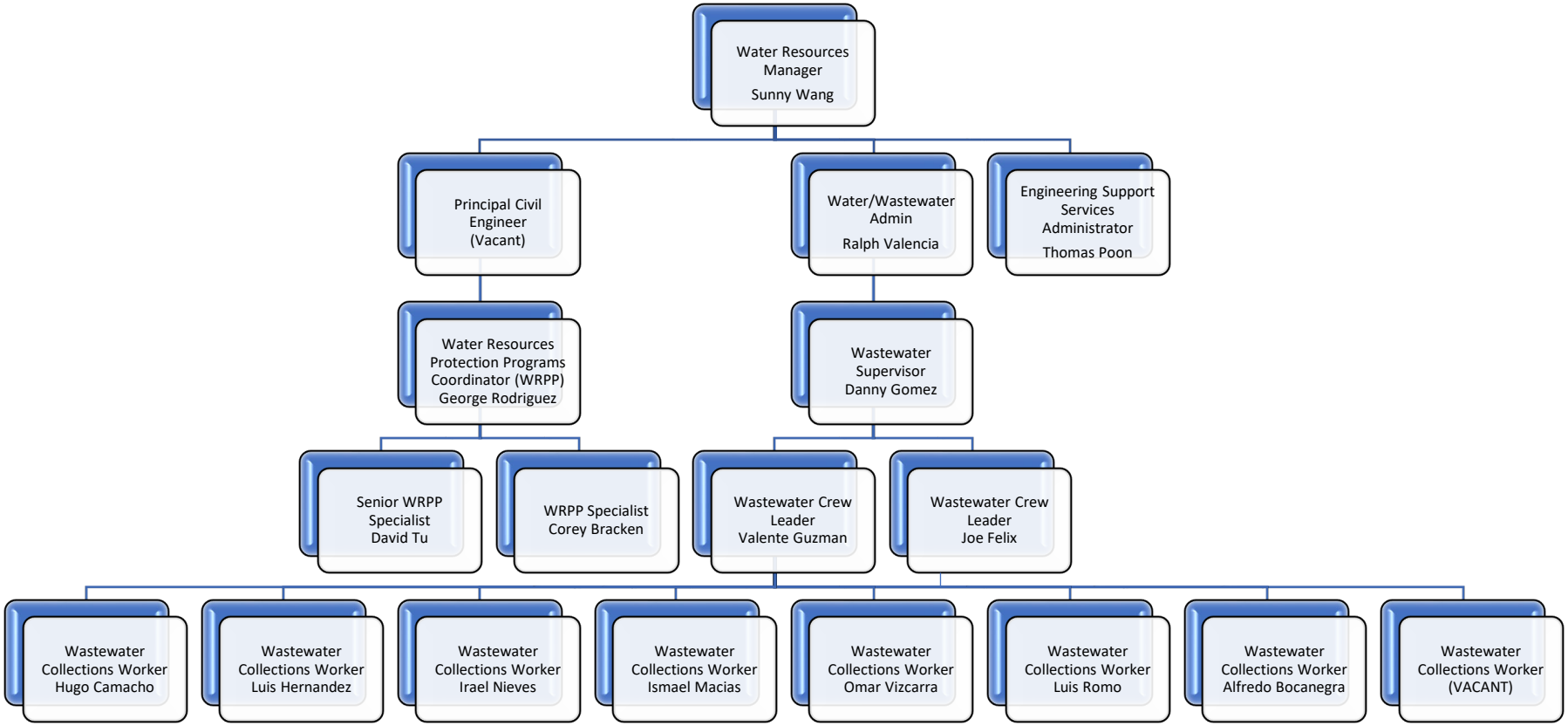
11.2 Communication with Satellite Wastewater Collection Systems

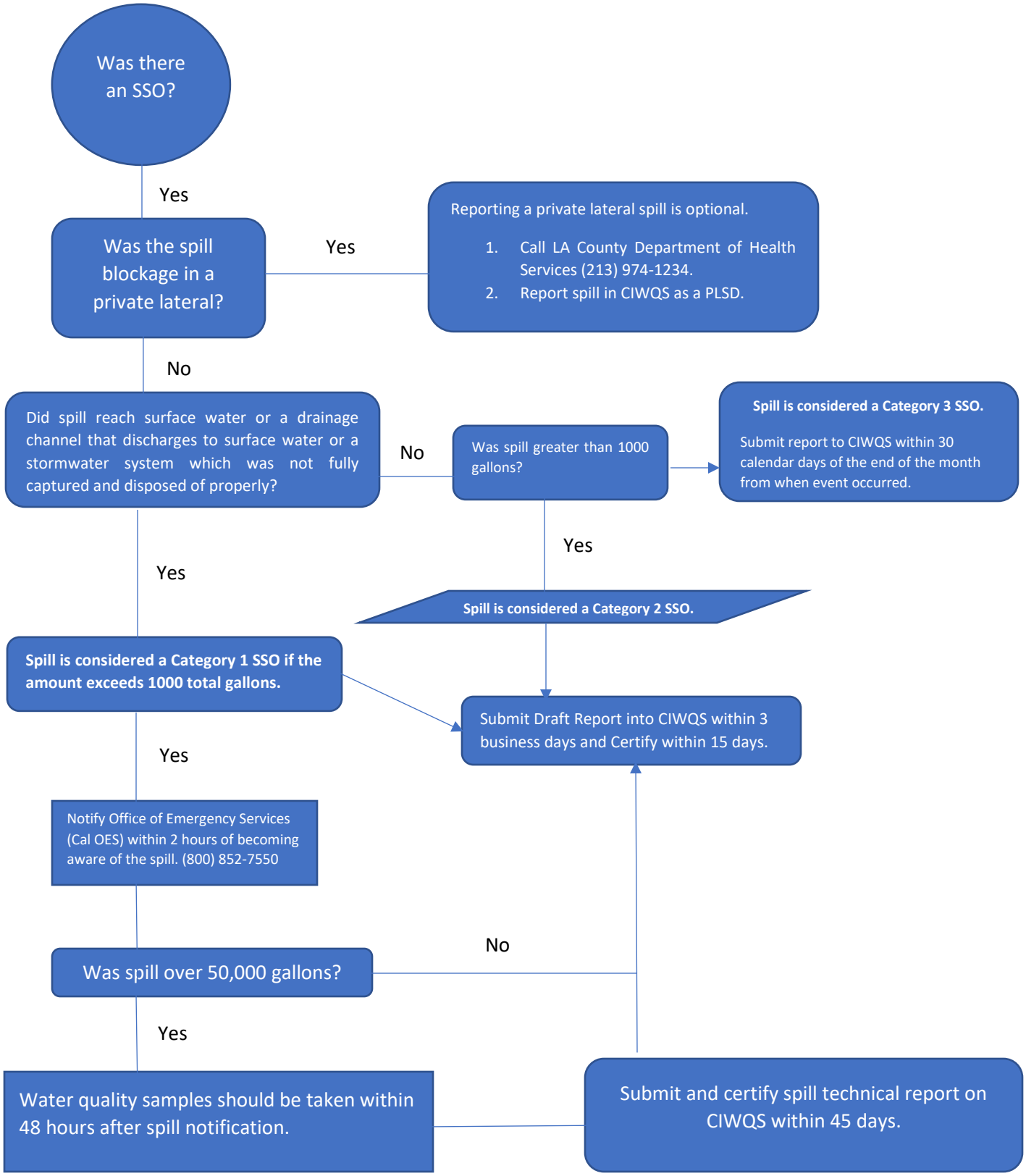
The City of Santa Monica communicates regularly with the City of Los Angeles which accepts and treats flow from the City. The City of Santa Monica and other satellite agencies that have their flow treated by Los Angeles attend quarterly contract Cities meetings at which treatment plant, collections system and pretreatment issues are discussed and coordinated.

11.3 Communication Program Appendix H

1. Sanitary Sewer Overflow Response Contact List

Appendix A


Water Resources Manager
Sunny Wang
Principal Civil Engineer (Vacant)
Water/Wastewater Admin
Ralph Valencia
Engineering Support Services Administrator
Thomas Poon
Water Resources Protection Programs Coordinator (WRPP)
George Rodriguez
Wastewater Supervisor
Danny Gomez
Senior WRPP Specialist
David Tu
WRPP Specialist
Corey Bracken
Wastewater Crew Leader
Valente Guzman
Wastewater Crew Leader
Joe Felix
Wastewater Collections Worker
Hugo Camacho
Wastewater Collections Worker
Luis Hernandez
Wastewater Collections Worker
Irael Nieves
Wastewater Collections Worker
Ismael Macias
Wastewater Collections Worker
Omar Vizcarra
Wastewater Collections Worker
Luis Romo
Wastewater Collections Worker
Alfredo Bocanegra
Wastewater Collections Worker
(VACANT)


Was there an SSO?
Yes
Was the spill blockage in a private lateral?
Yes
Reporting a private lateral spill is optional.
1. Call LA County Department of Health Services (213) 974-1234.
2. Report spill in CIWQS as a PLSD.
No
Did spill reach surface water or a drainage channel that discharges to surface water or a stormwater system which was not fully captured and disposed of properly?
No
Was spill greater than 1000 gallons?
Spill is considered a Category 3 SSO.
Submit report to CIWQS within 30 calendar days of the end of the month from when event occurred.
Yes
Yes
Spill is considered a Category 2 SSO.
Spill is considered a Category 1 SSO if the amount exceeds 1000 total gallons.
Submit Draft Report into CIWQS within 3 business days and Certify within 15 days.
Yes
Notify Office of Emergency Services (Cal OES) within 2 hours of becoming aware of the spill. (800) 852-7550
No
Was spill over 50,000 gallons?
Yes
Water quality samples should be taken within 48 hours after spill notification.
Submit and certify spill technical report on CIWQS within 45 days.

Appendix B

CITY OF LOS ANGELES
CALIFORNIA

RICHARD J. RIORDAN
MAYOR

CITY OF L.A.
DEPARTMENT OF
PUBLIC WORKS

BUREAU OF SANITATION

JUDITH A. WILSON
DIRECTOR
JOHN T. CROSSE
JAMES F. LANGLEY
DREW B. SONES
ASSISTANT DIRECTORS

FINANCIAL MANAGEMENT DIVISION
433 SOUTH SPRING ST, 4th FLOOR
LOS ANGELES, CA 90013
FAX: (213) 847-3593

AGREEMENT #7473

April 22, 1999

Craig Perkins, Director
Environmental and Public Works
Management Department
City of Santa Monica
1685 Main Street
Santa Monica, California 90401

Dear Mr. Perkins:

Subject: New Agreement for Wastewater Disposal Services

This letter encloses Santa Monica's two copies of the fully executed agreement. This marks an important milestone in the relationship between our two cities. It also means that our cities must begin the significant work of establishing the administrative procedures to implement the agreement's provisions. If you have any questions regarding the agreement's provisions or the procedures, please call Shahram Kharaghani at (213) 847-8748.

Sincerely,

Judith A. Wilson, Director
Bureau of Sanitation

By: Shahram Kharaghani
Financial Management Division

enclosures

C-98179

Contract #7473 CCS
(See also #7451)

AGREEMENT
BETWEEN THE CITY OF LOS ANGELES AND THE CITY OF SANTA MONICA FOR THE CONVEYANCE, TREATMENT AND DISPOSAL OF WASTEWATER

Table of Contents

C-98179

Contract #7473 CCS
(see also #7451)

AGREEMENT
BETWEEN THE CITY OF LOS ANGELES AND THE CITY OF SANTA MONICA FOR THE CONVEYANCE, TREATMENT AND DISPOSAL OF WASTEWATER

Table of Contents

Table of Contents

Table of Contents

Table of Contents

AGREEMENT #7473 CCS (see also #745D

This AGREEMENT ("Agreement") is made and entered into this _____ day of _____, 1999, by and between the CITY OF LOS ANGELES ("Los Angeles") and the CITY OF SANTA MONICA ("Contracting Entity") (collectively referred to herein as the "Parties" or individually as "Party").

RECITALS

WHEREAS, Contracting Entity currently contracts with Los Angeles for the conveyance, treatment, and disposal of wastewater; and

WHEREAS, disputes have arisen between Los Angeles and Contracting Entity in regard to a number of matters pertaining to the conveyance, treatment, and disposal of wastewater as well as charges regarding the same. Some of these disputes have resulted in a lawsuit, which has been consolidated with lawsuits between Los Angeles and other entities receiving wastewater service into a single case, LASC Case No BC 034185 ("Consolidated Action"), and a related case, LASC Case No. BC 128412 (collectively "Pending Actions"); and

WHEREAS, Los Angeles and Contracting Entity desire to resolve these issues and enter into a new contract for conveyance, treatment, and disposal of wastewater; and

WHEREAS, under the existing contract, Contracting Entity is authorized to discharge wastewater up to a specified flow. Under the existing contract, the charges imposed on Contracting Entity for operation and maintenance are based on actual volume of discharge and for capital are based on allowable volume of discharge; and

WHEREAS, Los Angeles acknowledges that the wastewater system currently has unused system capacity; and

WHEREAS, Los Angeles and Contracting Entity desire to eliminate discharge entitlements and make all unused capacity in the wastewater system available to either of the Parties as that Party's discharge increases, subject to the requirements and limitations set forth in this Agreement; and

WHEREAS, Los Angeles and Contracting Entity desire to eliminate discharge entitlements in return for proportionally sharing future Sewerage Facility Charges, as hereinafter defined below, and for proportionally sharing in the capital costs for both the upgrade of existing facilities and the construction of new facilities; and

WHEREAS, Los Angeles acknowledges that it is operating a regional wastewater system and is obligated to assess charges on a fair and equitable basis because Los Angeles has received state and federal grant funding; and

WHEREAS, Los Angeles and Contracting Entity desire to base all treatment and disposal charges on actual discharge and to comply with federal and state requirements by measuring discharge in terms of flow and strength; and

WHEREAS, Los Angeles and Contracting Entity desire to base all conveyance charges on actual flow and distance;

WHEREAS, Los Angeles and Contracting Entity desire to have all wastewater dischargers of the Amalgamated System, as more fully described herein below, pay equivalent rates for all fees and charges related to the Amalgamated System; and

WHEREAS, Contracting Entity owns conveyance facilities which costs are desired by Contracting Entity and Los Angeles to be paid for in the same way as are costs of the Amalgamated System,

NOW, THEREFORE, in consideration of the mutual promises specified herein and for other good and valuable consideration, Los Angeles and the Contracting Entity agree as follows:

I. DEFINITIONS

"Agency" or **"Agencies"** means any Entity(ies), other than Los Angeles, that is(are) signatory to an agreement or contract for wastewater services that complies with the Universal Terms.

"Amalgamated System" (See "Los Angeles' Wastewater Treatment and Collection System")

"Amalgamated System Expenses" means those expenses used to determine the Amalgamated System Sewerage System Charge pursuant to Section II.B.2.

"Amalgamated System Revenues" means those revenues used to determine the Amalgamated System Sewerage System Charge pursuant to Section II.B.3 of this Agreement.

"Amalgamated System Sewerage Facilities Charge" means the charge, as determined in Section II.C.3, levied on new or expanding dischargers to recover the full cost of constructing Amalgamated System capacity to accommodate the anticipated increase in wastewater discharge.

"Amalgamated System Sewerage System Charge" means the charge levied on an Entity to recover that Entity's Proportionate Share of the Net Amalgamated System Expenses.

"Available Treatment Plant Effluent" means all treatment plant effluent that meets all applicable discharge standards and is not committed for the maintenance or preservation of a biological habitat as mandated by a county, state, or federal agency.

"Biochemical Oxygen Demand" or **"BOD"** means the measure of the biochemically decomposable material in wastewater as represented by the oxygen uptake as determined by the procedures specified in Standard Methods.

"Boundary Line Connection" means any wastewater discharge that is generated within the territorial boundaries of one Entity but is directly discharged to the sewer system of another Entity, and ultimately is treated by the Amalgamated System.

"By-product" means any product, excluding Reclaimed Water, produced incidental to the process of treating wastewater. By-products may include, but are not limited to, electricity, digester gas, and biosolids products.

"Capital Improvement Program" means Los Angeles' planned expenditures for capital projects in the Los Angeles Wastewater Treatment and Collection System.

"Commercial Discharger" means any commercial user as defined in Appendix G, Revenue Program Guidelines of the *Policy for Implementing the State Revolving Fund for the Construction of Wastewater*

Treatment Facilities published by the California State Water Resources Control Board, dated February 21, 1996 or as it may be revised from time to time.

"**Contracting Entity**" means the City of Santa Monica.

"**Date of Execution**" or "**Execution**" means the date the last Original Contracting Entity executes an agreement complying with the Universal Terms or the date Los Angeles executes an agreement complying with the Universal Terms with the last of the Original Contracting Entities, whichever occurs last.

"**Default**" means those actions as specified in Section VIII A.

"**Entity**" or "**Entities**" means Los Angeles or any local governmental organization(s), whether a city or a sanitation district, any state or federal jurisdiction, or any other jurisdiction or organization, public or private, which is located outside Los Angeles' jurisdictional boundaries and receives wastewater conveyance, treatment, and disposal services from the Los Angeles Wastewater Treatment and Collection System pursuant to a contract with Los Angeles, except as provided in Section IX.B.1.b.

"**Fiscal Year (FY)**" means the 12-month period beginning on July 1 of one calendar year and ending on June 30 of the following calendar year or any other 12 month period mutually agreed to by the Parties. The designation for the Fiscal Year shall be based on the two partial calendar years included in the Fiscal Year (e.g. 1998-99).

"**Flow Year**" means the fourth quarter of one Fiscal Year and the first three quarters of the next Fiscal Year. The designation of the Flow Year (e.g. 1998-99) shall be the same as that of the Fiscal Year from which the three quarters are utilized.

"**General Fund Reimbursement Charge**" means the charge levied pursuant to Section II.D for reimbursement of the costs of emergency response services that are provided to the Amalgamated System but are paid for by Los Angeles' General Fund, separate and apart from costs that are reimbursed pursuant to Section II.B.2.a.(3).

"**Incremental Cost Approach**" means the method of calculating the Amalgamated System Sewerage Facilities Charge in which the rate is based on the sum of (a) the value of that capacity of the Amalgamated System facilities that is unused and therefore available to provide service to new customers and (b) the present value of projected future costs within any Los Angeles' Capital Improvement Plan that are related to expanding the Amalgamated System capacity, all divided by the sum of the unused capacity plus the future capacity of the projects identified in any Los Angeles' Capital Improvement Plan.

"**Industrial Discharger**" means any industrial user as defined in Appendix G, Revenue Program Guidelines of the *Policy for Implementing the State Revolving Fund for the Construction of Wastewater Treatment Facilities* published by the California State Water Resources Control Board, dated February 21, 1996 or as it may be revised from time to time.

"**Local System**" (See "Los Angeles' Wastewater Treatment and Collection System").

"**Los Angeles**" means the City of Los Angeles, a municipal corporation and the individual organizational components thereof.

"Los Angeles' Wastewater Treatment and Collection System" or **"System"** means all present and future facilities, including but not limited to plants, pipelines, pump stations, structures, tanks, valves, support facilities such as laboratories and maintenance yards, and other appurtenances owned by Los Angeles to manage, operate, maintain, collect, convey, treat, store, distribute, and dispose of wastewater, treatment plant effluent, and By-products.

"Amalgamated System" means that portion of the Los Angeles' Wastewater Treatment and Collection System exclusive of the Local System.

"Local System" means the following facilities:

a. One half of the Los Angeles-Glendale Water Reclamation Plant, the costs of which are paid by the City of Glendale.

b. Pumping stations, pipelines, and other facilities needed to distribute Reclaimed Water to the extent that the facilities are not also needed to discharge treatment plant effluent to the ocean, Los Angeles River, or other receiving water in the event that the treatment plant effluent is not reused.

c. Sewers less than 30 inches in diameter.

d. Pumping plants and associated force mains, siphon structures and piping, diversion structures and junction structures with single influent sewers less than 30 inches in diameter, or, in the case of multiple influent sewers, where the equivalent single influent sewer is less than 30 inches in diameter as set forth in Section II.B.2.d.

e. The Los Angeles Zoo treatment plant.

f. The Japanese Garden at the Donald C. Tillman Water Reclamation Plant.

"MGD-miles" means the product of the quantity of flow of an area of Los Angeles as set forth in Section III.G.7, Contracting Entity, or other Entity discharging wastewater to the Amalgamated System and the distance between the Point of Discharge, as hereinafter defined, of that area of Los Angeles, Contracting Entity, or other Entity into the Amalgamated System and the point(s) of treatment as more fully described in Section III.G.

"Net Amalgamated System Expenses" means the difference between the Amalgamated System Expenses and the Amalgamated System Revenues.

"Nonpayment Charge" means the charge levied on an Agency to collect its share, as determined pursuant to Section II.E, of any Unpaid Amounts.

"Original Contracting Entities" means collectively all of the following Entities which execute a contract for wastewater service complying with the Universal Terms, as herein defined, with Los Angeles by April 1, 1999: the City of Beverly Hills, the City of Culver City, County Sanitation Districts Nos. 4, 5, 9, 16, and 27 of Los Angeles County, the City of El Segundo, the City of San Fernando, and the City of Santa Monica.

"Party" or **"Parties"** means Contracting Entity and/or Los Angeles.

"Pass Through Flow" means any wastewater discharge other than Boundary Line Connections, either measured or estimated, that is generated within one Entity's jurisdiction and is subsequently included in another Entity's measured discharge.

"Point of Discharge" means either (a) the population centroid of Contracting Entity or (b) the population centroid of a drainage area within Los Angeles, of an Agency other than Contracting Entity, or of an Entity not signatory to an agreement complying with the Universal Terms.

"Prime Rate" means the base rate on corporate loans posted by at least 75% of the nation's 30 largest banks, as published in the Wall Street Journal or its successor publication.

"Proportionate Share" means (a) for treatment/disposal, the quantity of wastewater discharged directly or indirectly by an Entity into the Amalgamated System measured in terms of flow and Strength, as calculated pursuant to Section III.F, divided by the total quantity of wastewater discharged into the Amalgamated System comprised of the same parameters, calculated pursuant to Section III.A.2, and (b) for conveyance, the quantity of wastewater discharged directly or indirectly by an Entity into the Amalgamated System measured in terms of MGD-miles, calculated pursuant to Section III.G, divided by the total MGD-miles from all Entities discharging wastewater to the Amalgamated System. Proportionate Share for the City of Glendale shall include the flow, Strength and MGD-miles for its share of sludge from the Los Angeles/Glendale Water Reclamation Plant.

"Reclaimed Water" means Available Treatment Plant Effluent that is put to beneficial reuse in accordance with applicable laws and regulations.

"Revenue Program" means the rate schedule and analysis that demonstrates that each class of wastewater discharger is paying its fair and equitable share of the cost of operating and maintaining the Amalgamated System, complying with the Revenue Program Guidelines of the *Policy for Implementing the State Revolving Fund for the Construction of Wastewater Treatment Facilities* published by the California State Water Resources Control Board, dated February 21, 1996 or as it may be revised from time to time.

"Standard Methods" means the most recent edition of "Standard Methods for the Examination of Water and Wastewater," published by the American Public Health Association, the American Water Works Association, and the Water Environment Federation or their successors, or the successor publication which establishes the standards in the wastewater disposal industry.

"Strength" means, upon Execution of this Agreement, the parameters of Biochemical Oxygen Demand and Suspended Solids, and, subsequently, as these parameters are modified or augmented pursuant to Section II.B.1.d.

"Surface Water Runoff" means water contained in publicly-owned streambeds, channels or other catchments located on the ground surface or in publicly-owned storm sewers. Surface Water Runoff does not include groundwater, except for groundwater that has seeped into publicly-owned streambeds, channels or other catchments located on the ground surface or into publicly-owned storm sewers.

"Suspended Solids" or **"SS"** means the insoluble solid matter in wastewater that is separable by laboratory filtration as determined by the procedures specified in Standard Methods.

"System Buy-in Approach" means the method of calculating the Amalgamated System Sewerage Facilities Charge in which the rates are based on the value of the Amalgamated System capital facilities, whether in service or still to be placed into service, calculated pursuant to Section II C 4.a, divided by the total Amalgamated System flow and Strength capacity.

"System Buy-out Approach" means the method of calculating the payment to an Agency for completely removing its wastewater from the Amalgamated System in which the rates are based on the value of the Amalgamated System facilities constructed subsequent to June 30, 1984,whether in service or still to be placed into service, calculated pursuant to Section II C.4.a, divided by the total Amalgamated System flow and Strength.

"Universal Terms" means those terms and conditions of this Agreement that were negotiated between Los Angeles and the Original Contracting Entities or, in the case of federal entities, provides the same cost recovery of Net Amalgamated System Expenses. These terms and conditions are set forth in detail in the Sections I through IX of this Agreement and as those terms and conditions may be amended pursuant to Sections VII and IX.P.

"Unpaid Amount" means the difference between what Los Angeles has billed an Entity for Net Amalgamated System Expenses under its wastewater services contract or agreement, including any month-to-month charges levied pursuant to Section VII.I, and what the Entity actually has paid.

"Value Engineering" means the process by which an independent engineer or group of engineers reviews and evaluates plans, specifications, and supporting engineering documents for a capital project, including the project's cost effectiveness

II. CHARGE SYSTEM

A. General

Los Angeles agrees to implement and Contracting Entity agrees to abide by a new charge system. The new charge system will:

1. allow Los Angeles to equitably recover, from each Agency, that Agency's Proportionate Share of the Net Amalgamated System Expenses by implementation of an Amalgamated System Sewerage System Charge,

2. provide for the collection and crediting of Amalgamated System Sewerage Facilities Charges,

3. provide for the collection of General Fund Reimbursement Charges, and

4. provide for the collection of Nonpayment Charges.

B Amalgamated System Sewerage System Charge

The Amalgamated System Sewerage System Charge shall be based on the operation and maintenance (O&M) costs and capital costs of the Amalgamated System for the Fiscal Year in

which service is provided. The charge shall include credits for all Amalgamated System Revenues as discussed in Section II.B.3.

1. Allocation of Expenses & Revenues

The Net Amalgamated System Expenses shall be allocated to either conveyance or treatment/disposal as more fully defined in Section III.A.1. The allocated expenses shall then be divided by the appropriate Amalgamated System loading(s) to determine unit rates

a. The unit rate for conveyance shall be equal to the net conveyance expense divided by the Amalgamated System MGD-miles as calculated pursuant to Section III.A.2.c.

b. The treatment/disposal expenses shall be further allocated among the parameters of flow and Strength in accordance with the procedures set forth in Section III.A.1. The unit rate for each parameter shall be equal to the portion of the Net Amalgamated System Expenses allocated to that parameter divided by the total Amalgamated System loading for that parameter.

c. The total Amalgamated System quantities and loadings for MGD-miles, flow and Strength shall be determined in accordance with the procedures set forth in Section III.A.2.

d. The Strength parameters shall be modified or augmented by Los Angeles as necessary to conform with state and federal requirements or, upon mutual consent of the Parties, to account for a constituent that causes the Amalgamated System to incur a significant cost that would otherwise not be incurred.

2. Amalgamated System Expenses

a. The Amalgamated System Expenses, projected for the forthcoming Fiscal Year, used to determine the Amalgamated System Sewerage System Charge shall include the following:

(1) The direct O&M costs of the Amalgamated System, including direct salary costs incurred by Los Angeles General Fund on behalf of the Amalgamated System and later charged to the Amalgamated System.

(2) The direct capital costs of the Amalgamated System, whether for the purpose of upgrading existing facilities or for providing new and expanded facilities, including direct salary costs incurred by the General Fund on behalf of the Amalgamated System and later charged to the Amalgamated System.

(3) Costs of administrative, management and support activities at the program, bureau, department and city-wide levels which are directly charged or allocated as overhead to the Amalgamated System, including the costs of administering any agreement for wastewater services that complies with the Universal Terms.

(4) The costs associated with support facilities such as laboratories and maintenance yards to the extent that those facilities are used to support the Amalgamated System.

(5) The costs of portable equipment, such as vehicles and computers, to the extent that the equipment is used to support the Amalgamated System.

(6) Compensated time off, retirement and fringe benefits added to the labor component of O&M and capital costs, to the extent that they are not already included in either the direct O&M or capital costs or in the overhead allocated to the Amalgamated System.

(7) Costs associated with the operation, maintenance and construction of capital facilities relating to the processing, distribution or sale of By-products, which costs are incurred by Los Angeles and are related to the Amalgamated System, including the associated administrative and overhead costs

(8) Principal and interest payments on and the costs of obtaining any loan that is attributable to the Amalgamated System, the proceeds of which are Amalgamated System Revenues pursuant to Section II.B.3.a.(4).

(9) Costs resulting from compliance with any program mandated by another governmental agency, or a court decree, settlement agreement or consent decree with a regulatory agency that are related to the Amalgamated System provided that Los Angeles shall make good faith efforts to make any such program available to Contracting Entity. However, the costs shall not be included if that program is mandated to be separately implemented and locally funded by any of the Agencies

(10) Liability as provided in Sections VI.B and C.

(11) Costs of preparing Los Angeles' Wastewater Revenue Program, developing charging and billing procedures and ordinances, calculating the charges and preparing the invoices pursuant to the provisions of this Agreement, and investigating adjustments and providing customer service related to service charges. Those activities which are related to Los Angeles' internal customers that were being performed by the Los Angeles Department of Water and Power as of the Date of Execution of this Agreement shall not be included regardless of who shall perform those activities in the future.

(12) The capital and O&M costs of the Moss Avenue Pumping Station and portions of the Coastal Interceptor Sewer owned, managed, operated, maintained, and controlled by the City of Santa Monica at its sole and exclusive discretion, as set forth in Exhibit A.

(13) Any fee or charge that is legally levied by an Agency on Amalgamated System sewers or pumping plants that are located within that Agency.

(14) The compensation paid to an Agency removing its wastewater discharge from the Amalgamated System pursuant to Section VII.L, including any interest paid by Los Angeles for late payment pursuant to Section VII.L.

b. The expenses used to determine the Amalgamated System Sewerage System Charge shall not include the following:

(1) Costs related to the Local System.

(2) Costs of issuance, interest and retirement of principal related to the Los Angeles capital financing program, except as identified in Section II.B.2.a.(8).

(3) Costs related to the inspection, monitoring and enforcement programs for the Industrial Dischargers either located in Los Angeles or monitored by Los Angeles on behalf of another Entity, including associated administrative and laboratory services.

(4) Costs of billing, collection, and enforcement activities which are related to Los Angeles' internal customers that were being performed by the Los Angeles Department of Water and Power as of the Date of Execution of this Agreement regardless of who shall perform those activities in the future.

II.B.2.c The conveyance portion of the capital and O&M costs included as Amalgamated System Expenses shall be equal to the sum of the total cost of all facilities 30 inches in diameter and greater and the total cost of all facilities 36 inches in diameter and greater, divided by two.

d. For purposes of determining the conveyance costs included in the Amalgamated System Expenses pursuant to Section II.B.2.c and for inclusion as an Amalgamated System facility, the diameter of a pump station and associated force main, siphon structure and piping, diversion structure, junction structure, or sewage storage facility shall be considered to be equal to the diameter of the influent sewer to the pump station, siphon, diversion structure, junction structure, or sewage storage facility. The diameter of a vent station, manhole, or other appurtenance to a sewer shall be equal to the diameter of the sewer to which the appurtenance is connected. A pump station and force main, diversion structure, junction structure, or siphon structure and piping with multiple influent sewers shall be considered to have an equivalent single influent sewer of 30 inches or greater if:

$$\sum_{i=1}^{n} d_i^{8/3} \geq 8,689$$

d_i = diameter of i^{th} influent sewer

and shall be considered to have an equivalent single influent sewer of 36 inches or greater if:

$$\sum_{i=1}^{n} d_i^{8/3} \geq 14,130$$

Where d_i is the diameter of the i^{th} influent sewer, in inches, and $i = 1,2,\ldots,n$ influent sewers.

e. The treatment portion of the capital and O&M costs included in the allowable expenses set forth in Sections II.B.2.a shall include only one-half of the costs related to the Los Angeles-Glendale Water Reclamation Plant.

3. Amalgamated System Revenues

a. The revenues to be credited against expenses in determining the Amalgamated System Sewerage System Charge shall include the following:

(1) Amalgamated System Sewerage Facilities Charges - The Amalgamated System Sewerage Facilities Charges received from all Agencies and determined for Los Angeles pursuant to Section III.D.2 as new or anticipated burdens are placed on the Amalgamated System.

(2) Any of the following penalties or interest:

(a) Reimbursement for any liability for non-compliance with state or federal regulatory requirements included as an Amalgamated System Expense for which a Party is solely responsible pursuant to Section VI.C.

(b) Penalties paid by an Agency for violating the conditions of the month-to-month relationship pursuant to Section VII.K.

(c) Interest paid by an Agency for late payment of amounts owed to Los Angeles in excess of compensation for the Agency's past capital payments pursuant to Section VII.L.

(d) Proceeds of any penalty not otherwise allocated pursuant to this Agreement.

(3) Any grant receipts, FEMA funds, or other state or federal appropriations that offset Amalgamated System Expenses

(4) Any receipts of loans from the federal and/or state governments (e.g. from the State Revolving Fund) that are used to offset Amalgamated System Expenses, provided that Contracting Entity does not separately receive loans to offset its share of Amalgamated System Expenses

(5) Revenue from the sale of By-products.

b The revenues used to determine the Amalgamated System Sewerage System Charge shall exclude the following:

(1) Proceeds from the Los Angeles capital financing program, including any bonds, certificates, commercial paper or other securities, except as included pursuant to Section II.B.3.a.(4).

(2) Interest and penalties for late payments pursuant to Section III.E.

(3) Interest from a joint account established because an Agency disputes a portion of a bill pursuant to Section VIII.C.3.

Amalgamated System Sewerage System Charges related to monitoring penalty amounts, imposed pursuant to Sections IV.A.2, IV.F, and IV.G, shall not be considered as Amalgamated System Revenues because the penalty amounts are used to adjust the Proportionate Shares attributable to each Agency and Los Angeles.

4. Reclaimed Water

Los Angeles and Contracting Entity shall share in the Available Treatment Plant Effluent produced by the Amalgamated System, as expressly set forth herein.

a Los Angeles shall have a proportionate right to all Available Treatment Plant Effluent produced by the Amalgamated System. The quantity of Available Treatment Plant Effluent to which Los Angeles has a right shall be equal to the total Available Treatment Plant Effluent produced by the Amalgamated System multiplied by the proportion its quantity of flow discharged into the Amalgamated System for the latest completed Flow Year, calculated pursuant to Section III.F.1.b, bears to the total Amalgamated System flow for the latest completed Flow Year calculated pursuant to Section III.A.2. For purposes of determining Los Angeles' proportionate right to Available Treatment Plant Effluent produced by the Amalgamated System, the quantity of flow discharged by Los Angeles shall include any flow discharged by an organization not having an agreement or contract that complies with the Universal Terms pursuant to Section IX.B.1.b.

b. Contracting Entity shall have a proportionate right to Available Treatment Plant Effluent produced by the Amalgamated System. The quantity of Available Treatment Plant Effluent to which Contracting Entity has a right shall be equal to the total Available Treatment Plant Effluent produced by the Amalgamated System multiplied by the proportion its quantity of flow discharged into the Amalgamated System for the latest completed Flow Year, calculated pursuant to Section III.F.1.a, bears to the total Amalgamated System Flow for the latest completed Flow Year, calculated pursuant to Section III.A.2.

c. The maximum amount of Available Treatment Plant Effluent which a Party may obtain from any individual Amalgamated System facility shall be limited to its proportionate right to Available Treatment Plant Effluent produced by the entire Amalgamated System, determined pursuant to Section II.B.4.a or b, multiplied by the total Available Treatment Plant Effluent produced at that Amalgamated System facility and divided by the total Available Treatment Plant Effluent produced by the entire Amalgamated System, except as allowed by Section II.B.4.e.

d. In no event shall a Party have a right to more Available Treatment Plant Effluent from a combination of all treatment facilities in the Amalgamated System than its proportionate right to Available Treatment Plant Effluent produced by the entire Amalgamated System, determined pursuant to Section II.B.4.a or b. This limitation

on a Party's right shall not restrict a Party's ability to acquire Available Treatment Plant Effluent from any other Entity that has a right to Available Treatment Plant Effluent.

e. Any Available Treatment Plant Effluent to which a Party has a right, but is not being utilized by that Party, may be utilized by the other Party at no cost until such time as the first Party utilizes the Available Treatment Plant Effluent or, if the first Party sells its share, until such time as the buyer of the first Party's share utilizes the Available Treatment Plant Effluent.

f. Los Angeles shall provide Contracting Entity access to the Available Treatment Plant Effluent supply, as set forth above, at no cost to Los Angeles. Contracting Entity shall be responsible for acquiring any easements, rights-of-way, and permits as necessary and for constructing any facilities necessary for the Contracting Entity to receive Available Treatment Plant Effluent from any Amalgamated System facility. Los Angeles shall not unreasonably withhold the approval of nor unreasonably charge for any easements, rights-of-way, or permits requested by Contracting Entity.

g. Los Angeles may impose reasonable conditions on granting access to the Available Treatment Plant Effluent supply as are necessary to ensure that such access does not interfere with its treatment operations.

II. C. Amalgamated System Sewerage Facilities Charges

1. Requirements for Amalgamated System Sewerage Facilities Charges

a. Each Party shall be responsible, pursuant to Section III.D, for Amalgamated System Sewerage Facilities Charges for any net increase in anticipated wastewater discharge, as determined pursuant to Section II.C.2, arising from new development, changes in land use, or increases in discharges from Industrial Dischargers within its jurisdiction or within jurisdictions for which it has assumed full responsibility.

b. Although a Party is responsible for Amalgamated System Sewerage Facilities Charges, it is not obligated to levy the same or any charge upon individual dischargers within its jurisdiction.

c. Surface Water Runoff discharged directly or indirectly to the Amalgamated System may be exempted from the Amalgamated System Sewerage Facilities Charge requirement pursuant to Section II.F.4.

2. Net Increase in Anticipated Discharge

For purposes of determining whether an Amalgamated System Sewerage Facilities Charge will be required of a Party, the net increase in anticipated wastewater discharge shall be determined on a parcel by parcel basis, except where more than one parcel has been consolidated into a single development. In this case, the net increase will be based on the entire development. The net increase in anticipated wastewater discharge for any parcel or development shall be equal to the difference between the anticipated discharge and the baseline discharge for the parcel or development.

a. Anticipated Discharge

For Industrial Dischargers, the anticipated discharge shall be based on the new permitted flow and the anticipated discharges of Strength. If the Industrial Discharger's discharge permit does not contain more accurate information, the anticipated discharges of Strength shall be equal to the discharges contained in the Los Angeles Sewage Generation Factor Table, established in accordance with Section III.F.4.a, proportioned by the amount of flow.

For residential parcels and for Commercial Dischargers, the anticipated discharge shall be equal to the theoretical quantities of discharge for each of the parameters of flow and Strength based on the total square footage or other unit of measure, as adopted pursuant to Section III.F.4.a, and the intended use of the proposed project.

b. Baseline Discharge

The baseline discharge shall be the greater of:

(1) For an Industrial Discharger, the highest annual flow, BOD, and SS measured during the five Flow Years preceding the Date of Execution of this Agreement.

For residential parcels and for Commercial Dischargers, the theoretical quantity of discharge, established in accordance with Section III.F.4.a, for each of the parameters of flow, BOD, and SS at the time this Agreement is executed, or

(2) the theoretical or permitted discharge that has been acquired through the payment of Amalgamated System Sewerage Facilities Charges pursuant to this Agreement.

c. Future Strength Parameters

Any future Strength parameter will be established for baseline discharge at the time the parameter is adopted pursuant to Section II.B.1.d.

3. Amalgamated System Sewerage Facilities Charge

The Amalgamated System Sewerage Facilities Charges shall be calculated as follows:

$$ASFC = [TSFCR_Q + (CSFCR_Q)(D_{Miles})](ID_Q) + \sum(TSFCR_{Strength})(ID_{Strength})$$

Where:

ASFC = The Amalgamated System Sewerage Facilities Charge;

$TSFCR_Q$, = The Amalgamated System Sewerage Facilities

Charge rates for flow related to treatment, calculated in terms of dollars per million gallons per day pursuant to Section II.C.4;

$TSFCR_{Strength}$ = The Amalgamated System Sewerage Facilities Charge rates for each Strength parameter related to treatment, calculated in terms of dollars per 1000 pounds per day pursuant to Section II.C.4;

$CSFCR_Q$ = The Amalgamated System Sewerage Facilities Charge rate related to conveyance, calculated in terms of dollars per MGD-mile pursuant to Section II.C.4;

ID_Q and $ID_{Strength}$ = Party's net increase in anticipated annual average flow, and annual average Strength loading for each parameter, in terms of million gallons per day and 1000 pounds per day, respectively; and

D_{Miles} = Party's total MGD-miles for the latest completed Flow Year, calculated pursuant to Section III.G, divided by the Party's flow for the latest completed Flow Year, calculated pursuant to Section III.F.1.

II.C.4. Rate Calculation

The Amalgamated System Sewerage Facilities Charge rates levied upon a Party shall be based on the System Buy-in Approach as described below. Pursuant to the provisions of Section VII.A, following the initial ten year non-renegotiation period, either Party may initiate renegotiations to change the basis of the Amalgamated System Sewerage Facilities Charge to the Incremental Cost Approach provided that the conditions of Section VII.E are met.

a. Value of Facilities

(1) The value of any Amalgamated System facility in service shall be equal to the full cost of that facility inflated to reflect present costs and then depreciated.

(2) The value of any Amalgamated System facility under construction or not yet in service, also known as "Construction Work In Progress" shall be equal to the full cost of that facility inflated to reflect present costs but not depreciated.

(3) The remaining principal on any loan from the federal and/or state governments that was used to offset the cost of an Amalgamated System facility, pursuant to Section II.B.3.a.(4) shall be subtracted from the value of that facility.

(4) The full cost shall be equal to the original acquisition cost, including all direct and indirect costs and all design and construction management costs, of those Amalgamated System facilities contained in Los Angeles' wastewater fixed asset register and Los Angeles' wastewater Construction Work in Progress.

(5) Inflation to present worth shall be calculated using the *Engineering News Record* Construction Cost Index or its equivalent.

(6) Depreciation shall be calculated using the straight-line depreciation method with the same asset lives used by Los Angeles in its accounting reports.

b. Design Capacity of Amalgamated System Facilities

(1) Treatment-related Facilities

The design capacities for flow and Strength used to calculate the Amalgamated System Sewerage Facilities Charge rate shall be equal to:

(a) the sum of the average influent flow and Strength capacities, respectively, of the Donald C. Tillman Water Reclamation Plant, the Terminal Island Treatment Plant, the Hyperion Treatment Plant, and any other reclamation or treatment plant that is incorporated into the Amalgamated System, plus

(b) one-half of the average influent flow and Strength capacities, respectively of the entire Los Angeles-Glendale Water Reclamation Plant, less

(c) the sum of the design flow and Strength, respectively, of the sludge returned to the Amalgamated System conveyance system from the Donald C. Tillman Water Reclamation Plant and any other reclamation plant that is incorporated into the Amalgamated System, less

(d) one-half of the design flow and Strength, respectively, of the sludge returned to the Amalgamated System conveyance system from the entire Los Angeles-Glendale Water Reclamation Plant.

The average influent flow and Strength capacities for the treatment and reclamation plants shall be the design values as adopted by Los Angeles' Board of Public Works or any revised values adopted by Los Angeles' Board of Public Works where the revised values reflect changes in regulation by a county, state, or federal agency or where the revised values more accurately reflect the true capacities of the plants as demonstrated by Los Angeles. The standard flow and Strength loadings in the sludge returned to the Amalgamated System conveyance facilities from the reclamation plants shall be the values used in the planning and/or design of the Amalgamated System facilities as adopted by Los Angeles' Board of Public Works or any revised values adopted by Los Angeles' Board of Public Works where the revised values more accurately reflect the average flow and Strength loadings of the sludge produced by the reclamation plants when they are operated at their influent capacities, as demonstrated by Los Angeles.

(2) Conveyance-related Facilities

The capacity of conveyance-related facilities, measured in terms of MGD-miles, shall be equal to the Amalgamated System flow capacity, calculated pursuant to Section II.C.4.b.(1), multiplied by the average distance of the Amalgamated System. The average distance of the Amalgamated System shall be equal to the sum of the MGD-miles of Los Angeles, Contracting Entity, and all other Entities discharging wastewater to the Amalgamated System, calculated pursuant to Section III.G, divided by the total flow in the Amalgamated System, calculated pursuant to Section III.A.2. The MGD-miles and total flow in the Amalgamated System shall be determined using data for the latest Flow Year completed prior to the adoption of the Amalgamated System Sewerage Facilities Charge rates pursuant to Section III.A.3.

c. Rates

(1) The value of each facility that is part of the Amalgamated System, either by its inclusion in the fixed asset register or the Construction Work In Progress, shall be allocated to conveyance and to treatment flow and Strength by cost centers and using the same allocation factors adopted by Los Angeles pursuant to Section III.A.1.b.

(2) The Amalgamated System Sewerage Facilities Charge rates shall be calculated by dividing the allocated costs of all capital facilities that are part of the Amalgamated System by the Amalgamated System design conveyance and treatment flow and Strength capacities as determined pursuant to Section II.C.4.b.

II. D. General Fund Reimbursement Charge

1. Contracting Entity shall pay a General Fund Reimbursement Charge to compensate the Los Angeles general fund for the Contracting Entity's share of providing emergency response services to the Amalgamated System. The General Fund Reimbursement Charge shall be calculated based on the formula ("Formula") set forth in Exhibit B, which is attached hereto and is incorporated herein by this reference as if it were set forth fully herein.

In no case shall the General Fund Reimbursement Charge exceed an amount equal to the O&M portion of the Amalgamated System Sewerage System Charge levied upon Contracting Entity times the lesser of: (1) 5%, or (2) the percentage of operating revenues levied upon the Los Angeles' wastewater enterprise fund as general fund reimbursement, pursuant to Los Angeles Municipal Code Section 64.60 and as that Section may be amended from time to time.

Los Angeles shall not initiate any action to revise or invalidate the Formula. The Formula may only be amended or revised under the following circumstances: (a) the State Water Resources Control Board or the Environmental Protection Agency, on its own initiative, requires or mandates the change; or (b) a court of competent jurisdiction rules in final, binding judgment that the Formula is invalid or illegal. Prior to any change in the Formula, and before implementation of any revised Formula, Los Angeles must obtain the written

approval of the State Water Resources Control Board or the Environmental Protection Agency, or their successor agencies, stating that the proposed change and the revised Formula comply with the Revenue Program Guideline requirements.

2. Provided that Contracting Entity interpleads or otherwise names Los Angeles in any court challenge, Contracting Entity shall not be responsible for any General Fund Reimbursement Charge that is held to be invalid or illegal, or any amount that is held to be excessive for Los Angeles or any Agency by a court of competent jurisdiction.

3. If, in finding that the General Fund Reimbursement Charge is invalid, illegal, or excessive, a court of competent jurisdiction rules that monies collected for this purpose must be returned, Los Angeles shall within 90 days return or credit all General Fund Reimbursement Charges paid by Contracting Entity that are ordered to be returned by the court.

II.E. Nonpayment Charges

As of October 1 following the end of each Fiscal Year, Los Angeles shall determine all of the Unpaid Amounts which have became more than 120 days delinquent since the previous October 1. Contracting Entity shall pay a Nonpayment Charge equal to the Unpaid Amounts multiplied by Contracting Entity's Proportionate Share of the Net Amalgamated System Expenses for the Fiscal Year and divided by the total Proportionate Shares of the Net Amalgamated System Expenses for the Fiscal Year for Los Angeles and all Agencies without any Unpaid Amounts.

II.F. Surface Water Runoff

1 Privilege to Discharge

a. Either Party may discharge Surface Water Runoff, directly or indirectly, to the Amalgamated System, subject to the conditions set forth in Section II.F

b. Discharge of Surface Water Runoff during the period of November 1 through March 31 shall be prohibited.

c. Discharge of Surface Water Runoff shall be prohibited unless Los Angeles has obtained a waiver from the U.S. Environmental Protection Agency or has otherwise demonstrated that the discharge of Surface Water Runoff complies with the state and federal revenue program guidelines.

2. Limitation of Discharge

a. The total Surface Water Runoff discharge to all treatment and reclamation plants in the Amalgamated System from all dischargers shall not exceed 5% of the Amalgamated System flow capacity, as defined in Section II.C.4.b.

b The Surface Water Runoff discharge to any treatment or reclamation plant other than the Hyperion Treatment Plant shall be limited to an aggregate amount from all dischargers that does not exceed 5% of the flow capacity of that treatment or reclamation plant, as defined in Section II.C.4.b.

c. The Surface Water Runoff discharge to any treatment or reclamation plant shall not exceed the difference between the flow capacity at that treatment or reclamation plant, as defined in Section II C.4.b, and the influent flow, exclusive of Surface Water Runoff, at that treatment or reclamation plant.

3. Amalgamated System Sewerage System Charges

Any Party who discharges Surface Water Runoff to the Amalgamated System shall be responsible for the full Amalgamated System Sewerage System Charge for the total amount of Surface Water Runoff discharged by the Party to the Amalgamated System.

II, F, 4. Amalgamated System Sewerage Facilities Charge

a. Treatment Facilities

(1) If the aggregate amount of Surface Water Runoff discharged by all Agencies and Los Angeles does not cause any of the limitations as set forth in Section II.F.2 to be violated, no payment of Amalgamated flow System Sewerage Facilities Charges shall be required.

(2) If the aggregate amount of Surface Water Runoff discharged by all Agencies and Los Angeles causes any of the limitations as set forth in Section II.F.2 to be violated, the discharges shall be divided into categories and prioritized as follows:

Category 1 - Mandated by a responsible agency of the County of Los Angeles, the State of California, or the United States

Category 2 - Voluntary discharge

Beginning with all of the dischargers in Category 2 and then moving to Category 1, the full Amalgamated System Sewerage Facilities Charge must be paid or the flow removed from the Amalgamated System until the remaining Surface Water Runoff no longer causes the limitations as set forth in Section II.F.2 to be violated. The portions of their discharges for which the dischargers shall be required to pay the Amalgamated System Sewerage Facility Charge or remove flow from the Amalgamated System shall correspond to the proportions of the total Surface Water Runoff in their respective categories that they discharge. For purposes of this calculation, any Surface Water Runoff for which an Amalgamated System Sewerage Facilities Charge has been paid shall not be included. Once any discharger within a given category has been required to pay the Amalgamated System Sewerage Facilities Charge, all subsequent dischargers in that category shall also be required to pay the Amalgamated System Sewerage Facilities Charge.

(3) For purposes of this Section, the flow capacities of the treatment or reclamation plants and of the Amalgamated System shall be as determined pursuant to Section II C 4.b, the plant influent flow shall be the average plant influent flow for the most recently completed Flow Year, and the amount of

Surface Water Runoff shall be the average discharge. The average discharge shall be defined as the total discharge during a Flow Year divided by the number of days of actual discharge during that same Flow Year.

b. Conveyance Facilities

(1) Each Fiscal Year before discharging Surface Water Runoff into a conveyance system owned by the other Party, a Party wishing to discharge Surface Water Runoff shall first obtain permission from the other Party.

(2) If the individual Surface Water Runoff discharge from any given point of diversion of a Party causes the total peak dry weather flow in the receiving conveyance system to exceed the capacity of any part of the system, the Party owning the receiving conveyance system with insufficient capacity may deny the other Party the right to discharge that portion of the Surface Water Runoff which causes the exceedence. For purposes of this paragraph, the capacity of any sewer within the receiving conveyance system shall be that peak dry weather flow which causes the sewer to flow at three-quarters (3/4) of its full depth. The capacity of any pumping station within the receiving conveyance system shall be ninety (90) percent of the rated capacity of the plant.

III. ADMINISTRATION

A. Amalgamated System Sewerage System Charge Rate Development

1. Expense and Revenue Allocation

a. The allocation of O&M costs to flow and Strength shall be determined by using updated cost accounting information for individual cost centers, typically unit processes, and distribution of the O&M expenditures utilizing process-specific O&M distribution factors adopted by the Los Angeles Board of Public Works for each cost center. The cost accounting information shall be updated for the first full Fiscal Year following completion of secondary treatment facilities under construction at the Hyperion Treatment Plant as of the Date of Execution of this Agreement. Thereafter, this information shall be updated not less than once every two years using the average O&M expenditures from the two most recently completed Fiscal Years. Plant-wide allocation percentages shall be calculated by dividing the distributed O&M costs by the total costs and shall be used to allocate anticipated O&M costs in Los Angeles' Revenue Program.

b. The allocation of capital costs to flow and Strength shall be determined by assigning anticipated capital expenditures for the forthcoming Fiscal Year to individual cost centers, typically unit processes, and distribution of these anticipated expenditures utilizing process-specific distribution factors adopted by the Los Angeles Board of Public Works for each cost center and shall be incorporated into Los Angeles' Revenue Program.

2. Amalgamated System Loadings

a. The Amalgamated System flow and Strength loadings, respectively, shall be equal to:

(1) the sum of the influent flow and Strength loadings, respectively, at the Donald C. Tillman Water Reclamation Plant, the Terminal Island Treatment Plant, the Hyperion Treatment Plant, the entire Los Angeles-Glendale Water Reclamation Plant and any other reclamation or treatment plant that is incorporated into the Amalgamated System, less

(2) the sum of the flow and Strength loadings, respectively, in the sludge returned to the Amalgamated System conveyance system from the Donald C. Tillman Water Reclamation Plant, the entire Los Angeles-Glendale Water Reclamation Plant and any other reclamation plant that is incorporated into the Amalgamated System, less

(3) the City of Glendale's share of the influent flow and Strength loadings, respectively, at the Los Angeles-Glendale Water Reclamation Plant, plus

(4) the flow and Strength loadings, respectively, in Glendale's share of the sludge that is returned to the Amalgamated System conveyance system from the Los Angeles-Glendale Water Reclamation Plant

Glendale's share of the influent flow at the Los Angeles-Glendale Water Reclamation Plant shall be equal to one-half (½) of the total influent flow at the plant. Glendale's share of the influent Strength loadings, measured in pounds per day, shall be equal to Glendale's share of the influent flow, measured in million gallons per day, multiplied by the average concentrations of Strength discharged from Glendale, measured in milligrams per liter, and multiplied by 8.34, a conversion factor.

Glendale's share of the sludge flow from the Los Angeles-Glendale Water Reclamation Plant shall be equal to one-half (½) of the total sludge flow from the Los Angeles-Glendale Water Reclamation Plant for the latest completed Flow Year. Glendale's share of the Strength loadings in the sludge from the Los Angeles-Glendale Water Reclamation Plant shall be equal to the Strength loadings in Glendale's share of the influent to the plant multiplied by the Strength loadings in the sludge of the plant, and divided by the total Strength loadings in the plant influent.

b. For purposes of calculating the Amalgamated System Sewerage System Charge rates and for determining the flow and Strength loadings from Los Angeles pursuant to Section III.F.1.b, the Amalgamated System flow and Strength loadings shall be equal to the quantities determined in Section III.A.2.a plus the sums of any penalty amounts determined pursuant to Sections IV.A.2, IV.F.2.a, IV.F.3.b, IV.G.2.a, and IV.G.3.b

c. The Amalgamated System MGD-miles shall be equal to the sum of the MGD-miles for all areas as set forth in Section III.G.

3. Rate Adoption Ordinance

Los Angeles shall annually adopt, by ordinance, in conformance with the requirements and provisions of this Agreement, the rates to determine the Amalgamated System Sewerage System Charges and Amalgamated System Sewerage Facilities Charges for the use of the Amalgamated System. This rate setting process will begin with the first full Fiscal Year following Execution of the Agreement and continue every Fiscal Year thereafter. The rates for the first partial year, if any, after Execution of the Agreement shall be those that were mutually agreed to by the Parties prior to Execution of this Agreement.

a. Rate Adoption Time Frame - Los Angeles shall adopt rates for service to be provided in the next Fiscal Year prior to the start of that Fiscal Year. To allow sufficient time for the Contracting Entity to adopt corresponding rates for its own jurisdiction, Los Angeles shall provide the adopted rates no later than four (4) months prior to the start of the Fiscal Year for which they are to become effective. If there are less than four (4) months between the Execution of this Agreement and the start of the next Fiscal Year, Los Angeles shall provide preliminary rates within one (1) month of Execution of this Agreement and shall adopt rates within four (4) months of the Execution of this Agreement.

b. Breakdown of Charges to O&M and Capital - The rate adoption ordinance shall provide a breakdown of the Amalgamated System Sewerage System Charge rates into the categories of O&M and capital.

c. At the same time that Los Angeles submits information on the forthcoming annual rates, Los Angeles shall provide an estimate of Amalgamated System Sewerage Service Charges for the following five year period. This estimate shall not be binding and shall only be used by the Agencies for planning purposes.

4. Modification of Adopted Rates

If during a given Fiscal Year it becomes apparent that the actual expenditures in that Fiscal Year will exceed the anticipated expenditures used to establish the rates for the Amalgamated System Sewerage Service Charge in that Fiscal Year, Los Angeles may adopt a new rate ordinance to reflect the increased costs and subsequent payments will be based on the newly adopted rates. If Los Angeles adopts new rates pursuant to this Section, Los Angeles shall also prepare new invoices pursuant to Sections III.B.1, 2 and 3 for any remaining periods within the Fiscal Year for which the new rates will apply.

B. Billing

1. Los Angeles shall prepare an annual estimated bill containing bimonthly installments for the Amalgamated System Sewerage System Charge and the General Fund Reimbursement Charge to the Contracting Entity. The bill shall be postmarked to Contracting Entity no later than 30 days prior to the start of the Fiscal Year for which the bill applies.

2. The Amalgamated System Sewerage System Charge portion of the bimonthly installments shall be calculated as follows:

$$\text{Bimonthly Amount} = [(R_Q \times D_Q) + \sum(R_{Strength} \times D_{Strength}) + (R_C \times D_C)] \times F / 6$$

where:

R_Q = The Amalgamated System Sewerage System Charge rate for the Fiscal Year which is attributable to flow in terms of dollars per million gallons;

$R_{Strength}$ = The Amalgamated System Sewerage System Charge rate for the Fiscal Year which is attributable to each Strength parameter in terms of dollars per 1000 pounds;

R_C = The Amalgamated System Sewerage System Charge rate for the Fiscal Year which is attributable to MGD-miles in terms of dollars per MGD-mile;

D_Q = The wastewater flow, including any treatment sludge, discharged by Contracting Entity during the latest completed Flow Year;

$D_{Strength}$ = The quantity of each Strength parameter, including any treatment sludge, discharged by Contracting Entity during the latest completed Flow Year;

D_C = The MGD-miles attributable to Contracting Entity for the latest completed Flow Year, calculated pursuant to Section III G;

F = Payment factor equal to the ratio of actual expenditures to budgeted expenditures, averaged over the three most recently completed Fiscal Years, multiplied by 0.9.

3 The General Fund Reimbursement Charge portion of the bimonthly installments shall be calculated pursuant to Section II.D.

4. Within six months following the conclusion of a Fiscal Year, Los Angeles shall submit to Contracting Entity a reconciliation invoice for the Amalgamated System Sewerage System Charge and the General Fund Reimbursement Charge for services provided during that Fiscal Year. For purposes of calculating the reconciliation invoice, the Proportionate Share shall be determined using quantities for the Flow Year with the designation corresponding to the same Fiscal Year for which service is provided and for which the reconciliation invoice applies. The reconciliation invoice shall include the following :

a. the Contracting Entity's reconciled Amalgamated System Sewerage System Charge which shall be calculated as its Proportionate Share of the actual Net Amalgamated System Expenses for that Fiscal Year, including credit for all Amalgamated System Sewerage Facilities Charges paid by the Agencies and determined for Los Angeles, although not paid by Los Angeles, pursuant to Section III.D.2, less any payments already made pursuant to Section III.C.1. This part of the bill will also break the total actual Net Amalgamated Expenses for the Fiscal Year into expenses attributable

to O&M and expenses attributable to capital in accordance with Los Angeles' adopted policy on capitalization.

b. the Contracting Entity's reconciled General Fund Reimbursement Charge for that Fiscal Year which shall be calculated pursuant to Section II.D.1, less any General Fund Reimbursement Charge payments already made by Contracting Entity during the Fiscal Year pursuant to Section III.C.

c. any Nonpayment Charge for the past Fiscal Year pursuant to Section II.E.

d. a statement of the flow and Strength, including any penalty amounts, of each Entity discharging into the Amalgamated System.

e. a statement of the final Amalgamated System rates.

III.C. Payment

1. Contracting Entity shall make the payments for the bimonthly installments of the Amalgamated System Sewerage System Charge and the General Fund Reimbursement Charge, prepared pursuant to Section III.B.1, for each Fiscal Year in a timely manner so that they are postmarked by the last business day of July, September, November, January, March, and May, respectively, or within 30 days of receipt of the annual bill by Contracting Entity, which ever comes later.

2. Contracting Entity shall pay the reconciliation invoice within 30 days of its receipt.

III.D. Amalgamated System Sewerage Facilities Charge Payment

1. Beginning on the Date of Execution of this Agreement, Contracting Entity and Los Angeles shall be responsible for Amalgamated System Sewerage Facilities Charges in accordance with Section II.C.1. ~ pg. 12

2. All of Contracting Entity's Amalgamated System Sewerage Facilities Charges for its increased flow and strength during each bimonthly billing period shall be calculated by Contracting Entity and submitted along with the next bimonthly payment made pursuant to Section III.C.1. The Amalgamated System Sewerage Facilities Charges for which Los Angeles is responsible shall be calculated by Los Angeles after the end of each Fiscal Year. Los Angeles' and Contracting Entity's Amalgamated System Sewerage Facilities Charge shall be calculated pursuant to Section II.C using rates adopted pursuant to Section III.A.3. These amounts are Amalgamated System Revenues and shall be subtracted from the Net Amalgamated System Expenses when determining the reconciliation invoices pursuant to Section III.B.4.a. SFC

3. Within 60 days following the end of each Fiscal Year, Contracting Entity shall submit a report to Los Angeles listing all new development, changes in land use, or increases in discharges from Industrial Dischargers which could result in a net increase in wastewater discharge during the Fiscal Year or partial Fiscal Year following the Date of Execution. The report shall total the increased flow, Strength loadings and MGD-miles resulting from the development, changes in land use and increases in discharges from Industrial

Dischargers listed in the report. Within 60 days following the end of each Fiscal Year, Los Angeles shall submit to Contracting Entity a report listing all of the new development, changes in land use and increases in discharges from Industrial Dischargers in the areas for which Los Angeles has responsibility and which could result in a net increase in wastewater discharge during the Fiscal Year or partial Fiscal Year following the Date of Execution. The report shall total the increased flow, Strength loadings and MGD-miles resulting from the development, changes in land use and increases in Industrial discharges listed in the report for Los Angeles. Either Party may, at its own cost, audit the other Party's records to assess compliance with the foregoing requirement.

4. Los Angeles shall notify Contracting Entity in writing if Contracting Entity's wastewater discharges are increasing at a rate that exceeds the growth rate upon which Los Angeles' long-range capacity plans for the System are based. If Los Angeles' wastewater discharges are increasing at a rate greater than the growth rate upon which the long-range capacity plans are based, Los Angeles shall notify Contracting Entity in writing.

5. By February 1 of each year, Contracting Entity shall provide Los Angeles with an estimate of the long-term increased flow and Strength loadings arising from new development, changes in land use and increases in discharges from Industrial Dischargers within its jurisdiction during the forthcoming Fiscal Year. This information shall be used for planning purposes only; there is no implied warranty as to its accuracy.

E. Late Payment

1. Any payments of Amalgamated System Sewerage System Charges, General Fund Reimbursement Charges, Nonpayment Charges or Amalgamated System Sewerage Facilities Charges that are late shall be subject to interest on the original amounts due at the Prime Rate in effect when the payment first became due plus one (1) percent for payments that are 1 to 30 days late, the Prime Rate in effect when the payment first became due plus five (5) percent for payments 31 to 60 days late, and the Prime Rate in effect when the payment first became due plus ten (10) percent for payments more than 60 days late, not to exceed the maximum rate allowed by law. As long as payment, including applicable interest and penalties, is made within 120 days, Contracting Entity shall not be deemed to be in Default.

2. Los Angeles shall credit Contracting Entity for any Unpaid Amount that is subsequently paid by an Agency other than Contracting Entity, provided that Contracting Entity has paid a Nonpayment Charge corresponding to its share of the original Unpaid Amount. Los Angeles shall notify Contracting Entity of the credit within ten (10) business days of receiving the payment of the Unpaid Amount. Contracting Entity shall deduct the amount of the credit from its next bimonthly payment of Amalgamated System Sewerage System Charges, provided the payment of the Unpaid Amount was received no less than ten (10) days before the due date of the next bimonthly payment. If the payment of the Unpaid Amount is received less than ten (10) days before the due date of the next bimonthly payment, Contracting Entity shall deduct the credit from its second bimonthly payment of the Amalgamated System Sewerage System Charges following the payment of the Unpaid Amount. Noticing shall be pursuant to the requirements of Section IX.O. The credit shall be equal to:

a. The amount of the previous Nonpayment Charge, plus

b Any related interest and penalties paid by the delinquent Agency over the period of time from when Contracting Entity is billed the Nonpayment Charge to when the Unpaid Amount is recovered, multiplied by Contracting Entity's Proportionate Share of the Net Amalgamated System Expenses for the Fiscal Year divided by the total Proportionate Shares of the Net Amalgamated System Expenses for the Fiscal Year for Los Angeles and all Agencies without any late or delinquent payments

3 If Los Angeles does not notify Contracting Entity within ten (10) days of receipt of the payment of an Unpaid Amount by an Agency, Los Angeles shall credit Contracting Entity with interest at a rate equal to the Prime Rate in effect when the credit first became due plus ten (10) percent over the period of time from when the Unpaid Amount was paid to the date that Los Angeles notifies Contracting Entity of the credit.

F. Discharge Flow and Strength

1. Discharge Quantities

The quantity of wastewater flow and Strength discharged by each Party, including any wastewater treatment sludge and Surface Water Runoff, shall be calculated at the end of each Flow Year as follows:

a. The total quantity of flow and Strength discharged from Contracting Entity shall be equal to:

(1) the sum of all quantities measured, pursuant to Sections III.F.2 and IV.B, at gauging stations located on sewers discharging from Contracting Entity either directly or indirectly to the Amalgamated System, less

(2) any quantities from Surface Water Runoff, Pass Through Flows, and Boundary Line Connections which originate from any Entity besides Contracting Entity that pass through a gauging station located on sewers discharging from Contracting Entity, less

(3) any wastewater or Surface Water Runoff that is generated within the territorial boundaries of jurisdictions or organizations for which Los Angeles has assumed responsibility pursuant to Section IX.B.1.b that passes through a gauging station located on sewers discharging from Contracting Entity, plus

(4) the quantities, pursuant to Section III.F.3, that are generated in Contracting Entity's ungauged areas and discharged either directly or indirectly to the Amalgamated System, including Boundary Line Connections.

b. The total quantity of flow and Strength discharged by Los Angeles shall be equal to:

(1) the total Amalgamated System flow and Strength loadings, calculated as set forth in Section III.A.2, less

(2) the sum of all quantities discharged by the Agencies and other Entities to the Amalgamated System.

2. Measurement Methodology

a. The measurement of the quantity of flow or Strength of any discharge pursuant to Section IV.B shall be performed in accordance with the requirements of Section IV.D. Strength shall be measured following the sampling and analysis protocols recommended in Standard Methods. All analyses of Strength samples shall be performed by a laboratory certified to conduct such analyses by the California State Department of Health Services pursuant to the Environmental Laboratory Act of 1988, and as that Act may be amended from time to time

b. The total mass emission of Strength at any given monitoring station shall be equal to the daily average pounds per day of Strength measured at the monitoring station multiplied by the number of days in the Flow Year. The daily average pounds per day shall be equal to the straight average of the samples taken, as follows:

(1) For the first three years following Execution of this Agreement, it shall be based on all samples taken from the Date of Execution through the end of the Flow Year.

(2) After the first three years following Execution of this Agreement, it shall be based on samples taken only during the three most recently completed Flow Years.

3. Estimation Methodology

The quantity of flow or Strength of any discharge that is not measured pursuant to Section IV.B, including the discharge from Boundary Line Connections and Pass Through Flows, shall be equal to the sum of the estimated discharges from each of the individual dischargers within the ungauged area, except that Los Angeles need not estimate the quantities of Pass Through Flows or Boundary Line Connections if they are tributary to unmeasured areas for which the discharges are estimated. However, if requested by Contracting Entity for purposes of its facilities planning, Los Angeles shall make this information available to Contracting Entity.

a. The flow and Strength discharges for residential customers shall be estimated using the theoretical factors adopted pursuant to Section III.F.4.b.

b Where a Party bases its service charges to Commercial/Industrial Dischargers on their metered water usage, the flows for those dischargers shall be estimated based on their metered water usage and the percentage of water usage that is discharged to the sewer, which percentage is as adopted by Los Angeles for use in charging the dischargers within its corporate limits and included in its Wastewater Revenue Program. Where a Party monitors Industrial Dischargers' flows directly, those dischargers' estimated flows shall be based on the monitored flows. Where a Party does not base its service charges to Commercial/Industrial Dischargers on metered

water usage or monitored flows, the flows for those dischargers shall be estimated using the theoretical factors adopted pursuant to Section III.F.4.b.

c. The Strength discharged by Commercial/Industrial Dischargers shall be estimated using the theoretical factors adopted pursuant to Section III.F.4.b, except where Strength concentrations are monitored. Where a Party monitors Industrial Dischargers' Strength concentrations, those customers' estimated Strength shall be based on the monitored concentrations.

4. Estimation Factors

a. For purposes of determining estimated discharges for the calculation of Amalgamated System Sewerage Facilities Charges, Los Angeles' Board of Public Works shall adopt a list of user categories and assumed loadings per unit of usage for each category. This list of user categories and assumed loadings shall be known as the Los Angeles Sewage Generation Factor Table.

b. For purposes of determining estimated discharges for ungauged areas and Boundary Line Connections, Los Angeles' Board of Public Works shall adopt another list of user categories and an assumed flow and Strength per unit of usage for each category. This list of user categories and assumed loadings shall be based on the Los Angeles Sewage Generation Factor Table, however, the number of user categories shall be condensed to conform with the classifications set forth in the Los Angeles County Assessor's tax roll or as may otherwise be mutually agreed to by the Parties. This list shall be known as the Amalgamated System Sewage Generation Factor Table.

G MGD - miles

Until Contracting Entity and Los Angeles can develop a more accurate method of allocating the costs of the conveyance portion of the Amalgamated System, the MGD-miles shall be based on a straight-line centroidal approach. Los Angeles shall use the following formulas and procedures to determine the centroidal MGD-miles for Contracting Entity, Los Angeles, other Agencies and any other Entities discharging wastewater to the Amalgamated System:

1. For an area whose flow is tributary to the Donald C. Tillman Water Reclamation Plant but not tributary to any future treatment or water reclamation plant that may be operated by Los Angeles, that area's MGD-miles shall be equal to the sum of:

a. the portion of that area's flow that is treated at the Donald C. Tillman Water Reclamation Plant, including the area's share of sludge returned to the sewer from any upstream treatment or water reclamation plant that may be operated by Los Angeles, multiplied by the straight-line distance from the area's Point of Discharge to the Donald C. Tillman Tillman Water Reclamation Plant, plus

b. the portion of that area's flow that is treated at the Los Angeles-Glendale Water Reclamation Plant, including the area's share of sludge returned to the sewer from any upstream treatment or water reclamation plant that is operated by Los Angeles,

multiplied by the straight-line distance from the area's Point of Discharge to the Los Angeles-Glendale Water Reclamation Plant, plus

c. the portion of that area's flow that is treated at the Hyperion Treatment Plant, including the area's share of sludge returned to the sewer from any upstream treatment or water reclamation plant that is operated by Los Angeles, multiplied by the sum of the straight-line distance from the area's Point of Discharge to the Valley Spring Forman Diversion Structure and the straight-line distance from the Valley Spring Forman Diversion Structure to the Hyperion Treatment Plant.

2 For an area whose flow is tributary to the Valley Spring Forman Diversion Structure but not tributary to the Donald C. Tillman Water Reclamation Plant or any future treatment or water reclamation plant that may be operated by Los Angeles, that area's MGD-miles shall be equal to the sum of:

a. the portion of that area's flow that is treated at the Los Angeles-Glendale Water Reclamation Plant, including the area's share of sludge returned to the sewer from any upstream treatment or water reclamation plant that may be operated by Los Angeles, multiplied by the straight-line distance from the area's Point of Discharge to the Los Angeles-Glendale Water Reclamation Plant, plus

b. the portion of that area's flow that is treated at the Hyperion Treatment Plant, including the area's share of sludge returned to the sewer from any upstream treatment or water reclamation plant that is operated by Los Angeles, multiplied by the sum of the straight-line distance from the area's Point of Discharge to the Valley Spring Forman Diversion Structure and the straight-line distance from the Valley Spring Forman Diversion Structure to the Hyperion Treatment Plant.

3. For an area whose flow is tributary to the Los Angeles-Glendale Water Reclamation Plant, but not tributary to the Donald C. Tillman Water Reclamation Plant, the Valley Spring Foreman Diversion Structure or any future treatment or water reclamation plant that may be operated by Los Angeles, that area's MGD-miles shall be equal to the sum of:

a. that portion of that area's flow that is treated at the Los Angeles-Glendale Water Reclamation Plant, including the area's share of sludge returned to the sewer from any upstream treatment or water reclamation plant that may be operated by Los Angeles, multiplied by the straight-line distance from that area's Point of Discharge to the Los Angeles-Glendale Water Reclamation Plant, plus

b. the portion of that area's flow that is treated at the Hyperion Treatment Plant, including the area's share of sludge returned to the sewer from any upstream treatment or water reclamation plant that is operated by Los Angeles, multiplied by the straight-line distance from the area's Point of Discharge to the Hyperion Treatment Plant.

For the City of Glendale, the area's flow shall include its share of sludge from the Los Angeles-Glendale Water Reclamation Plant, calculated pursuant to Section III.A.2.a.

4. For an area whose flow is tributary to the Hyperion Treatment Plant, but not tributary to the Donald C. Tillman Water Reclamation Plant, the Valley Spring Forman Diversion Structure, the Los Angeles-Glendale Water Reclamation Plant or any future treatment or water reclamation plant that may be operated by Los Angeles, that area's MGD-miles shall be equal to that area's flow multiplied by the straight-line distance from that area's Point of Discharge to the Hyperion Treatment Plant.

5. For an area whose flow is tributary to the Terminal Island Treatment Plant but not tributary to any future treatment or water reclamation plant that may be operated by Los Angeles, that area's MGD-miles shall be equal to that area's flow multiplied by the straight-line distance from that area's Point of Discharge to the Terminal Island Treatment Plant.

6. For an area whose flow is tributary to any future treatment or water reclamation plant that may be operated by Los Angeles, that area's MGD-miles shall be equal to the MGD-miles calculated in Sections III.G.1 through 5, as applicable, plus the amount of that area's flow that is treated at the future treatment or reclamation plant multiplied by the straight-line distance from that area's Point of Discharge to the future treatment or reclamation plant.

7. In order to determine the MGD-miles attributable to Los Angeles, Los Angeles shall first be divided into sub-areas tributary to the Donald C. Tillman Water Reclamation Plant, the Valley Spring Forman Diversion Structure, the Los Angeles-Glendale Water Reclamation Plant, the Hyperion Treatment Plant, the Terminal Island Treatment Plant and any future treatment or water reclamation plant that may be operated by Los Angeles, respectively. The sub-area tributary to the Terminal Island Treatment Plant shall be further subdivided into the Harbor, Terminal Island and Wilmington areas. The MGD-miles for each sub-area shall be determined using the same procedures in Sections III.G.1 through 6, as applicable. The total MGD-miles attributable to Los Angeles shall be equal to the sum of the MGD-miles attributable to each of the sub-areas.

8. In calculating MGD-miles pursuant to Section III.G.1 through 7, each area's flow shall consist of the total wastewater generated within the area, including infiltration and inflow and the sludge from any treatment facility operated by the Entity that is not included in the Amalgamated System, which sludge is discharged by the Entity into the Amalgamated System.

IV. DISCHARGE MEASUREMENT

A. Responsibility for Monitoring, Estimating, Evaluating, and Reporting

1. The discharging Party, i.e. the Party discharging wastewater to the other Party, shall be responsible for all monitoring, evaluating, and reporting of wastewater discharge measurements at the locations required by Section IV.B. The discharging Party shall also be responsible for estimating, evaluating and reporting flow and Strength where estimation is allowed pursuant to Section IV.B.

2. The receiving Party, i.e. the Party receiving the wastewater discharge from the other Party, shall have the option of monitoring, evaluating, and reporting of discharge measurements when the discharging Party fails to execute its responsibility pursuant to Sections IV.A.1

and IV.E. In this case, the cost of monitoring, estimating, evaluating, and reporting shall still be the sole responsibility of the discharging Party and not attributable to the Amalgamated System. If the receiving Party exercises its option due to the discharging Party's failure, the data shall not be considered missing, but penalty amounts equal to 5% of the quantities measured by the receiving Party shall be added to the measured quantities.

3. If the receiving Party exercises its option for monitoring, evaluating, and reporting, the discharging Party may resume its responsibility after it demonstrates compliance with the monitoring, evaluating, and reporting requirements for a period of 30 days. During the demonstration period, the receiving Party shall still have the right to monitor the discharge at the expense of the discharging Party, but no penalty amounts shall apply.

B. Criteria for Measurement

1. The flow and Strength shall be measured for any discharge that meets one of the following criteria:

   a. The discharge is Surface Water Runoff.

   b. The wastewater discharged through a single sewer, excluding Pass Through Flow, Surface Water Runoff, and Boundary Line Connections from another Entity, exceeds 0.5 cfs for the prior three consecutive flow years.

2. All flow and Strength not measured pursuant to Section IV.B.1 shall be estimated pursuant to Section III.F.3, except as follows:

   a. The receiving Party, at its discretion, may measure flow and Strength from a discharging Party with a discharge less than 0.5 cfs, provided that the cost of such measurement will be the sole responsibility of the receiving Party and not be attributable to the Amalgamated System.

   b. The discharging Party may elect to measure the flow and Strength of any discharge in lieu of estimating the flow and Strength. The discharging Party shall inform the receiving Party of its election before the Flow Year in which it will begin such measurement or within two months after the Date of Execution, whichever comes later. The discharging Party may also elect to begin estimating the flow and Strength of any discharge it has previously elected to measure, but is not required to measure, in which case it shall inform the receiving Party of this election before the Flow Year in which it will begin such estimation. Whether it elects to estimate or measure the discharge, the discharging Party shall use the elected method to determine the flow and strength it reports to the receiving Party pursuant to Section IV.C for the entire Flow Year.

C. Flow and Strength Reporting

1. Quarterly reports of all measured flow and Strength data collected during a quarter shall be submitted within 30 days of the end of the quarter.

2. Annual reports of the estimated flow and Strength, including all Boundary Line Connections, and the last quarterly report of measured flow and Strength data shall be submitted within 30 days of the end of the Flow Year.

3. Submission of quantity measurements and estimates shall constitute the discharging Party's verification that such data is an accurate representation of the Party's wastewater flow and Strength and acknowledgment that such data will be used to calculate a Party's total quantity of wastewater pursuant to Section III.F.1.

D. Flow and Strength Measurement

1. Frequency

a. Flow shall be monitored continuously.

b. Strength shall be sampled monthly for the first two years after Execution of this Agreement and then quarterly thereafter. Strength samples shall be collected for 24 uninterrupted hours each month or quarter such that each day of the week is represented over a seven sample period and no day of the week is represented in more than four out of twelve consecutive 24-hour samples. Each 24-hour composite sample shall consist of 24 individual samples which are combined such that each sample represents the volume of wastewater discharged during the time between samples.

2. Physical Requirements

a. A permanent and continuous flow metering station shall be installed at each location where flow and Strength is measured pursuant to Section IV.B and at each location where Surface Water Runoff is discharged to the sanitary sewer system.

b. A temporary flow metering device may be used to measure flow while the permanent station is being repaired or replaced. If a temporary flow metering device is used, the Party shall make reasonable efforts to ensure the timely repair or replacement of the permanent flow metering device.

c. All Strength samples shall be taken at the same location as the flow measurement station using an automatic sampling device

3. Weather

No Strength samples shall be collected within 72 hours of a rainfall event which records more than ½ inch of rain within a 24 hour period.

4. Flow Monitoring

a Flow metering equipment installed at each station shall be of a type that will accurately measure the range of flows passing the gauging station.

b. Flow metering equipment shall include redundant measuring techniques over the entire range of flows for which the station is intended to measure.

c. Procedures for the measurement, data collection, and flow calculation shall be documented for each gauging station.

d. If multiple methods of measurement can be utilized, the most accurate method for the particular device being used and the quantity of flow being measured shall be consistently utilized and reported. In the event of a measurement sensor failure, an alternate method of measurement and flow calculation may be utilized until such time as the sensor failure is corrected.

E. Verification of Procedures

1. The discharging Party shall provide the receiving Party with its flow database via computer disk or other electronic means. The database shall include all of the discharging Party's unprocessed data for each measuring technique employed in measuring its flows pursuant to Section IV.D.4.b The discharging Party shall provide the data collected each month within fifteen (15) working days after the end of the month. If the discharging Party fails to provide the data within the fifteen day period, the receiving Party shall have the option of monitoring the flow itself at the expense of the discharging Party pursuant to Section IV.A. Any data not submitted within thirty (30) days following the end of each quarter shall be considered missing pursuant to Sections IV.F an G. Provision of the database to the receiving Party does not release the discharging Party of its obligation to evaluate the data pursuant to Section IV.A.

2. If the receiving Party desires to conduct an audit of the discharging Party's quantity measurements and/or estimations, it shall notify the discharging Party of its intent to audit within 30 days of receiving the measured or estimated quantities. The receiving Party's costs of performing the audit shall be borne by the receiving Party. The discharging Party shall provide the receiving Party access to all monitoring data and records within 15 days of the notice of intent to audit. The receiving Party shall notify the discharging Party of the results of the audit within 45 days of the notice of intent to audit If the receiving Party's audit of the data and records reveals discrepancies in the discharging Party's data and records, the Parties shall meet for the purpose of resolving, to the mutual satisfaction of both Parties, the discrepancy in the data and records. If the Parties cannot arrive at a satisfactory resolution, the Parties shall resolve the issue via the dispute resolution process set forth in Section VIII C. Routine questions regarding quantity measurement and estimation shall not be considered to be audits for purposes of this Section and shall be considered to be an expense of the Amalgamated System.

3 A representative of the receiving Party, at its own cost, shall be authorized to accompany the discharging Party and observe the discharging Party's practice in setting the Strength sampling device, in retrieving the device and in compositing the samples, for one sampling each year and at all locations discharging Party is required to sample. Discharging Party shall notify receiving Party of the date, time and location(s) of the next sampling after being notified of receiving Party's desire to observe the sampling.

4. The discharging Party shall split each composite sample and shall make available a preserved half to the receiving Party within six hours of retrieval of the sampling device if so requested by the receiving Party at no cost to the discharging Party.

5. If the Parties cannot arrive at a satisfactory solution to any disputes over sampling and measurement, the Parties shall resolve the issue via the dispute resolution process set forth in Section VIII.C. Routine questions shall not be considered audits for purposes of this Section and shall be considered expenses of the Amalgamated System.

F. Missing Flow Data

1. If no more than 30 days are missed during any Flow Year and no more than 14 days are missed during any 30 day period at any individual monitoring station, then:

   a. No penalty shall apply.

   b. The data for the missing days shall be assumed to be equal to the average of all measured days

   c. A letter shall be submitted explaining the cause for any missed data that exceeds 7 consecutive days.

2. If the number of missed days is between 30 and 90 days during any Flow Year, is no more than 30 days during any 45 day period, or is no more than 20 consecutive days at any individual monitoring station, then:

   a. The data for the missing days shall be assumed to be equal to the average of all measured days. To this amount shall be added a penalty equal to 10% of the assumed amount.

   b. A letter shall be submitted explaining the cause for any missed data that exceeds 7 consecutive days.

3. If the number of missed days exceeds 90 days during any Flow Year, is more than 30 days during any 45 day period, or is more than 20 consecutive days at any individual monitoring station, then:

   a. The Party will be deemed to be in Default upon compliance with the noticing requirements of Section VIII.A.1.c or Section VIII.A.2.b

   b. The missing data shall be assumed to be equal to either (1) the average of all measured days, if at least 200 days were measured or (2) the average of the preceding Flow Year, if less than 200 days were measured. To this amount shall be added a penalty equal to 25% of the assumed amount.

   c. The receiving Party shall have the right to measure the flow at the expense of the discharging Party. The receiving Party shall have the right to continue to meter the flow at the expense of the discharging Party until the discharging Party has shown,

to the reasonable satisfaction of the receiving Party, that it can and will comply with all of the flow metering requirements.

G Missing Strength Data

1. If no more than 2 non-consecutive months of sampling are missed during the first two Fiscal Years and no quarterly samples thereafter at any individual monitoring station, then:

   a. No penalty shall apply.

   b The data for the missing months or quarters shall be assumed to be equal to the average of all measured months or quarters.

   c. A letter shall be submitted explaining the cause for any missed data.

2. If the number of missed samples is between 2 and 4 months and no more than 2 consecutive months during the first two Fiscal Years and no more than one quarterly sample thereafter at any individual monitoring station, then:

   a. The data for the missing months or quarters shall be assumed to be equal to the average of all measured months or quarters. To this amount shall be added a penalty equal to 10% of the assumed amount.

   b. A letter shall be submitted explaining the cause for any missed data.

3. If the number of samples missed is more than four months or more than two consecutive months during the first two Fiscal Years or more than one quarterly sample thereafter at any individual monitoring station, then:

   a. The Party will be deemed to be in Default upon compliance with the noticing requirements of Section VIII.A.1.c or Section VIII.A.2.b.

   b. The missing data shall be assumed to be equal to either (1) the average of all measured months or quarters or (2) the average of the preceding year, whichever is higher. To this amount shall be added a penalty equal to 25% of the assumed amount

   c. The receiving Party shall have the right to measure Strength at the expense of the discharging Party. The receiving Party shall have the right to continue to measure the strength at the expense of the discharging Party until the discharging Party has shown, to the reasonable satisfaction of the receiving Party, that it can and will comply with all of the Strength measuring requirements.

H. Conditions for Waiver of Penalties

If conditions beyond the reasonable control of a discharging Party prevents that Party from meeting any of the measurement requirements, the discharging Party may petition the receiving Party for a waiver of the penalty provisions. The discharging Party shall provide documentation

of the reasons that caused the problems and the steps being taken to correct the problems. The receiving Party shall not unreasonably deny the petition for waiver.

I. Implementation

1. Each discharging Party shall have 12 months from the Execution of this Agreement to install and operate the flow monitoring stations required under the terms of this Agreement. Each discharging Party shall report the completion of the flow monitoring stations. Upon notification of completion, the flow monitoring requirements shall become effective.

2. For locations that meet the requirements for measuring flow pursuant to Section IV.B.1 or where the discharging Party elects to measure the flow and Strength of its discharge pursuant to Section IV.B.2.b subsequent to the Date of Execution, the discharging Party shall have one year from the date that the location meets the requirements or from the date that the discharging Party notifies the receiving Party of its election to install the appropriate flow metering equipment. Each discharging Party shall report the completion of the flow monitoring stations. Upon notification of completion, the flow monitoring requirements shall become effective.

3. The provisions for the collection of flow data in the agreements in effect prior to the Date of Execution of this Agreement shall continue in effect until the new flow measurement stations are operable.

V. MEETINGS

A. Contracting Entity/Los Angeles Meetings

1. Within 30 days of a written request of Contracting Entity, but in no case less than semi-annually, Los Angeles shall meet with a representative or representatives of Contracting Entity to discuss issues of mutual interest relative to this Agreement, including but not limited to:

a. The operation and maintenance costs pertaining to the Amalgamated System;

b. The capital program pertaining to the Amalgamated System;

c. Written policies pertaining to the administration of the charge system;

d. Disputes between Los Angeles and the Agencies, pursuant to Section VIII of this Agreement;

e. The risk management practices pertaining to the Amalgamated System;

f. Regulatory updates.

At any such meeting, two representatives from Los Angeles shall be present. One Los Angeles representative shall be an employee from Los Angeles with knowledge of the Amalgamated System and the second Los Angeles representative shall be appointed by the

President of the City Council. The representative from Contracting Entity must be an Assistant Manager, Division Head, City Manager, Department Head or their duly authorized representative. In no case shall the representative(s) from either Party be legal counsel. The foregoing requirements, however, shall not prevent either Party from designating other representatives to be present at any such meeting, including additional staff, consultants and attorneys. Los Angeles' costs of preparing for and attending any such meeting shall be considered a contract administration cost and shall be included as Amalgamated System Expenses pursuant to Section II.B.2.a.(3).

2. In submitting the Revenue Program and annual Capital Improvement Program to the Council and the Mayor for approval, Los Angeles Staff shall identify and summarize any issues where the Contract Entity disagrees with the proposed Revenue Program or Capital Improvement Program and shall expressly state the reasons for those disagreements.

3. If matters are deemed to be of general interest to all Agencies who have wastewater conveyed and treated by Los Angeles, Los Angeles shall have the right to meet with the representatives of the Agencies collectively to discuss the issues of common interest. If Los Angeles meets with the Agencies collectively, this shall not preclude either Contracting Entity or Los Angeles from requesting a meeting to discuss an issue or issues limited in scope to the interest of Contracting Entity and Los Angeles.

4. If requested by two or more Agencies, those Agencies shall have the right to meet collectively with Los Angeles. If Los Angeles meets collectively with the Agencies, this shall not preclude either Contracting Entity or Los Angeles from requesting a meeting to discuss an issue or issues limited in scope to the interest of the Contracting Entity and Los Angeles.

B. Value Engineering

1. The Agencies have the right, collectively, to meet at least once with any Value Engineering team hired by Los Angeles to review a proposed capital project for the Amalgamated System. For each project, Los Angeles' cost of the first of any such meeting shall be considered to be an Amalgamated System Expense. Contracting Entity shall pay the cost incurred by the Value Engineering team as a result of any subsequent meetings in proportion to its flow discharged to the Amalgamated System divided by the total flow discharged to the Amalgamated System by those Agencies requesting the subsequent meetings. The first meeting shall take place, if at all, within 30 days of the date of the letter requesting such meeting and at a mutually convenient time and place.

2. Los Angeles shall provide the Agency representatives with a copy of any Value Engineering study for an Amalgamated System project within 30 days of the completion of the study.

C. Financial Auditing

1. The Agencies have the right, collectively, to meet at least once each auditing cycle with the auditor of the System's financial statement. The meeting shall take place, if at all, within 30 days of the date of the letter requesting such meeting and at a mutually convenient time and place. The cost of a single meeting shall be considered to be an Amalgamated System Expense. Contracting Entity may have further meetings with the auditors of the

Amalgamated System's financial statement, provided that Contracting Entity reimburses Los Angeles for any additional auditor's cost incurred as a result of the additional meetings, in proportion to its flow discharged to the Amalgamated System divided by the total flow discharged to the Amalgamated System by those Agencies requesting the subsequent meetings. Los Angeles may require that the auditors bill the Agencies directly for the additional costs.

2. Contracting Entity shall have the right to audit those System financial records that are made available to the auditor of the System's financial statements for audit purposes and to review the audit work papers at its own expense.

VI. OPERATION, LIABILITY, AND COMPLIANCE

A. Ownership and Operation

1. Los Angeles is recognized as the sole owner and sole operating authority of the Amalgamated System. As such, Los Angeles shall exercise reasonable care and skill and shall act as a prudent manager of the Amalgamated System to ensure compliance with all federal, state, and local laws, regulations, and rules pertaining to the discharge of wastewater, including without limitations all applicable pretreatment standards and effluent limits, if any.

2. With regard to the inspection, maintenance, and operation of the Local System or of facilities owned by either Los Angeles or Contracting Entity and all discharges within each Party's respective jurisdiction or territorial boundaries, each Party shall exercise reasonable care and skill and shall act as a prudent manager to ensure compliance with all federal, state, and local laws, regulations, and rules pertaining to the discharge of wastewater, including without limitation, all applicable pretreatment standards and effluent limitations, if any.

3. Contracting Entity hereby waives any present and future claims to any equity interest in the Amalgamated System. Los Angeles agrees that any future agreement or contract with any other Entity shall not give that Entity any equity interest in the Amalgamated System.

B. Liability

1. Regulatory Liability

Liability, federal or state, whether related to water or air, including fines, penalties, increased costs due to more stringent regulations as a result of the regulatory liability, and/or the cost of any alternative project in lieu of, or in addition to, any fine or penalty shall be treated as an expense of the Amalgamated System if said liability results from the construction or operation of the Amalgamated System. This would include, but not be limited to: operator error, negligence, sewage spills or other discharges resulting from clogs, breaks in pipes, lack of capacity, or electrical outages, equipment failure or breakdown, discharges into the air in violation of any SCAQMD rule or regulation, or any other action or inaction by Los Angeles in constructing or operating the Amalgamated System which results in liability assigned to any portion of the Amalgamated System.

2. General Liability

Unless otherwise stated in this Agreement, third party liability, including compensatory damages, shall be treated as an expense of the Amalgamated System if said liability results from the operation of the Amalgamated System.

3. Liability Related to Non-Amalgamated System Facilities

Contracting Entity will not be responsible for liability which results solely from construction and operation of the Local System. Similarly, Los Angeles will not be responsible for liability which results solely from construction and operation of Contracting Entity's wastewater collection system. If liability results from a combination of activities involving the Amalgamated System and other wastewater facilities, the Net Amalgamated System Expenses shall include the costs related to that portion of the liability attributable to the activities involving the Amalgamated System which is the basis for the liability.

4. Gross Negligence

Liability which results from gross negligence and/or the willful and/or intentional acts of an individual or individuals charged with the operation of a facility which is part of the Amalgamated System shall not be chargeable as an expense of the Amalgamated System but shall be borne by Los Angeles or the successor jurisdiction responsible for the operation of the Amalgamated System.

5. Notification of Claims

Los Angeles shall provide written notification to all Agencies of any and all claims and Notices of Dispute submitted to Los Angeles which refer, relate, or pertain to the Amalgamated System within thirty (30) days of receipt of such claim, provided that such claims are for amounts exceeding $500,000, excluding construction claims. Notification of construction claims shall only be required if so requested by Contracting Entity.

C. Compliance with State and Federal Regulatory Requirements

1. The Parties shall satisfy all state or federal requirements for preparing and updating their Revenue Programs.

2. In any circumstance where (i) Los Angeles as owner of the System is mandated by a state or federal requirement to establish a program, prepare a study, or undertake some other action and (ii) such action would require Los Angeles to enter Contracting Entity's jurisdiction, Contracting Entity shall be responsible for complying with such requirement and shall report to Los Angeles all actions undertaken to comply.

   a. Los Angeles shall provide written notification to Contracting Entity of any state or federal requirements that are applicable to Contracting Entity in the foregoing circumstances.

   b If Contracting Entity fails to take the necessary action after having been duly notified of its obligations by Los Angeles and if Contracting Entity's failure to take the

necessary action would result in any liability payable from the Amalgamated System, then Los Angeles shall have the authority to enter Contracting Entity's jurisdiction to perform the required actions on behalf of Contracting Entity and to directly charge Contracting Entity for any costs necessarily incurred to achieve compliance.

c. If Contracting Entity's failure to take the actions necessary to comply with the state or federal requirements results in any liability payable from the Amalgamated System, Contracting Entity shall bear full financial responsibility for any fines or penalties that are levied as a result of Contracting Entity's failure to comply.

d. If Los Angeles and Contracting Entity are both required to take actions to comply with state and federal requirements and Los Angeles fails to take the necessary actions to comply with the state and federal requirements and if Los Angeles' failure to take the necessary actions results in any liability payable from the Amalgamated System, Los Angeles shall bear full financial responsibility for any fines or penalties that are levied as a result of Los Angeles' failure to comply.

VII. TERM OF AGREEMENT

The term of this Agreement is thirty (30) years unless it is modified in writing by mutual consent of the Parties and shall commence upon full Execution.

A. Reasons to Initiate Renegotiations

During the unexpired term of this Agreement, either Party may request that the other Party negotiate, in good faith, modifications of the Agreement which the requesting Party believes are necessary because of any of the following changed circumstances:

1. There is a material change in the regulatory framework for wastewater that renders one or more of the terms or conditions of the Agreement to no longer be fair and equitable;

2. There is a proposed change in the physical configuration of the Amalgamated System that the existing terms or conditions of the Agreement do not adequately address;

3. There is a material change in the financial framework of Los Angeles' wastewater conveyance and/or treatment system which either renders any of the terms or conditions of the Agreement to no longer be fair and equitable or creates a condition that the existing terms or conditions cannot accommodate;

4. There is any change in the regulatory, operating or financial framework of Los Angeles' wastewater conveyance and/or treatment system, which in the view of either Party, will or has caused the charge system described in Section II of this Agreement to no longer be fair and equitable.

5. If, after ten (10) years from the Date of Execution of this Agreement, Los Angeles requests the Contracting Entity to contribute money towards capital facilities or improvements for the Amalgamated System which are valued at $100 million or more, including direct and

indirect costs, in any one fiscal year and whose useful life is greater than the length remaining on the term of the then existing Agreement.

B. Initial Time Prohibitions on Negotiations

Notwithstanding the provisions of Section VII.A above, and excepting the provisions within this Agreement concerning Reclaimed Water and Surface Water Runoff, the Parties hereby knowingly and expressly waive the right to renegotiate any provision of this Agreement for a period of ten (10) years from the Date of Execution, irrespective of the cause, rationale or circumstances. The Parties further acknowledge and agree that the existing charge system will be used to recover the Amalgamated System Expenses during the initial ten (10) years of this Agreement even if either Party believes that the charge system may not be fair and equitable. The Parties acknowledge and agree that they have reached this Agreement following a period of lengthy and complicated negotiations and they are unwilling and further find it imprudent to revisit the subject-matter herein for a period of ten (10) years. With respect to the renegotiation of the Reclaimed Water and Surface Water Runoff provisions, the Parties knowingly and expressly waive the right to renegotiate these provisions for a period of five (5) years from the Date of Execution of this Agreement. Thereafter, either Party may seek to renegotiate Reclaimed Water and Surface Water Runoff provisions at any time. However, if after two years of good faith negotiations, the Parties fail to agree on new Reclaimed Water and Surface Water Runoff provisions, this Agreement shall not terminate within the initial ten (10) years of this Agreement.

C. Negotiation Completion Requirements

If after two years of good faith negotiations concerning any of the above proposed changes to a then existing Agreement, pursuant to Sections VII.A and B, the Parties have been unable to reach a mutual agreement on any proposed changes to a then existing Agreement, the then existing Agreement shall, unless otherwise stated, terminate and the relationship of the Parties shall be governed by Section VII.I below.

D. Negotiations at Expiration of the Term

At least two calendar years prior to the expiration date of a then existing Agreement, the Parties shall begin good faith negotiations to extend the relationship of the Contracting Entity with Los Angeles for the conveyance and treatment of the Contracting Entity's wastewater. If, at the time set for expiration of the then existing Agreement, the Parties have not been able to reach a new agreement or have not agreed to extend the then existing Agreement, the Agreement shall, unless otherwise stated in Sections VII.A or B, terminate and the relationship of the Parties shall be governed by Sections VII.I and L below.

E. Conditions for Modification Proposals

In the renegotiation of any provision in this Agreement pursuant to Section VII.A or in the negotiation of any extension to this Agreement or any new agreement pursuant to Section VII.D, all Los Angeles proposals to the Contracting Entity shall include a restatement of this Section VII.E in its entirety and shall comply with the following:

1 The charge system must be fair and equitable to Los Angeles and Contracting Entity;

2. The charge system for the Contracting Entity within the Amalgamated System must be substantially similar to and consistent with the charge system for the internal users of Los Angeles' wastewater conveyance and/or treatment system within the Amalgamated System;

3. There shall be a fair and equitable cost recovery methodology to fully reimburse Los Angeles and the Contracting Entity for capital payments for the Amalgamated System capacity needed to serve new dischargers; and

4. There shall be a fair and equitable term (period of years) as measured by the capital needs and revenue requirements of the Contracting Entity.

F. Requirement for Good Faith Renegotiations

Los Angeles' obligation to, in good faith, negotiate an extension of its relationship with the Contracting Entity pursuant to Section VII.D or renegotiate any matter under this Agreement pursuant to Section VII.A shall not be discharged unless and until it has presented in good faith a proposal which complies with the requirements set forth in Section VII.E above.

G. Non-binding Mediation

It shall be the right of either Party to request, in writing, a formal, non-binding mediation concerning the renegotiation of any provision of this Agreement or negotiation of any extensions hereto up to and including the one hundred eightieth (180^{th}) calendar day prior to termination of this Agreement pursuant to Sections VII.C and D above. The non-requesting Party must accept a timely written request for non-binding mediation. The good faith negotiations shall not be deemed complete until the formal, non-binding mediation process has concluded by written statement of the mediator or the term of this Agreement has terminated pursuant to Sections VII.C and D above.

H. Termination Restriction

In the event Los Angeles fails to propose provisions or an extension pursuant to Sections VII.C and D above that satisfy the requirements of Section VII.E or fails to participate in a formal, non-binding mediation process upon timely request by the Contracting Entity, the then existing Agreement shall not terminate and it shall continue in full force and effect until Los Angeles presents, in good faith, a proposal to the Contracting Entity that satisfies the requirements of Section VII.E.

I. Month to Month Relationship

The Parties recognize that withdrawal from the Amalgamated System is a serious and complex undertaking and as such agree to follow the procedure for such withdrawal as set forth herein. If the Parties are unable to reach a mutual agreement on changes to the then existing Agreement proposed pursuant to Section VII.C above and the then existing Agreement is terminated as provided, or if the term of the then existing Agreement expires as described in Section VII.D above, or if a Party remains in Default for more than ninety (90) days, the result in any of these instances shall be a month to month relationship between the Parties wherein Los Angeles agrees to transport and treat the wastewater of the Contracting Entity provided that the Contracting Entity:

1. pays its fair and equitable share of the wastewater conveyance and treatment costs, including O&M and capital, in an amount and according to a charge system as determined by Los Angeles consistent with the requirements of Section VII.E above;

2. complies with all then existing regulatory requirements, rules, regulations, laws and directives of the federal and state government concerning wastewater, including all Industrial Waste pretreatment requirements, rules, regulations and laws; and

3 actively and in good faith works towards extricating its wastewater discharge from the Amalgamated System.

J. Termination of the Month to Month Relationship

The month to month relationship shall terminate if:

1. the Parties agree to a written agreement which supersedes the month to month relationship;

2. the Contracting Entity removes its wastewater discharge from the Amalgamated System;

3. the Contracting Entity violates one of the provisions of the month to month relationship set forth above; or

4. five years expires from the date that the month to month relationship commences. However, this five year cap on the month to month relationship may be extended by mutual written agreement of the Parties.

K. Penalties for Violation of the Month to Month Relationship Conditions

If the Contracting Entity violates the terms and conditions of the month to month relationship, the Contracting Entity shall move, with all due deliberate speed, to remove its wastewater discharge from the Amalgamated System and shall be liable to pay the Amalgamated System a 10% penalty on all wastewater conveyance and treatment provided by the Amalgamated System from the time the Contracting Entity violates the terms of the month to month relationship to the time that the Contracting Entity no longer discharges wastewater to the Amalgamated System. If the Contracting Entity takes longer than one year from the date that it violates the month to month relationship to remove its wastewater from the Amalgamated System, then the penalty for conveyance and treatment of the Contracting Entity's wastewater shall increase to 15% and shall increase 5% each year until the Contracting Entity's wastewater is removed from the Amalgamated System.

L. Contracting Entity Capital Investment Buyout

If the Contracting Entity removes its wastewater discharge from the Amalgamated System pursuant to any of the scenarios set forth above, then the Amalgamated System will reimburse the Contracting Entity for the remaining value of it's past capital payments for the Amalgamated System. The compensation for the past capital payments shall be based on the System Buy-out Approach as described below :

1 The values of Amalgamated System facilities in service or included in Construction Work in Progress from Fiscal Year 1984-85 forward shall be determined using the procedure contained in Section II.C.4.a.

2. The value of each facility determined pursuant to Section VII.L.1 shall be allocated to conveyance and to treatment flow and Strength by cost centers and using the same allocation factors adopted by Los Angeles pursuant to Section III A.1.b.

3. The compensation rates shall be calculated by dividing the totals of the values allocated pursuant to Section VII.L.2 by the Amalgamated System MGD-miles and flow and Strength loadings determined pursuant to Section III.A.2 for the latest completed Flow Year. Los Angeles shall calculate the compensation rates and include the rates in its Revenue Program whenever it prepares and adopts a Revenue Program.

4. The amount of compensation shall be calculated by multiplying Contracting Entity's MGD-miles and flow and Strength discharges for the latest completed Flow Year by the compensation rates and summing the results.

5. Los Angeles shall subtract the following from Contracting Entity's compensation for its past capital payments calculated pursuant to Section VII.L.1 through 4:

   a. Any Amalgamated System Sewerage System Charges, General Fund Reimbursement Charges, and Amalgamated System Sewerage Facilities Charges owed by Contracting Entity pursuant to Sections III.C and D.

   b. Any interest owed for late payments pursuant to Section III.E.

   c. Any surcharges owed for wastewater service provided to Contracting Entity after it is required to remove its wastewater from the Amalgamated System pursuant to Section VII.K.

   d. Any amounts owed by Contracting Entity for meetings with any Value Engineering team or the System's financial auditor beyond the first such meeting, pursuant to Sections V.B.1 and V.C.1.

6 Contracting Entity shall pay to Los Angeles any negative net amount calculated above within 90 days of removing its flow. Los Angeles shall pay to Contracting Entity any positive amount calculated above within 90 days of Contracting Entity removing its flow. If payment is made after 90 days but before 120 days, interest shall be added at the Prime Rate in effect at the time Contracting Entity removes its flow plus one (1) percent. If payment is made after 120 days but before 150 days, interest shall be added at the Prime Rate in effect at the time Contracting Entity removes its flow plus five (5) percent. If payment is made after more than 150 days, interest shall be added at the Prime Rate in effect at the time Contracting Entity removes its flow plus ten (10) percent. In no case shall interest exceed the maximum rate allowed by law.

VIII. CONFLICTS

A. Default

1. Events Constituting a Default by Contracting Entity

Each of the following constitutes a "Default" by Contracting Entity under this Agreement.

a. Contracting Entity fails to pay any amount of an undisputed invoice, including any applicable interest and penalties, within 120 days of the due date.

b. Contracting Entity fails to pay at least eighty-five (85) percent of the total amount due on any disputed invoice by the due date and to place the withheld amount into a joint account within ten (10) business days from the due date, as required pursuant to Section VIII.C.3.a.

c. Contracting Entity fails to perform or observe any term, covenant, or undertaking in this Agreement that it is to perform or observe and such failure continues for ninety (90) days from a Notice of Default being sent in the manner prescribed in Section IX.O.

2. Events Constituting a Default by Los Angeles

Each of the following constitutes a "Default" by Los Angeles under this Agreement.

a. Los Angeles fails to accept and treat the wastewater discharged into the Amalgamated System by Contracting Entity.

b. Los Angeles fails to perform or observe any term, covenant, or undertaking in this Agreement that it is to perform or observe and such failure continues for ninety (90) days from a Notice of Default being sent in the manner prescribed in Section IX.O.

B. Remedies

In the event of a Default, the Parties shall have the following rights and remedies:

1. Specific Performance

Contracting Entity and Los Angeles agree and recognize that the rights and obligations set forth in this Agreement are unique and of such a nature as to be inherently difficult or impossible to value monetarily. If one Party does not perform in accordance with the specific wording of any of the provisions in this Agreement applicable to that Party, Defaults, or otherwise breaches this Agreement, an action at law for damages or other remedies at law would be wholly inadequate to protect the unique rights and interests of the other Party to the Agreement. Accordingly, in any court controversy concerning this Agreement, the Agreement's provisions will be enforceable in a court of equity by specific performance, including a month to month relationship and termination thereof as provided

in Sections VII I and J. This specific performance remedy is not exclusive and is in addition to any other remedy available to the Parties.

2. Cumulative Rights and Remedies

The Parties do not intend that any right or remedy given to a Party on the breach of any provision under this Agreement be exclusive; each such right or remedy is cumulative and in addition to any other remedy provided in this Agreement or otherwise available at law or in equity. If the non-breaching Party fails to exercise or delays in exercising any right or remedy, the non-breaching Party does not thereby waive that right or remedy. Furthermore, no single or partial exercise of any right, power, or privilege precludes any further exercise of a right, power, or privilege granted by this Agreement or otherwise.

3. Attorneys' Fees

In any adversarial proceedings between the Parties other than the dispute resolution procedure set forth below, the prevailing Party shall be entitled to recover their costs, including reasonable attorneys' fees. If there is no clear prevailing party, the Court or arbitrator shall determine the prevailing party and provide for the award of costs and reasonable attorneys' fees. In considering the reasonableness of either Party's request for attorneys' fees as a prevailing party, the Court or arbitrator shall consider the quality, efficiency, and value of the legal services and similar/prevailing rate for comparable legal services in the local community. If Los Angeles is awarded its legal fees/costs, then any proceeds therefrom shall first be applied so as to reduce legal fees/costs, if any, incurred by the Amalgamated System and then, to the extent there is any remaining balance, to the legal fees/costs incurred by Los Angeles.

C. Dispute Resolution

1. Scope of Dispute Resolution

Disputes ("Disputes") between the Parties other than those constituting a "Default", or "Exclusion" (defined below), shall be resolved pursuant to the provisions of this Section.

2. Exclusions

a. Emergency

An emergency event which, if not promptly resolved, may result in imminent danger to the public health, safety or welfare shall not be subject to dispute resolution.

b. Complete Discretion

Those matters reserved to the complete discretion of Los Angeles or Contracting Entity under this Agreement shall not be subject to dispute resolution

3. Procedures for Disputes Regarding Invoices

a. Contracting Entity may dispute any portion of a bill for service provided by Los Angeles only because it disagrees with the methodology or calculation of such charges. When disputing a bill, Contracting Entity shall tender the undisputed amount, but in no case less than 85% of the total amount billed, to Los Angeles when the payment is due, along with a written notice stating the amount of the bill which is being disputed, explaining the reason for the disputed amount and identifying the proposed banking institution for the joint account. Contracting Entity shall deposit the withheld amount in an interest bearing joint account within 10 business days of the date of the Contracting Entity's written notice. The joint account shall be at a banking institution selected by both Parties and shall be in the joint names of Contracting Entity and Los Angeles. Disbursements from the joint account shall be made only at the written direction of an authorized representative of each Party. The withheld funds shall remain in the joint account until such time as the dispute is resolved. Failure to pay at least 85% of the total amount billed by the due date and to place the withheld amount into a joint account shall invalidate the dispute and shall be considered a failure to make payment.

b. Within 30 calendar days of receipt of a written notice of the amount being disputed and the explanation for the dispute, Los Angeles shall notify Contracting Entity in writing that it: (1) agrees that Contracting Entity is correct in its assertion concerning the disputed amount; (2) disagrees with Contracting Entity's assertion concerning the disputed amount and shall provide an explanation for its disagreement; or (3) needs an additional 15 calendar days to investigate the assertion by Contracting Entity. If requesting an additional 15 days, Los Angeles must provide an explanation as to why the additional time is required to complete its investigation. Failure to respond in writing within 30 calendar days, or within 45 days if an extension is requested, of receipt of Contracting Entity's written notice will result in Los Angeles being deemed to have agreed with the assertion of Contracting Entity.

c. If Los Angeles notifies Contracting Entity that it disagrees with Contracting Entity's position on the disputed amount, Los Angeles shall simultaneously provide written notification to Contracting Entity of a date and time for a meet and confer. The dispute resolution process described in this Section and in Section VIII.C.4 may only be initiated if Contracting Entity has paid at least 85% of the invoice and deposited any remaining disputed amounts into an interest bearing joint account. Any costs or attorney's fees associated with pursuit of a billing dispute will be borne by the Party incurring said costs or attorney's fees

d. Contracting Entity and Los Angeles shall receive interest from the joint account in proportion to the amount of principal of the joint account that they receive upon resolution of the dispute. The Parties agree to provide written authorization for release of the funds within 30 days following the resolution of the amount in dispute in accordance with the agreement. If the disputed amount was greater than the 15% withheld pursuant to Section VIII.C.3.a above, Los Angeles shall return any amounts due to Contracting Entity within 30 days following the resolution of the dispute together with interest at the same rate that the joint account was earning.

4. Other Disputes

a. Each Party to this Agreement may submit any Dispute related to or arising under this Agreement to non-binding mediation by delivering a Notice of Dispute to the other Party.

b. The written Notice of Dispute prepared by the Party shall be delivered to the other Party in accordance with Section IX O The Notice of Dispute shall clearly describe the basis of the Dispute and the Sections of the Agreement under which the Dispute arises

c. The non-binding mediation shall be conducted by Judicial Arbitration Mediation Services (JAMS) or an equivalent mediation service agreed to by the Parties.

d. Unless otherwise agreed, a mediator shall be appointed within forty-five (45) days of the date the Notice of Dispute is delivered to hear the Dispute and provide a written determination. The mediator shall be chosen jointly by the Parties. If the Parties cannot agree, the Los Angeles County Superior Court shall appoint the mediator. Employees or agents of Los Angeles or Contracting Entity are ineligible to serve as the mediator.

e. The mediation shall be held within ninety (90) days of the date the Notice of Dispute is delivered.

f. Any statute of limitations applicable to any claims, rights, causes of action, suits, or liabilities of whatever kind or nature, in law, equity or otherwise, whether known or unknown, shall be tolled during the mediation process. For purposes of this Section, the mediation process shall commence upon the service of a Notice of Dispute to the other Party pursuant to Section VIII.C.4.a above. For purposes of this Section, the mediation process shall be deemed complete ten (10) days after service of the mediator's written notice of the conclusion of the mediation.

IX. GENERAL PROVISIONS

A. Supersedence

Upon execution of this Agreement, any and all existing agreements or contracts between Los Angeles and Contracting Entity concerning the use of the Amalgamated System are hereby rescinded, except for a settlement agreement relating to the Pending Actions and for those provisions relating to flow monitoring pursuant to Section IV.I.3.

B. Applicability To Others

1. Future Wastewater Service Contracts or Agreements

a. After the Date of Execution, Los Angeles agrees that any other agreement or contract relating to wastewater service entered into by and between Los Angeles and any Entity shall comply with the Universal Terms, the Federal Clean Water Act, the Clean Water Grant Revenue Program, and the State Revolving Fund Loan Program

requirements, and as they may be amended from time to time, or any other such statutes or regulations as mutually agreed by the Parties, except as otherwise provided in Section IX.B.1.b.

b. Los Angeles may enter into wastewater service agreements or contracts with jurisdictions or organizations that do not comply with the Universal Terms provided that:

(1) all flow originating from any jurisdiction or entity signing such an agreement shall be considered to have originated from Los Angeles,

(2) any jurisdiction or entity signing such an agreement shall be billed an equivalent General Fund Reimbursement Charge unless otherwise prohibited by law, and

(3) there will be no additional costs to the Contracting Entity.

c. Los Angeles shall not authorize or permit any Entity which is not signatory to a wastewater service agreement or contract that complies with the Universal Terms to acquire or use any capacity in excess of the amount said Entity is expressly authorized to use by virtue of its wastewater service agreement or contract with Los Angeles in effect on the Date of Execution of this Agreement. If an Entity which is not signatory to a wastewater service agreement or contract complying with the Universal Terms discharges in excess of the amount of flow or Strength to which it is entitled by the wastewater service agreement or contract in effect on the Date of Execution of this Agreement, Los Angeles will undertake legal proceedings to invalidate the existing agreement or contract and/or force the Entity to return their flow to within the contract limits and/or remove their wastewater discharge from the Amalgamated System.

2. Copies of New Agreements

If Los Angeles, after the Date of Execution, proposes to enter into any new wastewater service agreement or contract or to supplement, revise, or add an addendum to any existing wastewater service agreement or contract, then Los Angeles shall provide Contracting Entity with a copy of the same, in its final form, at least thirty (30) days prior to either the date the matter is presented to the governing body of Los Angeles or the date of execution by Los Angeles, whichever is earlier.

C. Revenue Program

Each Party shall prepare a Revenue Program as required by state and federal requirements. Following the initial approval of the Party's Revenue Program by the State Water Resources Control Board, or the successor agency, subsequent revisions or modifications shall only be required to maintain compliance with state and/or federal requirements.

D. Admissions by Parties

Nothing in this Agreement constitutes an admission of liability by either Party. This Agreement and any documents prepared in connection herewith may not be used as evidence in any litigation, except as necessary to interpret or enforce the terms of this Agreement.

E. Construction of Agreement

Each Party, with the assistance of competent legal counsel, has participated in the drafting of this Agreement and any ambiguity should not be construed for or against any Party on account of such drafting.

F. Each Party Bears Own Costs

Each Party is to bear its own costs, expenses, and attorneys' fees arising out of or in connection with the subject matter of this Agreement and the negotiation, drafting, and execution of this Agreement. Each of the Parties understands that this Agreement includes all claims for loss, expense and attorneys' fees, taxable or otherwise, incurred by it or arising out of the Pending Actions.

G. Waiver of Breach

No waiver or indulgence of any breach or series of breaches of this Agreement shall be deemed or construed as a waiver of any other breach of the same or any other provision hereof or affect the enforceability of any part or all of this Agreement. No waiver shall be valid unless executed in writing by the waiving Party.

H. Awareness of Contents/Legal Effect

The Parties expressly declare and represent that they have read the Agreement and that they have consulted with their respective counsel regarding the meaning of the terms and conditions contained herein. The Parties further expressly declare and represent that they fully understand the content and effect of this Agreement and they approve and accept the terms and conditions contained herein, and that this Agreement is executed freely and voluntarily.

I. Agreement Binding on All

This Agreement shall be binding upon and shall inure to the benefit of each of the Parties, and each of their respective agents, employees, directors, officers, attorneys, representatives, principals, shareholders, sureties, parents, subsidiaries, affiliates, successors, predecessors, assigns, trustees or receivers appointed to administer their assets, and attorneys of any and all such individuals and entities. All the covenants contained in this Agreement are for the express benefit of each and all such persons described in this Section. This Agreement is not intended to benefit any third parties.

J. Counterparts

This Agreement may be executed in counterparts. This Agreement shall become operative as soon as one counterpart hereof has been executed by each Party. The counterparts so executed

shall constitute one Agreement notwithstanding that the signatures of all Parties do not appear on the same page.

K. Severability

Should any non-material provision of this Agreement be held invalid or illegal, such invalidity or illegality shall not invalidate the whole of this Agreement, but, rather, the Agreement shall be construed as if it did not contain the invalid or illegal part, and the rights and obligations of the Parties shall be construed and enforced accordingly.

L. Captions

The captions contained herein are included solely for convenience and shall not be construed as part of this Agreement or as full or accurate descriptions of the terms hereof.

M. Choice of Law

This Agreement shall be construed and enforced pursuant to the laws of the State of California.

N. Authority to Enter into This Agreement

Each Party represents and warrants that its respective obligations herein are legal and binding obligations of such Party, that each Party is fully authorized to enter into this Agreement, and that the person signing this Agreement hereinafter for each Party has been duly authorized to sign this Agreement on behalf of said Party.

O. Notice

1. Any notice required under this Agreement shall be written and shall be served either by personal delivery, mail or fax.

2. In the case of service by personal delivery or fax, no additional time, in days, shall be added to the time in which a right may be exercised or an act may be done.

3. In the case of service by mail, notice must be deposited in a post office, mailbox, subpost office, substation, or mail chute, or other like facility regularly maintained by the United States Postal Service, in a sealed envelope, with postage paid, addressed to the representative(s) of the Party on whom it is to be served, at the office set forth in Section IX.O.4 below. The service is complete at the time of deposit. Any period of notice and any right or duty to do any act or make any response within any period or on a date certain after service of notice by mail shall be extended five days. Any period of notice and any right or duty to do any act or make any response within any period or on a date certain after service of notice by Express mail or other method of delivery providing for overnight delivery shall be extended by two court days.

4 Any notice required by this Agreement shall be served on the following representative(s) of the Parties:

City of Los Angeles:

City of Los Angeles
Bureau of Sanitation
433 S. Spring Street, Fourth Floor
Los Angeles, CA 90014

Attention: Financial Management

Contracting Entity:

City of Santa Monica
1685 Main Street
Santa Monica, CA 90401

Attention: Director, Environmental and Public Works Management Department

The Parties may, upon written notice, add or substitute representatives or addresses.

P. Amendments and/or Changes to Agreement

Any amendments and/or changes to this Agreement must be in writing, signed by a duly authorized representative of the Parties hereto, and must expressly state the mutual intent of the Parties to amend this Agreement as set forth herein. The Parties to this Agreement recognize that the terms and conditions of this Agreement which are set forth herein in the Sections preceding this Section have been arrived at through the collective negotiations of the following entities: The City of Los Angeles and the City of Beverly Hills, the City of Culver City, County Sanitation Districts Nos. 4, 5, 9, 16 and 27 of Los Angeles County, the City of El Segundo, the City of San Fernando and the City of Santa Monica. The Parties hereby agree that no amendments and/or changes may be made to the Universal Terms of this Agreement as set forth in the Sections which appear in this Agreement preceding this Section without the negotiated, collective agreement of Los Angeles and either seventy five percent (75%) of the Agencies or Agencies representing seventy five percent (75%) of all the flow discharged by the Agencies. The Parties also hereby recognize that each Agreement between Los Angeles and an Agency named herein shall contain this requirement as part of said Agreement. The Parties further recognize that the Agreements between Los Angeles and each of the Agencies named herein may contain terms and conditions set forth in Sections which appear after this Section which are necessitated by the relationship between Los Angeles and the individual Contracting Entity. However, any such additional Sections shall not alter, modify or change the terms and conditions of the Agreement as set forth in the Sections preceding this Section

X. SPECIFIC TERMS AGREED UPON BETWEEN CONTRACTING ENTITY AND LOS ANGELES

A. Definition

1. **"Moss Avenue/Coastal Interceptor Sewer System" or "CISS"** means pipelines, manholes, valves, pumps, structures, controls, and other appurtenant facilities of the Moss Avenue Pumping Station and portions of the Coastal Interceptor Sewer System, as set forth in Exhibit A.

B Expenses and Revenues Comprising the CISS Charge

1. Contracting Entity will levy upon Los Angeles a charge equal to the expenses of the CISS for the Fiscal Year, as described in Section X.B.3 below less the revenues associated with the CISS, as described in Section X.B.5 below ("CISS Charge"). The CISS Charge paid by Los Angeles shall be considered to be the same as the capital and operation and maintenance (O&M) costs of the Moss Avenue Pumping Station and portions of the Coastal Interceptor Sewer for purposes of determination of Amalgamated System Expenses as set forth in Section II.B.2.a.(12).

2. Contracting Entity will have sole discretion relating to any alterations, expansion, modifications, improvements, relocation, replacement, construction or reconstruction of any part of the CISS.

3. The expenses used to determine the CISS Charge shall include the following:

   a. The O&M costs of the CISS

   b. The direct capital costs of the CISS, for the purposes of upgrading existing facilities and providing new and expanded facilities.

   c. Costs of administrative, management and support activities at Contracting Entity which are directly charged to the CISS or allocated as overhead to the CISS.

   d. The costs associated with support facilities such as laboratories and maintenance yards to the degree that those facilities are used by the CISS

   e. The costs of portable equipment, such as vehicles and computers, to the degree that the equipment is used by the CISS.

   f. The following costs, to the extent that they are not already included in either the direct O&M or capital costs or in the overhead allocated to the CISS, added to the labor component of O&M and capital costs: compensated time off, retirement and fringe benefits.

   g. Principal and interest payments on any loan that is attributable to the CISS, the proceeds of which are included in revenues to be credited against expenses in determining the CISS Charge pursuant to Section X.B.5.b.

   h. Liability as provided in Sections VI.B and C, as made applicable to Contracting Entity's service to Los Angeles pursuant to Section X.D.

4. The expenses used to determine the CISS Charge shall not include the following:

   a. Costs related to Contracting Entity's wastewater collection system, except for the CISS.

   b. Costs of issuance, interest and retirement of principal related to Contracting Entity's capital financing program, except as provided in Section X.B.3.g

   c Costs related to the inspection, monitoring and enforcement programs for the Industrial Dischargers either located in Contracting Entity or monitored by Contracting Entity on behalf of another Entity, including associated administrative and laboratory services.

   d Costs of billing, collection and enforcement activities which are related to Contracting Entity's internal customers.

5. The revenues to be credited against expenses in determining the CISS Charge shall include the following:

   a Any grant receipts, FEMA funds, or other state or federal appropriations that offset specific CISS expenses.

   b. Any receipts of loans from the federal and/or state governments (e.g. from the State Revolving Fund) that are used to offset CISS expenses, provided that Los Angeles does not separately receive loans to offset its share of CISS expenses.

6. The revenues used to determine the CISS Charge shall exclude the following:

   a. Proceeds from Contracting Entity's capital financing program, including any bonds, certificiates, commercial paper or other securities, except as included pursuant to Section X.B.5.b.

   b. Interest and penalties for late payments pursuant to Section X.C.6

   c Interest from a joint account established because Los Angeles disputes a portion of a bill for CISS Charge pursuant to Section VIII.C.3, as made applicable to Contracting Entity's service to Los Angeles pursuant to Section X.D.

7. For purposes of calculating the CISS Charge, the expenses for capital repairs and improvements on the portions of the CISS from reach H to gauging station SM-1, as defined in Exhibit A and more specifically identified as the 30-inch diameter and 36-inch diameter gravity flow mains along Main Street from Pico Boulevard to the southerly boundary of Contracting Entity at SM-1, which expenses are incurred by Contracting Entity from the Date of Execution through five years from the Date of Execution, shall be limited to the following:

   a. Repairs for which FEMA or any other agency will provide full funding at no cost to Los Angeles or the Amalgamated System, and

   b Emergency repairs.

C. Aministration of the CISS Charge

1. Five Year Projections

Contracting Entity will annually provide to Los Angeles an estimate of the CISS Charge consistent with Section X.B above, broken down between O&M and capital, for each of the following five years. The estimated charges shall be provided to Los Angeles no later than five months before the start of the Fiscal Year for which the first year's estimated charge applies.

2. Annual Estimated Bill

Contracting Entity will prepare and submit an annual estimated bill containing bi-monthly installments of the CISS Charge to Los Angeles. Each of these installments shall be equal to Contracting Entity's budgeted costs that are included as CISS expenses less Contracting Entity's budgeted revenues which are subtracted from the expenses, pursuant to Section X.B above, divided by six (6). The bill shall be postmarked to Los Angeles no later than 60 days prior to the start of the Fiscal Year for which the bill applies. Los Angeles shall be responsible for billing and collecting from the Agencies, including Contracting Entity, their Proportionate Shares of the CISS Charge by including the charge in its calculation of the Amalgamated System Sewerage System Charge, pursuant to Section II.B.

3. Annual Reconciliation Invoice

Within two months following the conclusion of each Fiscal Year, Contracting Entity will submit to Los Angeles a reconciliation invoice for the CISS Charge for that Fiscal Year. The reconciled charge shall be calculated as the total actual expenses incurred by Contracting Entity in the Fiscal year, that are included in the CISS Charge pursuant to Section X.B.3. Contracting Entity shall credit bi-monthly installments made by Los Angeles during the Fiscal Year and any revenues received by Contracting Entity in the Fiscal Year pursuant to Section X.B 5 against the reconciled charge. The invoice shall provide a breakdown of the costs included in the charge to reflect O&M and Capital costs.

4. Payment

a. Bi-Monthly Payments

(1) Los Angeles shall pay Contracting Entity the amounts of the bi-monthly installments of the CISS Charge, prepared pursuant to Section X.C.2, for each Fiscal Year in a timely manner so that they are postmarked by the last business day of July, September, November, January, March, and May, respectively, or within 30 days of receipt of the annual bill by Los Angeles, whichever occurs later.

(2) The Parties may mutually agree, in lieu of both Parties making payments to each other, to offset the amounts owed by Los Angeles to Contracting Entity pursuant to Section X.C 4.a.(1) against amounts owed by Contracting Entity to Los Angeles under the bi-monthly invoice pursuant to Sections III.B and C.

b. Annual Reconciliation

(1) If the net reconciled CISS Charge calculated pursuant to X.C.3 is positive, Los Angeles shall pay Contracting Entity the net amount on the reconciliation invoice within 30 days of its receipt. Los Angeles may choose to pay only its Proportionate Share of the net CISS Charge within 30 days. However, since the CISS Charge is included as an Amalgamated System Expense pursuant to Section II.B.2.a.(12), Los Angeles shall be responsible for billing and collecting the Agencies' Proportionate Shares of the CISS Charge as part of their Amalgamated System Sewerage System Charges. If Los Angeles elects to pay only its Proportionate Share of the net CISS Charge within 30 days, then it shall pay Contracting Entity the Agencies' Proportionate Shares of the CISS Charge within ten (10) days of receipt of payment from the Agencies, or no later than 60 days after receipt of invoice, regardless if the Agencies have paid Los Angeles.

(2) If the net reconciled CISS Charge calculated pursuant to X.C.3 for a Fiscal Year is negative, Contracting Entity shall pay Los Angeles the net amount on the reconciliation invoice within 90 days following the conclusion of the Fiscal Year.

(3) The Parties may mutually agree, in lieu of both Parties making payments to each other, to offset the amounts owed by Los Angeles to Contracting Entity pursuant to Section X.C.4.b (1) against amounts owed by Contracting Entity to Los Angeles under the annual reconciliation invoice pursuant to Sections III.B and C.

5. Segregated Account for the Los Angeles' CISS Charge

a. Contracting Entity has set aside funds equal to the sum of Four Million Eight Hundred Thirty-one Thousand Four Hundred Forty-seven Dollars and sixty-eight Cents ($4,831,447.68) into a segregated interest-bearing account(s) titled the Moss Avenue/Coastal Interceptor Sewer System Costs (Los Angeles) Account(s) (the "Account(s)") for the benefit of Los Angeles and designated solely for the purpose of paying Los Angeles' Proportionate Share of the CISS Charge. Contracting Entity may use the Account(s) funds to pay for Los Angeles' Proportionate Share of the CISS Charge calculated using expenses incurred from and after and revenues received from and after January 1, 1999, pursuant to Section X.B.

b. The Account(s) shall earn interest, compounded daily, at the same rate as Los Angeles earns on the pooled investment of its wastewater system funds. Within two weeks following the end of each quarter of each Fiscal Year in which the Account(s) was open, Los Angeles shall provide to Contracting Entity a statement of the average rate of interest earned by the Los Angeles City Treasurer on its wastewater system funds during each month in that quarter. Within two weeks of receiving each interest rate statement from Los Angeles, Contracting Entity shall submit to Los Angeles a statement of the daily balance(s) in the Account(s) during the quarter covered by Los Angeles' statement, with the interest earnings applied to the balance(s) at the monthly rates reported by Los Angeles. All interest earned on the Account(s) shall be available to pay the CISS Charge and will be credited against amounts owed by Los

Angeles for its Proportionate Share of the CISS Charge. This credit will be reflected in the annual reconciliation invoice.

c. Any remaining balance(s) in the Account(s), shall be paid to Los Angeles within thirty (30) days of the earlier of the following:

(1) Final payments have been made to contractors for all ongoing construction, rehabilitation and /or replacement of the CISS facilities

(2) December 31, 2002

For purposes of calculating interest, the Account(s) shall be closed at the end of the Fiscal Year in which the remaining balance(s) in the Account(s) has been paid to Los Angeles as set forth above, or in which the balance(s) in the Account(s) has been depleted in paying for the CISS Charge After the end of that Fiscal year, Contracting Entity shall finalize the calculation of interest on the Account balance(s) during the Fiscal Year and shall credit any interest that has not been used to pay the CISS Charge against the next reconciliation invoice submitted to Los Angeles.

6. Late Payment

Any payments of the CISS Charge that are late shall be subject to interest on the original amounts due at the Prime Rate in effect when the payment first became due plus one percent (1%) for payments that are 1 to 30 days late, the Prime Rate in effect when the payment first became due plus five (5) percent for payments 31 to 60 days late, and the Prime Rate plus ten (10) percent for payments more than 60 days late, not to exceed the maximum rate allowed by law. As long as payment, including applicable interest and penalties is made within 120 days, it shall not be deemed to constitute a Default for "nonpayment"

D. Operation, Liability, Compliance and Conflicts

The provisions of Sections VI and VIII are hereby incorporated by reference, as if fully set forth herein, with the following exceptions:

1. The duties and responsibilities of Los Angeles shall be the duties and responsibilities of Contracting Entity and the duties and responsibilities of Contracting Entity shall be the duties and responsibilities of Los Angeles,

2. All references to the "Amalgamated System" or "System" shall be replaced by references to the "CISS",

3. All references to "the Local System" shall be replaced by reference to "Contracting Entity's wastewater collection system, not including the CISS," and

4. Reference to "accept and treat" in Section VIII.A.2.a shall be replaced by reference to "accept and convey."

E. Continuation of Dry Weather Diversion Flows from Pico-Kenter Storm Drain

The Parties acknowledge and agree that, despite the supersedence of existing agreements pursuant to Section IX.A, all the terms and conditions of Agreement No. 84370, relating to diversion of dry weather discharge from the Pico-Kenter drain to the Hyperion Treatment Plan will continue in full force and effect until the Contracting Entity public works project known as the Dry Weather Runoff Reclamation Facility ("DWRRF") is completed and fully functional or until Agreement No. 84370 expires under its own terms.

XI EFFECTIVE DATE

A To become effective, both this Agreement and a settlement agreement relating to the Pending Actions must be executed by Contracting Entity and Los Angeles. The effective date shall be the latter of the Date of Execution of this Agreement or the date of execution of the settlement agreement.

B For purposes of billing and payment, the provisions of Sections I through X of this Agreement shall not become effective until July 1, 1999. The charges for Fiscal Year 1998-99 shall be calculated in the same manner that the charges for Fiscal Year 1997-98 were determined.

1. By May 1, 1999 Los Angeles shall prepare an estimated invoice for Fiscal Year 1998-99 in an amount equal to 90% of the total invoice for Fiscal Year 1997-98. By July 1, 1999 Contracting Entity shall pay the estimated invoice for Fiscal 1998-99.

2. By December 1, 1999 Los Angeles shall prepare a reconciliation invoice for Fiscal Year 1998-99 in an amount equal to the total charges for Fiscal Year 1998-99 less the estimated payment previously made. Contracting Entity shall pay the reconciliation invoice within 30 days of its receipt.

ATTEST:

J. Michael Carey
Los Angeles City Clerk

4/21/99

CITY OF LOS ANGELES

By: _____
Richard Riordan, Mayor

Date: APR 16 1999

Approved as to Form:

James K. Hahn
Los Angeles City Attorney

Christopher M. Westhoff
Assistant City Attorney

ATTEST:

Maria Stewart
Santa Monica City Clerk

CITY OF SANTA MONICA

By: _____
John Jalili, City Manager

Date: March 29, 1999

Approved as to Form:

Marsha Jones Moutrie
Santa Monica City Attorney

City of **Santa Monica**

NDRY TO IDAHO

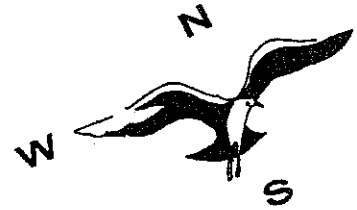
. OF ARIZONA

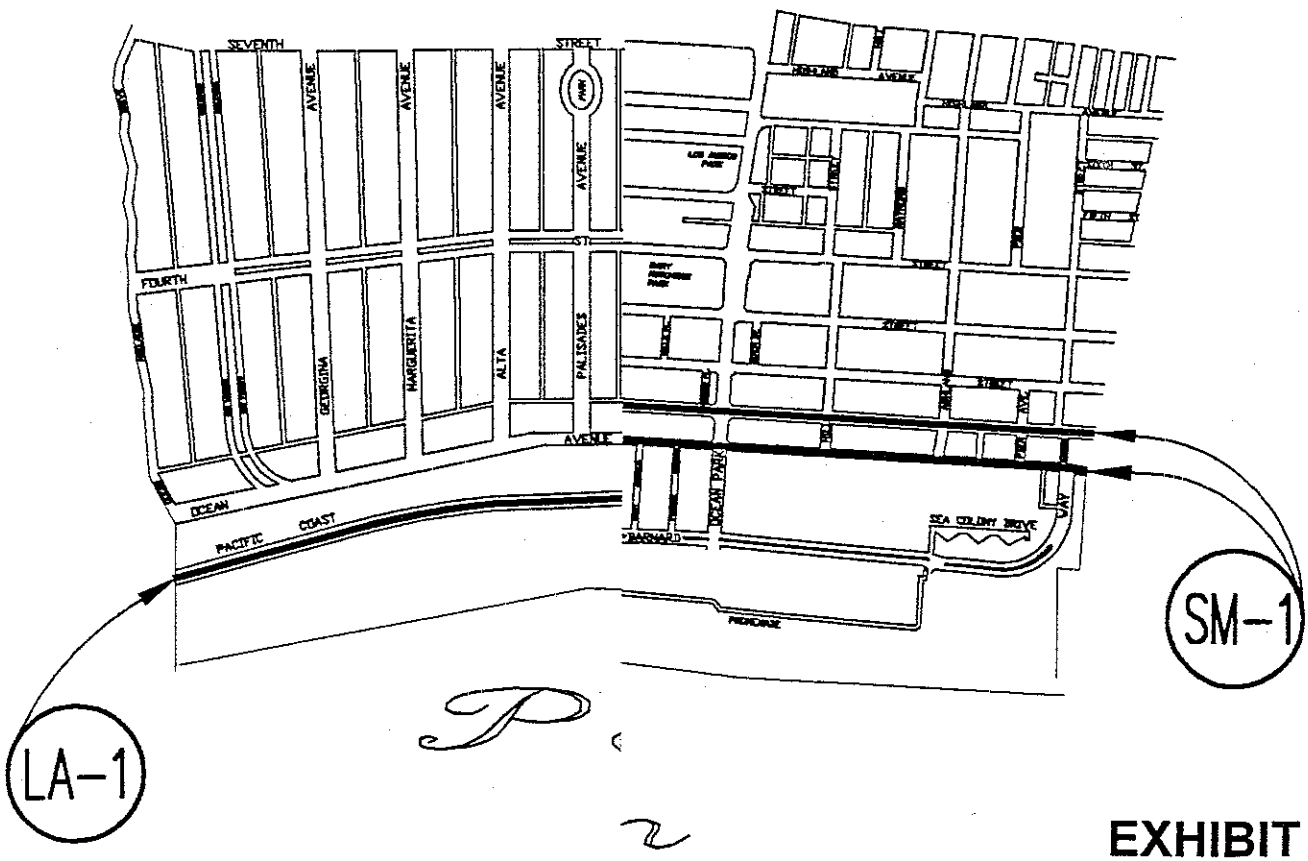
)F ARIZONA TO
TATION

TATION AND FORCE
'O OCEAN AVE.

CE MAIN TO
39" GRAVITY
9" GRAVITY

LVD. TO S'LY
ATED 30"+36"
4" RELIEF LINE
LVD. TO S'LY CITY LIMITS





P

2

EXHIBIT A

EXHIBIT B

General Fund Reimbursement Charge = $(V_{ERS} - V_{PI}) \times (V_{AS} \div V_{CLA}) \times (V_{PT} \div V_{DI}) \times P_{CE}$

Where:

V_{ERS} = Value of emergency response services based on the operating budget as set annually by the Los Angeles City Council;

V_{PI} = Value of Los Angeles pre-designated income for emergency response services operation expenses, including income from county, state or federal grants, allowances, revenue sharing, etc. which are designated or restricted to funding emergency response services operating expenses; fees and charges specifically charged by Los Angeles for emergency response services; income from any assessment or tax specifically designated for emergency responses services; and any other income which may only be used for the benefit of emergency response services operation expenses;

V_{AS} = Value of the Amalgamated System, calculated by inflating the original costs of acquiring the assets by two percent (2%) per year and then depreciating the costs using the same asset lives used by Los Angeles in its accounting reports. The value of the Amalgamated System shall exclude the value of land, easements, underground sewers and interceptors, facilities replaced by newer facilities, and unused or abandoned facilities;

V_{CLA} = Total assessed value of all real and personal property, excluding the assessed value of land, in Los Angeles. This value includes the value of all county assessed real and personal property minus the assessed value of the included land; the value of all state assessed real and personal property minus the value of the included land; and the value of all Los Angeles real and personal property minus the value of the included land. The value of Los Angeles property, excluding land, should be the total for the assets in the Los Angeles fixed asset register, excluding underground pipes and land. The asset values shall be calculated by inflating the original costs of acquiring the assets by two percent (2%) and then depreciating the costs using the same asset lives used by Los Angeles in its accounting reports;

V_{PT} = Value of property tax revenue available for general fund expenditures. This amount excludes property taxes collected for debt service as well as property tax assessments approved by a popular vote that are collected for a specific purpose, or property tax assessments collected for another agency;

V_{DI} = Value of all discretionary income received by Los Angeles from property taxes, sales taxes, business taxes, license fees, grants, allotments, income sharing, investment income, etc. This value excludes income collected for debt service and income collected for a specific service (such as water, sewer, electric service charges, etc.); and

P_{CE} = Contracting Entity's Proportionate Share

CITY OF SANTA MONICA
OFFICE OF THE CITY ATTORNEY
1685 Main Street, Room 310
Santa Monica, California 90401

TELECOPIER TRANSMISSION

DATE: March 31, 1999

PLEASE DELIVER TO: Gil Borboa

TELECOPIER NUMBER: **(310) 393-6697**

FROM: Linda Moxon

TELEPHONE NUMBER: (310) 458-8336
FAX NUMBER: (310) 395-6727

NUMBER OF PAGES INCLUDING THIS PAGE: 13

HARD COPY TO FOLLOW BY MAIL Yes No x

RE: **FINAL HYPERION SETTLEMENT AGREEMENT WITH CITY OF LA**

COMMENTS **See Pages 4-5, Sections 1 c. and d. re: Statements which we need to submit to LA for CISS costs.**

D

F

Contract #7451 ccs

SETTLEMENT AGREEMENT

This SETTLEMENT AGREEMENT ("Settlement Agreement") is made and entered into by and between the CITY OF LOS ANGELES ("Los Angeles") and the CITY OF SANTA MONICA (hereinafter referred to as "Contracting Entity"), by and through their respective counsel, with respect to the facts and circumstances giving rise to Civil Action No. BC 034185 and a related case, Case No. BC 128412 (hereinafter collectively referred to as "Pending Actions"), now pending in the Superior Court for the Central Judicial District, County of Los Angeles, State of California.

RECITALS

A. Los Angeles owns and operates certain facilities and appurtenances which provide for the conveyance, treatment and disposal of wastewater for Los Angeles, the Contracting Entity, and other entities throughout Los Angeles County.

B. Disputes have arisen between Los Angeles and Contracting Entity in regard to a number of matters pertaining to the conveyance, treatment and disposal of wastewater, as well as charges regarding the same.

C. Los Angeles and Contracting Entity desire and intend to, and do, by this Settlement Agreement, settle any and all claims that each has or may have against the other, which arose or could have arisen out of the Pending Actions.

NOW, THEREFORE, in consideration of the mutual promises specified herein and for good and valuable consideration, Los Angeles and Contracting Entity agree as follows:

1. By February 11, 1999, Contracting Entity and Los Angeles will take the following actions:

a. Contracting Entity will submit a disbursement request to the Trustee of its Wastewater Enterprise Revenue Bonds (Hyperion Project) (the "Bonds") for a payment to Los Angeles drawn on the Bond Improvement Fund and shall make payment to Los Angeles as described herein. The disbursement request will be for an amount equal to outstanding charges accrued and owing by Contracting Entity to Los Angeles for capital costs relating to the treatment, conveyance and disposal of wastewater by Los Angeles for Fiscal Years 1995-96, 1996-97 and 1997-98 ("1996-1998 Capital Costs") as calculated under the new Model Contract formula set forth in Exhibit "A". Los Angeles and Contracting Entity agree that the total amount of 1996-1998 Capital Costs due for Fiscal Years 1995-96, 1996-97 and 1997-98 is the sum of Eight Million Six Hundred Ten Thousand Four Hundred Dollars ($8,610,400 00). Los Angeles agrees that upon receipt of payment in this amount, Contracting Entity will have no further liability or obligation for 1996-1998 Capital Costs accrued and owing by Contracting Entity for Fiscal Years 1995-96, 1996-97 and 1997-98.

b Contracting Entity will set aside funds equal to the outstanding charges for operation and maintenance related to treatment, conveyance and disposal of wastewater by Los Angeles and to administration of the existing service agreement between Contracting Entity and Los Angeles, which charges are accrued and owing by Contracting Entity to Los Angeles for Fiscal Years 1995-96, 1996-97 and 1997-98 ("1996-98 O&M Treatment and Conveyance Costs"), after deduction of operation, maintenance and related contract administration costs of the Moss Avenue Pumping Station and portions of the Coastal Interceptor Sewer System ("CISS Facilities") owed by Los Angeles for Fiscal Years 1995-96, 1996-97 and 1997-98 ("1996-98 CISS O&M Costs").

Los Angeles and Contracting Entity agree that the total amount of 1996-98 O&M Treatment and Conveyance Costs accrued and owing by Contracting Entity to Los Angeles is $5,201,800.00. The Parties further agree that the total amount of 1996-98 CISS O&M Costs owed by Los Angeles to Contracting Entity is $368,900.22. After deduction of the 1996-98 CISS O&M Costs, the net amount owed by Contracting Entity, equal to the sum of Four Million Eight Hundred Thirty Two Thousand Eight Hundred Ninety-nine Dollars and Seventy-eight Cents ($4,832,899.78), will be deposited into an interest-bearing account titled the Moss Avenue/Coastal Interceptor

Sewer System Costs (Los Angeles) Account(s) (the "Account(s)"), as more fully described in a section to be added to the Model Contract containing below-the-line language to resolve any issues which are unique to Contracting Entity and Los Angeles ("Additional Section"), and will be held by Contracting Entity for the benefit of Los Angeles as described herein. The funds in the Account(s) will be designated solely for the purpose of paying Los Angeles' proportionate share of capital, operation and maintenance costs of the CISS Facilities which are incurred by Contracting Entity on or after January 1, 1999, as more fully described in the Model Contract and the Additional Section This proportionate share shall be the same as set forth in the Model Contract.

c. Los Angeles will pay Contracting Entity its share of costs incurred through December 31, 1998 for capital costs relating to the CISS Facilities, including the design costs for rehabilitation and/or replacement of the CISS Facilities and construction costs at the Moss Avenue Pumping Station.

Los Angeles and Contracting Entity agree that the total amount of CISS Facilities capital costs incurred by Contracting Entity through December 31, 1998, for which Los Angeles has not yet paid its share to Contracting Entity, is $4,852,100.03, that Los Angeles'

proportionate share of this cost is 89.9322 percent, and that the resulting amount owed by Los Angeles is the sum of Four Million Three Hundred Sixty-Three Thousand Six Hundred Dollars and Thirty Cents ($4,363,600.30). Contracting Entity agrees that upon receipt of payment in this amount, Los Angeles will have no further liability or obligation for CISS Facilities costs accrued and owing by Los Angeles through December 31, 1998.

d. On or before April 1, 1999, Contracting Entity shall submit a statement to Los Angeles of the proportionate share of the CISS Facilities capital costs incurred by Contracting Entity from July 1, 1996 though December 31, 1998, for those Original Contracting Entities, as defined in the Model Contract, other than Contracting Entity. Within 30 days of receiving the statement, Los Angeles shall submit invoices to the Original Contracting Entities, other than Contracting Entity, for the amounts shown on the statement and shall remit to Contracting Entity the payments it receives from the Original Contracting Entities within thirty (30) days of receiving the payments.

letter to SL 4-30-99 $455,409.73

On or before October 1, 1999, Contracting Entity shall submit a statement to Los Angeles of the proportionate share of the CISS Facilities capital costs incurred by Contracting Entity from January 1, 1999 to June 30, 1999 or the date of execution of the Model Contract,

whichever is later, for those Original Contracting Entities other than Contracting Entity and for Los Angeles, to the extent that Los Angeles' proportionate share exceeds the balance of the Account(s). Within 30 days of receiving the statement, Los Angeles shall submit invoices to the Original Contracting Entities, other than Contracting Entity, for the amounts shown on the statement, shall remit to Contracting Entity the payments it receives from the Original Contracting Entities within thirty (30) days of receiving the payments and shall remit to Contracting Entity Los Angeles' proportionate share of the CISS Facilities capital costs in excess of the balance of the Account(s).

e. The Account(s) shall be closed and any remaining balance(s) of the account(s) shall be paid to Los Angeles within 30 days of the earlier of the following:

(1) Final payments have been made to contractors for all ongoing construction, rehabilitation and/or replacement of the CISS Facilities.

(2) December 31, 2002.

f. Los Angeles and Contracting Entity are refining the language of the Additional Section, including language which addresses the funding of costs relating to the CISS Facilities. The parties agree to use best

efforts to complete the Additional Section and execute the Model Contract with the Additional Section within thirty (30) days of execution of this Settlement Agreement.

2. Upon occurrence of: (a) receipt of payments described in Section 1a above, and (b) confirmation that the Account(s) has (have) been established with the amount deposited into the Account(s) as described in Section 1b, Los Angeles will provide Contracting Entity with a fully executed Request for Dismissal Without Prejudice of the entire action as against Contracting Entity for filing with the Court. The Parties agree that the action, or any portion thereof, may be refiled by Los Angeles by June 1, 1999 against any Party that fails to fully comply with the terms of this Settlement Agreement.

3 Upon receipt of payment described in Section 1c above, Contracting Entity shall provide Los Angeles with a fully executed Request for Dismissal Without Prejudice of the entire action as against Los Angeles for filing with the Court. The Parties agree that the action, or any portion thereof, may be refiled by the Contracting Entity by June 1, 1999 if Los Angeles fails to fully comply with the terms of this Settlement Agreement.

4. Within thirty (30) days of execution of this Settlement, Contracting Entity and Los Angeles shall execute the Model Contract with the Additional Section, which shall include the following provisions:

a. The Contracting Entity shall pay a General Fund Reimbursement Charge to compensate the Los Angeles general fund for the Contracting Entity's share of providing emergency response services to the Amalgamated System. The General Fund Reimbursement Charge shall be based on a methodology which complies with federal and state revenue program guidelines. In no case shall the General Fund Reimbursement Charge exceed an amount equal to the operation and maintenance portion of the Amalgamated System Sewerage System Charge levied upon each respective Contracting Entity times the lesser of: (1) 5%, or (2) the percentage of the operating revenues levied upon the Los Angeles wastewater enterprise fund as a general fund reimbursement, pursuant to Los Angeles Municipal Code Section 64.60 and as that Section may be amended from time to time.

b. Provided the Contracting Entity interpleads or otherwise names Los Angeles in any court challenge, the Contracting Entity shall not be responsible for any General Fund Reimbursement Charge that is held to be invalid or illegal, or any amount that is held to be excessive for Los Angeles or any Agency by a court of competent jurisdiction, and Contracting Entity shall be reimbursed or receive a prompt credit to the extent ordered by a court of competent jurisdiction.

c. There will be no further discharge of Surface Water Runoff directly or indirectly to the Amalgamated System unless and until Los Angeles has obtained the requisite waiver from the Environmental Protection Agency.

d. Language to resolve any below-the-line issues which are unique solely to Contracting Entity and Los Angeles. The Parties agree that such language shall include, without limitation: (i) provisions relating to Los Angeles' responsibility to pay its proportionate share of costs of the CISS Facilities and to bill and collect amounts due for CISS Facilities costs incurred after the effective date of the Model Contract from all other contracting entities which are subject to the terms of the Model Contract, as more fully described in the Model Contract, including establishment of the Account(s) described herein to fund the CISS Facilities costs and (ii) provisions relating to the continuation of the shared cost arrangement relating to the dry weather urban runoff flows from Pico-Kenter Storm Drain, on the terms and conditions set forth in Agreement No 84370 between the Parties, until the agreement is replaced by an agreement to design, construct and operate a dry weather runoff reclamation facility to treat runoff from the Pico-Kenter Storm Drain.

5. The Parties' obligations to execute the Model Contract with the Additional Section are subject to the express condition precedent that, by April 1, 1999, the City of Burbank agrees to execute a contract for wastewater services in a form substantially similar to the Model Contract. If this condition should fail, the affected Parties agree to exercise best efforts to preserve their existing agreements embodied within the Model Contract and to incorporate the so-called "shortfall" language (attached hereto as Exhibit "B") and to promptly negotiate final contract terms which address the Contracting Entity's request to be relieved of any shortfall liability in the event the charge is held invalid and to execute such agreements forthwith.

6. The Settlement Agreement may be executed in counterparts. The Settlement Agreement shall become operative as soon as one counterpart hereof has been executed by each party. The counterpart so executed shall constitute one Agreement notwithstanding that signatures of both parties do not appear on the same page.

7. Should any non-material provision of this Settlement Agreement be held invalid or illegal, such invalidity or illegality shall not invalidate the whole of this Agreement but, rather, the Settlement Agreement shall be construed as if it did not contain the invalid or illegal part, and the rights and obligations of the Parties shall be construed and enforced accordingly.

8. Each party shall bear its own attorneys' fees and costs arising from the actions of their own counsel in connection with the pursuit or defense of the claims in the Pending Actions, this Settlement Agreement, the matters and documents referred to herein, and all related matters, unless otherwise set forth in this Settlement Agreement or the Model Contract.

9. Los Angeles and the Contracting Entity represent, warrant and agree that:

a. The person(s) executing this Settlement Agreement and any agreements or documents called for under this Settlement Agreement has the full right and authority to take such action and to commit fully and bind such party according to the provisions hereof; and

b. They have received independent legal advice from their own counsel and other advisors with respect to the advisability of making the settlement provided herein and with respect to the advisability of executing this Settlement Agreement and any agreement or documents called for under this Settlement Agreement.

10. This Settlement Agreement, and any agreement or documents called for under this Settlement Agreement, constitute an integration of the entire understanding and agreement by and between Los Angeles and the Contracting Entity. Any representations, warranties, promises or conditions,

whether written or oral, not specifically incorporated herein, shall not be binding upon any of the parties hereto, and the parties acknowledge that they have not relied, in entering into this Settlement Agreement, upon any representation, warranty, promise or condition not set forth herein.

APPROVED AS TO FORM:

JAMES K. HAHN
Los Angeles City Attorney

By: _____
Christopher M. Westhoff
Assistant City Attorney

DATED: 2/5, 1999

APPROVED AS TO FORM:

By: _____
MARSHA JONES MOUTRIE
Santa Monica City Attorney

DATED: 2-17, 1999

CITY OF LOS ANGELES

By: _____
Ellen Stein, President
Board of Public Works

DATED: 2-5, 1999

CITY OF SANTA MONICA
a municipal corporation

By: _____
JOHN JALILI
City Manager

DATED: 2-17, 1999

ATTEST TO:

_____
MARIA STEWART
Santa Monica City Clerk

WATER RESOURCES PROTECTION PROGRAMS

The City of Santa Monica's Water Resources Protection Programs monitors discharges into the sanitary sewer and storm drain systems to ensure the overall health of Santa Monica Bay is maintained.

For more detailed information regarding our programs, go to our website at ***http://www.water.smgov.net***

City of Santa Monica

Wastewater Operations.....**(310) 458-8532**
After hours.....**(310) 826-6712**

The City of Santa Monica thanks the City of Los Angeles for their generosity and their contribution of resources and information for this brochure.

City of Santa Monica
A Sustainable Community
sustainablesm.org

WATER RESOURCES PROTECTION PROGRAMS
City of Santa Monica, 1212 5th Street, 3rd Floor
Santa Monica, CA 90401 Tel: 310-458-8235

www.water.smgov.net

City of Santa Monica

WATER POLLUTION PREVENTION

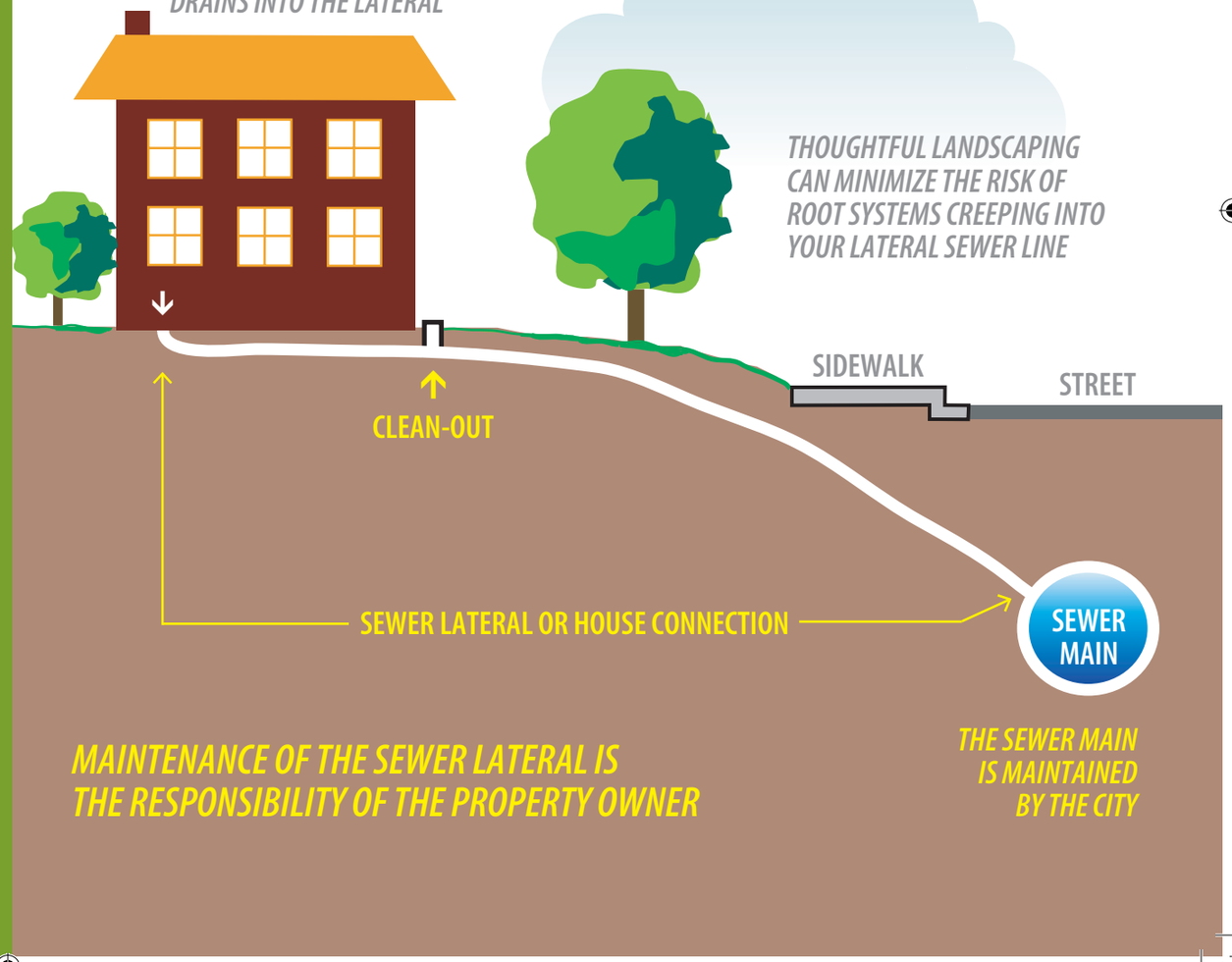
KEEP ROOTS OUT OF YOUR SEWER LATERAL

Photo courtesy of the City of Los Angeles Public Works Department

70% - 80% OF SEWAGE OVERFLOWS ARE CAUSED BY TREE ROOTS.

www.water.smgov.net

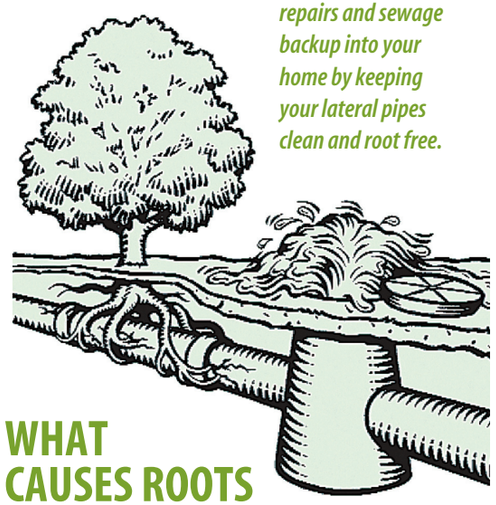
TYPICAL HOME SEWER CONNECTION



WHAT IS A LATERAL?

The City of Santa Monica operates and maintains its own wastewater collection system. An important contributor to our system is a network of laterals. Laterals are small underground sewer pipes, sometimes called sewer service lines (usually four inches, or less, in diameter) that carry wastewater from homes and businesses to the public sewer in the street. If you own your home, you also own the lateral from the end of your property's internal plumbing to its connection with the City's sewer main. Property owners are responsible for the proper operation and maintenance of their lateral.

Avoid costly plumbing repairs and sewage backup into your home by keeping your lateral pipes clean and root free.



WHAT CAUSES ROOTS TO GROW IN PIPES?

Roots are attracted to water and nutrients in sewage that escape through cracks or loose joints in sewer laterals. This means roots will move towards and penetrate through cracks, loose joints or any openings in sewer pipes. This happens even in the winter when trees appear to be dormant. The main point is that **leaky laterals invite roots and roots cause blockages**.

Once inside, roots will continue to grow and fill the pipe to create a root mass, commonly referred to as a "root ball," which may become matted with grease, paper, and other solid matter. This root ball will eventually clog your lateral. Continued growth of the root ball in a private lateral can eventually affect the City's sewer system.

As roots continue to grow within a pipe, they begin to expand and exert pressure at their point of entry and throughout the pipe. This can result in a ruptured pipe. A ruptured sewer pipe can be costly to fix or replace.

Signs that a sewer is blocked include slow moving drains, gurgling sounds from a toilet bowl, and sewage coming up from a clean-out. A pipe that is not cleared will become completely blocked and may rupture.

WHY IS IT IMPORTANT TO MAINTAIN LATERALS?

The majority of all lateral blockage occurrences are from private homes. Your lateral is particularly susceptible to tree root intrusion, especially if it is over ten years old. About half of the roots in the City's sewer system enter through defective private laterals. Tree root intrusion can damage your lateral and cause it to collapse over time. Earthquakes and settlement of soils are sometimes the cause of cracking or separation of joints that allow roots to intrude on your lateral. Another common cause of lateral blockage is from excessive buildup of grease (a result of pouring cooking oil and fat down the kitchen sink). Properly maintaining your lateral will increase its useful life, help prevent sewage from backing into your home and **minimize Sanitary Sewer Overflows (SSOs) into the streets, which lead into the storm drain system and into the Santa Monica Bay**. It will also help you to avoid early and costly bills to repair or replace your lateral. Moreover, failure to properly maintain your lateral may result in you being liable or responsible to your neighbors or the City for damages caused by your lateral.

The City maintains public sewers by periodically removing and clearing roots using mechanical equipment; systematically inspecting street sewers using Closed Circuit Television (CCTV) technology to identify structural defects; and by planning and implementing capital improvement projects to repair, rehabilitate or replace structurally deficient sewers.

It is important that property owners inspect, maintain, repair and/or replace private laterals to help reduce sewer overflow and protect private and public sewers from further damage.

WHAT CAN YOU DO TO PREVENT SEWER BACKUP PROBLEMS?

As a homeowner, you need to know where your lateral is and how it runs across your property into the main sewer system. When planting trees or shrubs, consider the location of your lateral and try not to plant near it. Do some basic research when selecting a tree to plant on your property and consider where to plant a tree in relation to a lateral.

BE PROACTIVE:

- Maintain and repair your sewer lateral.
- Never pour grease or put solids down your drains.
- Know where the clean-outs (access points) to your sewer line are for quick access to clear blockages. A clean-out is a vertical access pipe from an underground lateral to the surface.
- Keep your clean-out cap on and in good shape to keep out debris.
- Never remove your clean-out cap. This may cause sewage discharge into the street storm drain.
- Regularly snake or rod your lateral. Snaking your lateral often removes blockages. A licensed plumber can help you address these problems. A plumber often will thread a flexible cable with a cutting tool or rod attached to the end of it into your sewer line. If the cable meets resistance, then there is a good chance that there is a blockage. However, a broken or collapsed pipe may require digging up the line and replacing portions of the pipe. You are responsible for keeping the entire length of your lateral clear of clogs and blockages.

HOW DO I FIX A BLOCKED OR COLLAPSED LATERAL?

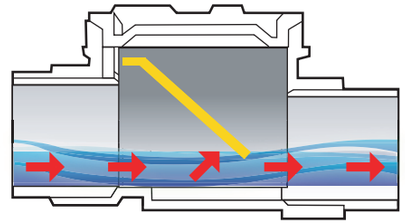
Call our Wastewater Division first regarding overflows, backups or for any sewer related questions at (310) 458-8532.

If you have a sewer backup or root intrusion problem, contact a licensed plumber or sewer contractor before deciding on a remedy. Consult the Yellow Pages under the heading "Sewer" or "Plumbing" for information on companies that perform CCTV pipe inspection and root control. It is always a good idea to get multiple quotes for any substantial amount of work.

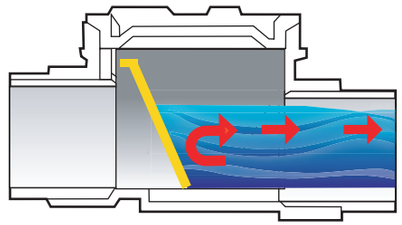
DO I NEED A SEWER BACKWATER VALVE?

Your property is connected to the public sewers. Some properties have been built so that an obstruction in the public sewer should not cause a sewage backup. In other areas, plumbing fixtures may be set at a lower elevation than the upper most manhole in the street. In these areas, a sewage backup is more likely, and a backwater valve can help prevent one from occurring. Additionally, if you have experienced a sewage backup or tree root intrusion at your property, you should consider having a backwater valve installed. A backwater valve only allows sewage to flow one way – into the sewer mainline in the street and not back into your home. A licensed plumber can address these issues and properly install a backwater valve if necessary and provide tips to ensure the longevity of its operation.

HOW DOES A SEWER BACKWATER VALVE WORK?



A properly installed backwater valve allows household wastewater to flow into the sanitary sewer.

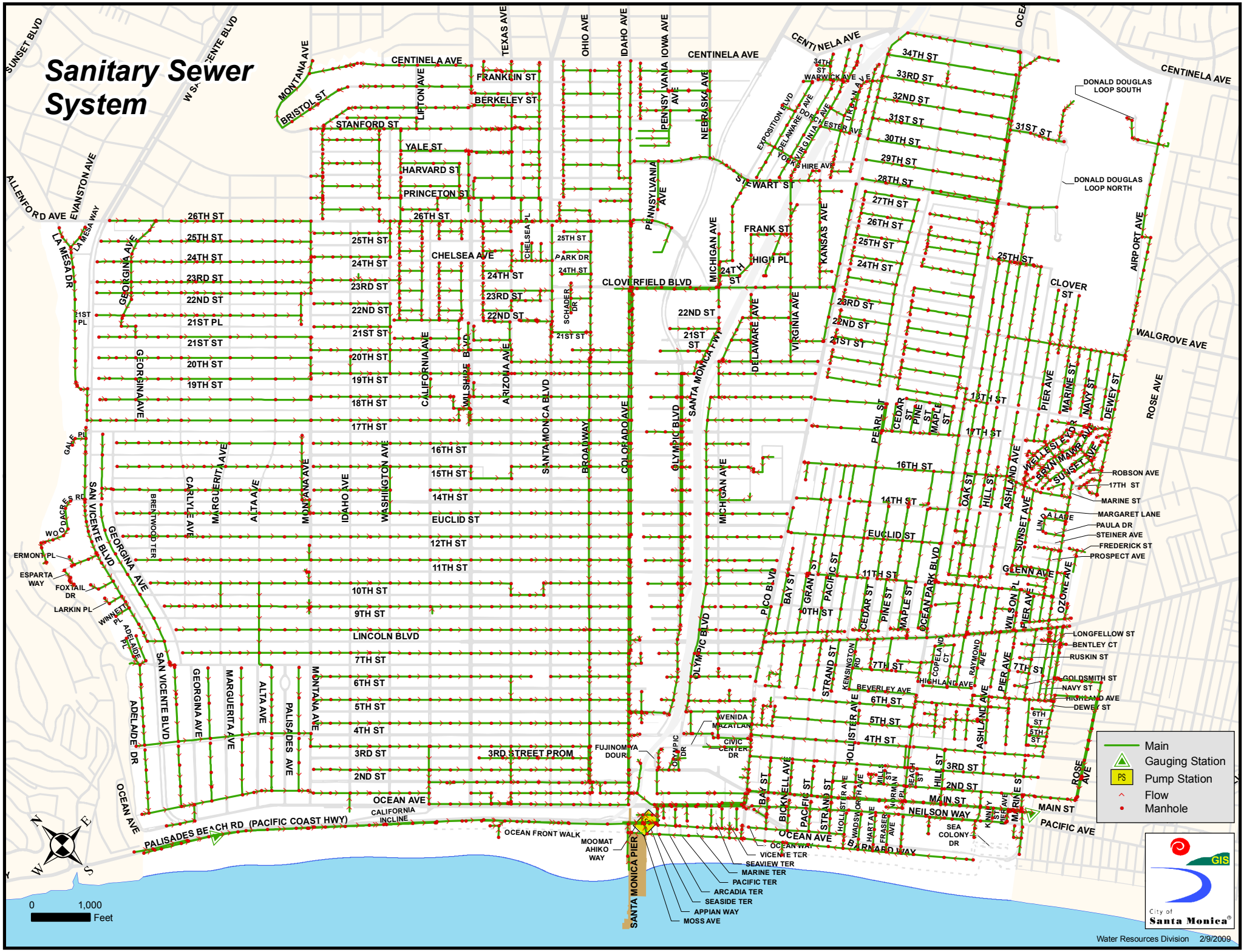


And it prevents sewage from entering your home from your lateral or the main sewer line.

WHO CAN ANSWER YOUR QUESTIONS?

We are pleased to provide you with the practical and technical information you need to protect the public's health and the environment. Call the City of Santa Monica's Wastewater Operations at: ***(310) 458-8532***, or visit our website at ***www.water.smgov.net.***

Appendix C


Sanitary Sewer System
Main
Gauging Station
PS Pump Station
Flow
Manhole
0 1,000 Feet
City of Santa Monica
Water Resources Division 2/9/2009

Appendix D

City of Santa Monica

Public Works Department – Water Resources Division

Standard Operating Procedures

TITLE:	TASK #:
JOB TO BE PERFORMED:	FREQUENCY: As Required

PROCEDURES

The section of the SSMP provides an overview and summary of the City's emergency response documents and procedures for sewer overflows.

6.1 Overflow Emergency Response Plan Elements

Pursuant to current regulations, the City has developed and implemented a sanitary sewer overflow emergency response plan (SSO Plan). The SSO Plan identifies measures to protect public health and the environment in the event of an overflow and includes the following elements:

- Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
- A program to ensure appropriate response to all overflows;
- 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.
- Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the SSO Plan and are appropriately trained;
- Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
- Procedures to ensure that all reasonable steps are taken to contain untreated wastewater and prevent discharge of untreated wastewater to waters of the United States and minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

6.2 Sanitary Sewer Overflow Emergency Response Plan

An SSO is any overflow, spill, release, discharge, or uncontrolled diversion of untreated or partially treated wastewater from a sanitary sewer. SSOs may contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients and oil and grease and can adversely impact human health and the

environment. In order to minimize the potential for health and environmental impacts, the City has developed the following plan and standard operation procedure (SOP) for responding to all SSOs.

SSO Emergency Response Plan:

City water resources and inspection staff have been trained to respond promptly upon receiving notification of an uncontrolled sewage discharge. An SSO can originate from residential structures, commercial facilities or City related devices, (e.g. broken sewer lines, and/ or manhole covers). Time is of the essence in responding to SSO incidents in order to control and reduce the potential for impact to the storm drain system and waters of the State.

The City SOP for responding to typical SSOs is available in hardcopy by request. The SSO plan involves two basic steps.

Step# 1- Upon notification, City Wastewater staff (both Operations and Water Resources Protection Program (WRPP) inspector) responds and identifies the location of the overflow and its characteristics (i.e. apparent source, volume released, extent, and whether or not it is on private property etc.). They also determine the potential cause of the SSO and the responsible party. This information is recorded on the SSO Response Form. To ensure containment, CSM Wastewater Staff locate the nearest down gradient (down slope) storm drain and determine if the release has, or will, reach this drain. Based on site conditions, the onsite incident manager decides if immediate action or additional staff or equipment is needed to prevent the release from reaching this drain. If the SSO occurred because of a blockage at a main City sewer line, the onsite incident manager will direct CSM Wastewater Staff to immediately contain the discharge by completely berming the storm drain inlet and to clear the blockage. Once the nature and extent of the discharge are known, staff will begin immediate cleanup of discharges caused by a City-owned pipeline; typically by vacuuming the discharge for lawful disposal.

The information collected on the SSO response form along with any other relevant information is reported by Wastewater Staff to all required outside agencies such as the Office of Emergency Services, LA County Dept. of Health Services, LA Regional Water Quality Control Board, and if applicable, LA Co. Flood Control and City of Los Angeles (see below for more detail).

Staff also ensures the release area (all public areas) are cleaned and disinfected after the normal sewer flow is restored and the blockage relieved. If the release has reached the storm drain system, staff will routinely check a couple of storm drain catch basins downstream from the contaminated catch basin to verify how far the release has traveled down the storm drain line. Depending on the severity of the release, samples may be required to be taken from those catch basins and analyzed for pathogenic organisms. Sampling, if any, is implemented at the discretion

of the Water Resources Protection Program (WRPP) Inspector on site, and is based on site specific observations. If there is a question about the necessity for sampling, onsite staff confers with the WRPP supervisor on duty. All WRPP Inspector staff have basic sampling equipment available as part of their standard response equipment.

If a release from a City-owned main has visibly impacted private property, the onsite staff will photo document all such impacts identified at the time of the release response. Staff also documents the contact information of the property owner and any notes regarding the potential impact in their field notebook. Questions regarding repair costs are directed to the **CSM Office of Risk Management at (310) 458-8910.**

Step # 2- If the SSO occurred because of a blockage or other problems within a privately owned lateral line resulting in a discharge to the ground surface and /or into the public right-of-way such as City streets, alleys or side-walks, CSM Wastewater staff will contain and prevent further discharges into the Public Right- of- Way as described in Step #1, above. This is typically done by using a City vacuum truck. CSM staff then contact the subject property owner/manager and direct them to immediately contact a private plumber to relieve the sewer blockage. In instances where there is no effective response from the property owner or manager to abate the SSO within a reasonable time frame (less than an hour), or at the discretion of the onsite incident manger or the WRPP Inspector, the water service may be temporarily turned off at the subject property after proper notifications are made by calling the CSM Water Division staff and requesting a temporary water service disruption.

Before attempting to turn off the water service, CSM Wastewater Staff will try to contact the property owner or manager. Wastewater Operations Staff will make notification if a WRPP Inspector is unavailable (i.e. after hours, weekends). Notification is made verbally and by posting a large placard in a common area and a door hanger on each unit or residence/ business. Each placard and door hanger has contact information for the CSM and the Los Angeles County DHS Public Health. If possible, door hanger notifications are placed on each tenant's door depending on access.

Note: The duration, and therefore volume, of the SSO discharge is estimated from when the SSO is first reported to the City, NOT when staff arrives to the site. Staff are required to accurately estimate the volume of the discharge and note how the estimate was derived in their field book. Photographs of the SSO site are also included in the incident file when damage to private property is known to have occurred.

Other agency contact/reporting contacts include:

- **Office of Emergency Services (OES) at (800) 852-7550** to obtain an OES Control#. After business hours including weekends, CSM Wastewater staff makes the notification to OES and provides WRPP inspection staff with the OES Control #.

- **LA County Dept. of Health Services at (213) 974-1234** and obtain a ticket #. After business hours including weekends, CSM Wastewater staff contact the agency and provide WRPP inspection staff with the incident ticket#.

- **Los Angeles County Department of Health Services (DHS) "Public Health" at 310-665-8484** (8:00am-5:00pm) to respond if sewage has been released at private properties. After business hours including weekends Wastewater Staff call the Los Angeles County Department of Health Services at (213) 974-1234. Los Angeles County DHS will direct clean-up of private property outside surfaces i.e. grass, sidewalk, and patio areas. Wastewater staff does not perform clean up services on private property and therefore the clean-up is the responsibility of the property owner.

- **LA Regional Water Quality Control Board at (213) 576-6657**. The Contact is Augustine Anijielo who may also be e-mailed at aanijielo@waterboards.ca.gov. After hours including weekends, Wastewater Staff will notify the agency.

-For sewer discharges into the **County of Los Angles Flood Control** storm drain system, call 24/7 dispatch – **1-800-675-4357**. For Sewer discharges into the City of Los Angeles storm drain system, call **1-800-974-9794**. WRPP inspection staff calls in incidents during regular work hours. Wastewater Staff makes this call during after hours, including weekends.

-For a significant spill (i.e. a spill that would bypass treatment and/or enter Santa Monica Bay) the **Recreational Waters Program at (626) 430-5360** is also contacted.

-For a significant spill into Ashland or Rose Diversions the contact is:

- Jared Deck at (562) 861-0316
- Mike Stephenson: (323) 776-7610

During weekends and after hours: Dispatch: (800) 675-4357

For logistics planning, staff has determined it typically takes 45-60 minutes for a private plumber to arrive and/ or relieve the sewer blockage on private property. Prior to the arrival of the plumber if the water is not shut down, City staff ensure that the property owner makes all efforts to contain sewer discharges on their property and not allow any discharges onto the

Public Right-of- Way. Any discharge that reaches the public right-of-way will be contained by City staff.

Wastewater Staff monitor the SSO site continuously to make sure the plumbing problem is corrected and sewage at the site has been cleaned up and the release area is disinfected. Wastewater Operations Staff will disinfect the affected City street and sidewalk (public areas) immediately in contact with the release using chlorine/water solution. Large discharges from private property requiring clean-up will be billed to the property owner for cost recovery of labor and equipment use. Once the sewer blockage is cleared, and the contaminated area cleaned and disinfected, the property owner/manager may call and request the Water Division to turn the water service back on, if needed.

If there is an extensive damage to privately owned properties because of an overflow and release of sewage due to a SSO, depending on the cause, staff will call or advise the property owner to contact directly **LA County Dept. of Health Services (DHS) at 310-665-8484** to evaluate the health hazard and recommend detailed procedures for proper clean-up. Staff will also contact the CSM Office of Risk Management to evaluate any damages if the SSO is caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

It is important to remember that discharges into the City storm drain system from SSO's typically are captured by one of the City diversion BMP projects such as SMURFF, Wilshire Blvd., Montana Ave., Rose Ave., Ashland Ave., Sunset-Canyon and Centinela-Pearl projects and therefore normally do not reach Santa Monica Bay as long as those diversion projects are operational at the time of the incident. Staff will confirm the operational status of the subject BMP project as part of the SSO response procedures.

Once the SSO response incident is concluded, WRPP Inspection Staff forward the required data to the **California Integrated Water Quality System (CIWQS)** by visiting the agency database at: http://ciwqs.waterboards.ca.gov and entering on-line the requested information about the SSO. WRPP Inspection Staff also retain a copy of all completed reports about an SSO incident in a folder designated for SSO records.

SSO Equipment and Training

Typical equipment required for response to an SSO, depending on location and size of the release, includes, but is not limited to, personal protective gear, reporting forms, traffic control devices such as cones or barricades, absorbent materials, sampling equipment, disinfectant solutions, pipe snake, vacuum trucks, backhoe, replacement pipe, and street sweepers.

The City conducts regular training to familiarize staff with health and safety issues, standard response procedures, and regulatory and technological developments. The City also encourages staff to recommend more efficient ways of completing work tasks based on staff field experience.

MATERIALS LIST
Task

DESCRIPTION	PART NUMBER	QUANTITY

PERSONNEL CLASSIFICATION	NUMBER	EQUIPMENT TYPE	QUANTITY
TIME OR QUANTITY			

PREPARED BY: _____ **DATE APPROVED:** _____

Water Resources Protection Programs
Sanitary Sewer Overflow Response Form

WRPP/Wastewater Staff Responding:	**SR #**

Date & Time of Notification	Date & Time of Response

Location of SSO | City | State | Zip

Santa Monica, CA

Point of Origin:
City Main
Private Lateral

Was there damage to private property? Y N Possibly

If yes, list damage:

Has discharge impacted public right of way? YES / NO

Location:

Complainant's Name | Telephone ( )

Date of Discharge	Start Time of Discharge	End Time of Discharge

Total Gallons Discharged	Total Gallons Entered Storm Drain System	Total Gallons Contained

Cause of SSO

☐ F.O.G. ☐ Roots ☐ Construction Debris

☐ Solid Matter (ie. paper) ☐ Vandalism ☐ Other:_____

Responsible Party's Name (if determined) | Telephone ( )

Responsible Party's Address | City | State | Zip

Final Destination of Spill: Storm Drainage Basin and BMP** **Is BMP operational? Y N

☐ Pier (SMURRF) ☐ Wilshire Boulevard (Diversion) ☐ Ashland Avenue (County Diversion)

☐ Pico-Kenter (SMURRF) ☐ Montana Avenue (Diversion) ☐ Rose Avenue (County Diversion)

☐ Sunset-Canyon ☐ Centinela-Pearl ☐ Santa Monica Bay

☐ Other _____

Actions taken to clean up and/or correct problem:

□ Hydrojet □ Vactor □ CCTV □ Disinfect □ Follow up □ Other _____

□ Notified/Recommended responsible party to service their private lateral connection. Name : _____

Contact No: _____

Spill Estimation Method

☐ Visual (e.g. bucket/barrel)

☐ Calculated

☐ SSCSC Manhole Overflow Gauge

☐ SSO Flow Out Table (Table A)

☐ Photos Taken

Notes / Assumptions / Calculations / Diagram

Agency Contacts	Contact Info	Date & Time	Notes
LA County Public Works (Rose/Ashland Diversion only)	Steve Caudillo - (562) 505 0243		
Office of Emergency Services	(800) 852-7550		
LA Co. Dept. of Health Services	(213) 974-1234		
LA Regional Water Quality	(213) 576-6657		
Control Board	aanijielo@waterboards.ca.gov		□ e-mailed
LA Co. Flood Control (If applicable)	(800) 675-4357		Ashland, Rose, & County lines
City of Los Angeles (If applicable)	(800) 974-9794		If spill will affect Hyperion
City of Santa Monica staff (WRPP)			□ e-mailed
CIWQS (WRPP)	http://ciwqs.waterboards.ca.gov		□ report complete
CSM SMURRF Diversion Operator	Jeff Grooms	(310) 453-6015 x5272	(310) 883-8350 (c)
CSM Risk Management	Michael Mack	(310) 458-2201	(310) 993-3557 (c)
	Deb Hossli	(310) 458-4907	(310) 463-4580 (c)

Emergency Phone Contact List for SSO

NOTE: FOR EACH DEPARTMENT, CALL FROM TOP TO BOTTOM UNTIL CONTACT IS MADE.

Wastewater	Water Resources Protection Program (310) 458-8235 – Main Office	Risk Management (in case of property damage)
Dispatch (310)458-8532	George Rodriguez Water Resources Protection Programs Coordinator (310)901-7069	Oles Gordeev Risk Manager (310)458-8910 office (310)463-4580 cell
Danny Gomez Wastewater Supervisor (310)629-9436	David Tu Senior Water Resources Protection Specialist (310)901-8145	Michael Mack Liability Claims Adjuster (310)458-2201 ext. 5944 (310)993-3557 cell
Val Guzman Wastewater Crew Leader (310)629-9419	Corey Bracken Water Resources Protection Specialist (310)490-3184	
Joe Felix Wastewater Crew Leader (310)729-8628	Sunny Wang Water Resources Manager (424) 330-9636	

After Hours: (310) 826-6712

Fire Department: (310) 458-8660 **Police**: (310) 458-8491

City of
Santa Monica

TO: **Homeowners/Tenants/Property Managers/Business Owners**

RE: **Sewage Overflows into Homes or Businesses**

The City has responded to a report of a sewage overflow into your home or business and, as part of its response, would like to provide you with the following important information:

- **Clearing and/or Repairing the Sewer Line.** The City's Wastewater Division staff will advise you soon after they arrive at your property whether the blockage (or other problem) that caused the sewage overflow occurred in the City's main sewer line or in your private sewer lateral. If the blockage occurred in the City's main sewer line, Wastewater Division staff will clear and/or repair the line as soon as possible and restore the line to its normal operating condition. If the blockage occurred in your private sewer lateral, you will be responsible for clearing the lateral and any necessary repair. It is important that you immediately contact a local plumber who can respond within one hour to prevent further negative impacts caused by the sewage overflow. You can contact the **Better Business Bureau at la.bbb.org** to obtain information and ratings on plumbers and contractors in the Los Angeles area.

  When experiencing a sewage overflow, please do not use any water or water related fixtures in your home as doing so may cause further damage. The City may need to turn off your water in order to mitigate health/environmental issues.

- **Clean Up.** In the event of a sewage overflow caused by a blockage (or other problem) in the City's main sewer line, the City's Wastewater Division will clean all sewage in the public right-of-way and report the spill to the appropriate State and County oversight agencies. You are responsible for cleaning up all sewage on your private property, both inside and outside the structure. Your homeowners' insurance or property insurance agent should be well-versed in handling these matters and able to provide a list of firms that specialize in emergency clean-up services.

- **Filing a Claim.** If you or your insurance carrier believes the City is responsible for the sewage overflow and you or your carrier intends to seek reimbursement for expenses incurred in connection with the incident or for any damage to personal property, you must file a claim against the City. **The City's Risk Management Division staff is available to explain the claim filing and damage documentation process; they can be reached during normal business at 310.458.8910.**

- **Documenting Damages and Costs.** The City's evaluation of the claim will focus on three key areas: 1) determining whether the City is responsible for the sewage overflow, and if so, 2) determining whether the cost incurred to mitigate any damage was reasonable and appropriate, and 3) whether the claim for damage to personal property is reasonable and appropriate. It is your obligation to present satisfactory evidence in support of the claim. Therefore, it is imperative that the claim package contain adequate supporting documentation. For example, the following documentation is advisable: the plumber's video footage from before and after the sewer line repair showing intrusion or blockage at the City's main sewer line, photographs of the property condition before and after clean-up, receipts for any expenses incurred or for the purchase of any personal property you claim was damaged or destroyed as a result of the sewage overflow, estimates for any necessary repairs, etc.

- **Preventing Future Sewage Overflows:** Properly maintaining your private sewer lateral is key to preventing future sewer overflows. The attached brochures provide important sewer lateral maintenance tips, as well as, information on the benefits of installing a sewer backwater valve. You can contact a licensed plumber or contractor for more information.

- **Questions?** For questions related to wastewater operations, please contact the City's Wastewater Division at 310.458.8532 during normal business hours and at 310.826.6712 for after hour emergencies. Further, the **Los Angeles County Department of Health Services (310.665.8484)** can provide detailed guidance on clean-up/disinfecting procedures for your property and answer other health related questions. For questions related to this sewage overflow incident and/or filing a claim against the City, please contact **Risk Management at 310.458.8910**.

City of
Santa Monica

Authorization for Emergency Clean-up

I, _____ (Property Owner or authorized representative) have voluntarily provided the City of Santa Monica and its authorized emergency clean-up representative with permission to enter my property located at _____in Santa Monica California for the sole purpose of mitigating the immediate impacts associated with a sanity sewer overflow (SSO) or water main failure. In this capacity, the City of Santa Monica may temporarily suspend water service to stop further discharge onto the property, and direct and oversee the mitigation and disinfection activities of its authorized emergency clean-up representative. Depending on the nature and scope of the SSO or water main failure, clean-up activities may include: water removal from the property, disinfecting and drying the affected areas to prevent health and safety issues, and carrying out other clean-up tasks necessary to mitigate immediate impacts.

I also understand that the City of Santa Monica will conduct an investigation into the cause of the SSO or water main failure. Should this investigation determine that the SSO or water main failure was caused in whole or in part by a failure or blockage in my private lateral or line, I agree to promptly reimburse the City of Santa Monica for my share of the emergency clean-up expenses. I understand the emergency clean-up activities will be performed by an outside contractor hired by the City and that I will be charged the City's rate for the work.

_____
Signature

_____
Print Name

_____
Date

SECTION 1.0: GENERAL SAMPLING PROCEDURES

This section provides basic procedures for wastewater sampling used for assessing inspection, compliance, and for monitoring the quality of sewage flows in City sewer main lines or accidental discharges to the ocean or other surface water (i.e. SSOs) with a volume of 50,000 gallons or more. The procedures outlined here are based on the U.S. EPA sampling procedures titled: Operating Procedure Number SESDPROC-306-R2. It is important to remember that the monitoring at the City's outfalls ONLY needs to be implemented if the City's diversions are not working AND the discharge (single event) exceeds 50,000 gallons. If the diversions are working, all discharges will either be diverted to the Hyperion Treatment Plant or to the City's SMURRF treatment plant. In these cases, there would be NO discharge to surface waters or the ocean. All water quality sampling will be conducted by Water Resources Protection Programs (WRPP) staff unless after hours or in the event of a City-wide emergency.

In the unlikely event that an SSO or sewer break occurs and the release volume to the storm drain is 50,000 gallons or more and none of the City's diversion structures are operable, grab samples for water quality will be collected at the appropriate storm drain outfall to receiving waters (i.e. the ocean). There are seven drainage areas in the City that have outfalls at the beach, each with their own City or County operated diversion structure. These drainage area outfalls include:

- Montana Outfall
- Wilshire Outfall
- Santa Monica Pier Outfall,
- Pico-Kenter Outfall,
- Ashland Outfall,
- Rose Outfall, and
- Sunset Canyon Outfall
- Westside Water Quality BMP (filters flows).

A figure showing the location of outfalls within City boundaries is provided in the Element 13 Appendix. Sampling of subject discharges at the Sunset Canyon or Rose Outfalls will be coordinated with LA County.

1.1 – Standard Sampling Equipment

At a minimum, the following list of equipment should be on hand for typical wastewater sampling activities. Because all sampling is site specific, it is important that knowledge of the site or file

information be utilized to ensure any necessary specialized equipment is also identified and added to this basic list. Typical sampling equipment includes:

- Chain-of-custody (COC) forms
- Gas monitor
- Clean Stainless-Steel Sampling Bailer With Chain
- Clean Teflon Beaker–for transferring liquid to sample bottles
- Cooler with double-bagged ice or "blue ice" – to maintain sample temperature at approximately 6C
- pH Meter and pH Paper
- Thermometer
- Appropriate Laboratory Cleaned Sample Bottles with applicable preservatives–be sure to have spares for selected key analytes in case of field breakage.
- Distilled Water–for small volume field decontamination of sampling equipment or person
- Personal Protective Equipment (PPE)–goggles, gloves, steel toe shoes, safety vest and hard hat
- Gallon-size Plastic Bags–for sample bottles
- Plastic Garbage Bags–for sampling waste-e.g. used PPE, etc.
- Traffic Control Equipment–cones/delineators, caution tape
- Sledgehammer and Pick–for opening manholes
- Digital Camera(charged batteries)
- Cell phone
- Paper Towels

1.2 – Parameters Field Measurements

During sampling, parameters such as temperature, pH, and EC may be measured in the field. Water quality measurements and instrument calibration details will be recorded in field books and in sampling notebooks.

1.2.1 – Field Equipment Calibration

To ensure that data are representative of the actual field conditions, field equipment will be routinely calibrated. For each calibration, the time and date of the procedure, equipment identification number, the calibration procedure and type of standards used will be recorded on field forms and in notebooks accompanying the equipment.

1.2.2 – Temperature Measurements

Temperature measurements will be made with a mercury-filled thermometer or an electronic thermistor, and all measurements will be recorded in degrees Fahrenheit.

1.2.3 – pH Measurement

The pH measurement will be made as soon as possible after collection of the sample, generally within a few minutes. The pH will be measured by immersing the pH probe into an aliquot of the sample. The pH meter will be calibrated per manufacturer specifications. Two buffer solutions (either pH-4 and pH-7, or pH-7 and pH-10, whichever most closely bracket the anticipated range of sample conditions) will be used for instrument calibration.

1.2.4 – Specific Electrical Conductance (EC) Measurement

In the event EC parameters are necessary, the EC will be measured by immersing the conductivity probe into an aliquot of the sample. The probes used should automatically compensate for the temperature of the sample. Measurements will be reported in units of micro-Siemens (µS) per square centimeter (equivalent to micromhos or µmhos) at 25 degrees Celsius (77 degrees Fahrenheit).

The EC meter will be calibrated in accordance with the equipment manufacturer's specifications and as outlined in the instruction manual for the EC meter used. The EC meter will be calibrated with a standard potassium chloride (KCl) solution recommended by the instrument manufacturer.

1.3 – Safety

Proper safety procedures must be observed at all times when collecting wastewater/water samples. It is incumbent on the sampling staff to be aware of potential hazards that may be encountered, and any special safety conditions (e.g. traffic, confined space, etc.) before planning or implementing the field sampling activity. Independent sampling consultants working for the City's Water Resources Protection Programs (WRPP) must have a site specific Health and Safety Plan (HASP) signed by a Certified Industrial Hygienist or other qualified professional. Sampling conducted by WRPP staff shall be pursuant to all relevant, applicable and most current City health and safety plan (HASP) guidelines.

1.4 – General Sampling Precautions

In order to collect representative and defensible data, field sampling must be conducted with a defined goal in mind (e.g. is the data for compliance, scheduled monitoring, or an enforcement action), and be conducted in an organized and repeatable fashion. Some general sampling precautions are:

- Store samples in a clean secure location in order to avoid contamination.
- Do not overflow bottles that contain preservatives while sampling.
- Maintain proper custody procedures at all times (i.e. do not leave samples unattended).
- Document all field activities in ink in a field notebook.
- To the extent possible, sample collection should progress from the least contaminated location to the most contaminated location in order to minimize the potential for significant cross-contamination from sampling equipment.
- If possible, segregate suspected high level contamination samples while storing and transporting from those with potentially lower levels of contamination.
- Always use a new pair of clean gloves for each sample location.
- Always use new laboratory-cleaned sample bottles.
- Always strictly observe laboratory sample preservative requirements and analytical method holding times.

1.5 – General Sampling Considerations

Because field, operational, or sampling conditions usually vary from one site to the next, the complexity of sampling at a particular site can also be markedly different from another. Key to any sample activity considerations are the specific pollutant limitations for the CSM. These can be found in CSM Municipal Code Section 5.20.040. In addition, the most recent bacterial Total Maximum Daily Load (TMDL) for Santa Monica Bay (receiving waters for our outfalls) is also relevant and applicable.

1.6 – Water Quality Samples

Grab samples will be collected to assess the water quality. The sampler will wear clean chemically resistant gloves as specified in the HASP while collecting the sample. Samples will be collected directly from the sampling device into laboratory-prepared bottles. Gloves will be changed at each individual sample location.

If known, each sampling episode should generally begin with the location having the lowest concentration of target compounds. Successive samples should generally be sampled in sequence of increasing concentration. Field QA/QC samples including equipment blanks, field blanks, trip blanks, and duplicates will be collected as necessary during each sampling event.

If a bladder pump or electric submersible pump is being used to sample, the flow rate will be adjusted to 1) approximately 100 milliliters per minute (mL/min); 2) a rate specifically selected based on discharge flow rates; or 3) as low as possible. This rate will be maintained until the discharge line has been purged and the sample collected.

All samples will be sent to a State-certified testing laboratory for analysis. Sample analysis will, at minimum, include the following methodologies:

- All outfall samples will be tested for Fecal Coliform by Method SM 9221B, Total Coliform by Method SM 9221E, Enterococcus and Fecal Streptococcus by Method SM 9230B, and in situ pH and field temperature.
- Additional analytes may be added based on knowledge of the discharge source.

1.7 – Sample Containers and Preservation

Appropriate pre-cleaned sample containers and preservatives for the analyses to be performed will be obtained from the subcontracted analytical laboratory. Appropriate sample containers, volumes, preservation, and holding time requirements are prioritized on Table 1 located in the Element 13 Appendix.

1.8 – Sample Labeling

Sample containers will be labeled before or immediately after sampling with self-adhesive tags having the following information written in waterproof ink:

- Project number;
- Sample identification number (unique);
- Date and time sample was collected;
- Initials of sample collector; and
- Preservatives used

1.9 – Quality Control Samples

To evaluate the precision and accuracy of analytical data, quality control samples, such as duplicates and blanks, will be periodically collected and/or prepared (e.g. one per location). These samples will be analyzed for the same analytes using unique (i.e. blind) sample identification number.

1.10 – Sample Handling, Storage, and Transportation

Efforts will be made to handle, store, and transport supplies and samples safely. Exposure to dust, direct sunlight, high temperature, adverse weather conditions, and possible contamination will be avoided. Immediately following collection, sample bottles will be sealed within a Ziploc bag and placed in a clean chest that contains ice (if cooling is required), and will be transported to the subcontracted laboratory as soon as practical. Samples may only be held in the dedicated sample refrigerator at the WRPP offices.

2.0 – Field Activity Documentation

The WRPP and Wastewater Division maintain all of its analytical data in an automated data system. In order to maximize the efficiency and accuracy of the data system, all laboratory data is transmitted from the laboratory to the WRRP in an electronic format (WRPP will handle all lab interactions). The responsible party on the COC will receive a copy of the data (including the accompanying COC) in a PDF format. The PDF format provides certainty that the data has not been altered after being generated by the laboratory. Another copy of the data is transmitted directly to the WRPP/Wastewater Division information and technology manager for direct downloading into the data system. It is recommended that if the PDF format is retained, that it be disposed of after three years or pursuant to the most current City document retention guideline. Both the laboratory and the data system will have possession of an approved copy of the data. The current analytical laboratory for the WRRP is the **Weck Laboratories Inc.,** located in the City of Industry, California, 91745, www.wecklabs.com. The laboratory contact is Kim Tu, **telephone: (626) 336-2139 and fax: (626) 336-2634, kim@wecklabs.com.** As the contract manager, WRPP is aware of the most current contract laboratory and contact information. If you have any questions, please contact WRPP directly.

Field activities will be documented through field notes, electronic records and/or photographic records. Field personnel will be responsible for maintaining field logs and more specific records for individual tasks being performed. Information recorded in field logs will include, but may not be limited to, the following:

- Description of field activities;
- Personnel and companies represented at the sample location or source of the discharge;
- Field and weather conditions;
- Calibration records;
- Deviations from accepted work or sampling plans, accompanied by a justification for the deviation; and
- Description of equipment problems.

Entries to field logs and task-specific data forms will be made in indelible ink and signed and dated by the personnel making the entry. If changes to entries are necessary, the person making the change will cross out the item to be changed with a single line and initial and date the change. An explanation of the change should be recorded, if necessary.

Photographs of field activities, events of conditions will be supplemented with written records of the subject, date and time of the photographs. All sample location specific information collected electronically by computerized or automated measurement devices will be kept on file at the City's

Water Division. Copies of results and records will remain within the Water Division's project files for a minimum period of three years.

2.1 – Field Data Sheets

A field record will be kept for each day of fieldwork or sampling. A sampling record will be used for each sample location to record the information collected during water quality sampling.

Water quality sampling forms will record the following information:

- Sample identification;
- Duplicate identification, if applicable;
- Date and time sampled;
- Sample location (i.e. outfall name & GIS coordinates);
- Owner's name of site of discharge source;
- Extraordinary circumstances (if any);
- Results of instrument calibration/standardization and field measurements (temperature, pH, EC) and observed relative turbidity;
- Depth from which sample was obtained (if from a diversion structure);
- Number and type of sample container(s); and
- Times and volumes corresponding to water quality measurement.

2.2 – Chain-of-Custody Procedures

The methodology described within this section is in general accordance with the procedures described in ASTM Standard D4840-88 (1993) (Practice for Sampling Chain-of-Custody Procedures) (ASTM, 1993b).

After samples have been collected and labeled, they will be maintained under chain-of-custody (COC) procedures. These procedures document the transfer of custody of samples from the field to the laboratory. Each sample sent to the laboratory for analysis will be recorded on a COC record, which will include instructions to the laboratory for analytical services.

Information contained on the triplicate COC record will include:

- Project number;
- Signature of sampler(s);
- Date and time sampled;
- Sample identification;
- Number of sample containers;

- Sample matrix (water);

- Analyses required;
- Remarks, including preservatives, special conditions, or specific quality control measures;
- Turnaround time and person to receive laboratory report;
- Method of shipment to the laboratory (i.e. hand delivered, courier, etc.;
- Release signature of sampler(s), and signatures of all people assuming custody; and
- Condition of samples when received by the laboratory.

Blank spaces on the COC record will be crossed out between the last sample listed and the signatures at the bottom of the sheet.

The field sampler will sign the COC record and will record the time and date at the time of transfer to the laboratory or to an intermediate person. A set of signatures is required for each relinquished/reserved transfer, including transfer within the City Water Division. The original imprint of the COC record will accompany the sample containers. A duplicate copy will be placed in the project file.

If the samples are to be shipped to the laboratory, the original COC record will be sealed inside a plastic Ziploc bag within the ice chest, and the chest will be sealed with custody tape, which has been signed and dated by the last person listed on the chain-of-custody. U.S. Department of Transportation (USDOT) shipping requirements will be followed and the sample shipping receipt will be retained in the project files as part of the permanent COC document. It is required that the shipping company not sign the COC forms as a receiver; instead the laboratory will sign as a receiver when the samples are delivered at the laboratory.

Note: The standard operating procedure is to hand deliver the samples to the lab, or use a lab provided courier.

3.0 – Equipment Cleaning

Equipment or sampling apparatus that contacts a sample will be decontaminated prior to use unless it is pre-cleaned during manufacture and has remained in its sanitary seal or other original packaging (i.e. disposable equipment). The purpose of decontamination is to minimize the potential for cross contamination during investigation activities.

Bailers, sampling pumps, and other non-dedicated purging or sampling apparatus will be cleaned before and after sampling each location. Factory new and sealed disposable bailers may be used for sampling, but may not be reused. Thermometers, pH electrodes, and EC probes that will be used repeatedly, will be cleaned before and after each sampling and at any time during sampling if the object comes in contact with foreign matter.

Cleaning of reusable equipment (water level probe, submersible pump, etc.) that is not dedicated to a particular sample location will consist of the following:

- Bailers – the inside and outside of bailers will be cleaned in a solution of biodegradable detergent and potable water, followed by a rinse with deionized (DI) water. The bailers may also be steam cleaned, followed by a DI water rinse;
- Pumps – downhole, reusable portions of purge pumps will be steam cleaned on the outside or washed with laboratory-grade detergent followed by a potable water rinse. If the pump does not have a backflow check valve, the inside of the pump and tubing should also be steam cleaned. For a purge pump with a backflow check valve, the interior of the pump and tubing may be cleaned by pumping a laboratory grade detergent and potable water solution through the system followed by a potable water rinse, or by steam cleaning; and
- Water Quality Meters – meters will be cleaned by rinsing the portion of the probe that was in contact with the groundwater sample in DI water, and allowing it to air dry.

Sample bottles and bottle caps will be provided by the subcontracted laboratory using standard U.S. EPA approved protocols. Sample bottles and bottle caps will be protected from contact with solvents, dust, or other contamination. Sample bottles will not be reused.

Weck Laboratories, Inc. - Sampling Guidelines

				Preservative (chill all[6], unless noted)					
Test Name	**Matrix**	**Bottle Type**	**Bottle size**	**Unchlorinated Water (Raw)**	**Chlorinated Water (Treated)**	**Soil/Solid**	**Holding Time until start of analysis**	**Analytical Technique**	**Analytical Method**
1,2,3-TCP	Water	Amber Glass	2 x 40 mL	HCl	Ascorbic/HCl		14 days	GC/MS Isot. Dil.	EPA 524.2SIM
1,4-Dioxane	Water	Amber Glass	2 x 1 L (*)	None	None		7 days	GC/MS Isot. Dil.	EPA 8270M
Acrolein/Acrylonitrile	Water	Glass	2 x 40 mL	None	Thiosulfate		3 Days	GC/MS	EPA 624/8260B
Alcohols	Water	Glass	1 x 40 mL	None	None		14 days	Dir. Inj./FID	EPA 8015B
Aldehydes	Water	Amber Glass	2 x 40 mL	$CuSO_4$	$NH_4Cl/CuSO_4$		7 Days	GC/ECD	EPA 556
Aldehydes	Water	Glass	1 L (*)	None	None		3 days	HPLC-UV	EPA 8315
Aldehydes[1]	Soil/Solid	Glass	4 oz			None	3 days	HPLC-UV	EPA 8315
Alkalinity, Total	Water	Poly	250 mL		None		14 Days	Titration	SM2320B
Anions by IC (F, Cl^-, SO_4^{2-})	Water	Poly	250 mL	None	None		28 days	IC	EPA 300.0
Anions by IC (NO_2^-, NO_3^-, PO_4^{3-})	Water	Poly	250 mL	None	None		48 hours	IC	EPA 300.0
Arsenic speciation	Water	Poly	250 mL	EDTA/acetic acid	EDTA/acetic acid		14 Days	Resin-ICP/MS	EPA 200.8
Asbestos-Sub	Water	Poly	1 L	None	None		48 Hours	TEM	EPA 100.1/.2-Sub
Bacteria-Coliform - solid/sludge/soil	Soil/solid	Glass-Sterile	4 oz			None	N/A	MTF	SM 9221B
Bacteria-Coliform - Wastewater	Water	Poly-Sterile	125 mL	Thiosulfate	Thiosulfate		6 hours	MTF	SM 9221B
Bacteria-Coliform - Drinking Water	Water	Poly-Sterile	125 mL	Thiosulfate	Thiosulfate		24 Hours	Colilert P/A or enumeration	SM 9223B
Bacteria-Enterococcus - Wastewater	Water	Poly-Sterile	125 mL	Thiosulfate	Thiosulfate		6 Hours	Enumeration Quantitray	Enterolert
Bacteria-Heterotrophic Plate Count	Water	Poly-Sterile	125 mL	Thiosulfate	Thiosulfate		24 Hours	Pour Plate Method	SM 9215B
BOD	Water	Poly	1 L	None	None		48 Hours	DO Probe	SM 5210B
BOD, Carbonaceous	Water	Poly	1 L	None	None		48 Hours	DO Probe	SM 5210
Bromate	Water	Amber Glass	40 mL	EDA	EDA		28 Days	IC	EPA 300.1
Bromate- Low Level	Water	Amber Glass	40 mL	EDA	EDA		28 Days	IC	EPA 326
Bromide	Water	Poly	250 mL	None[7]	None[7]		28 Days	IC	EPA 300.0
Bromide-Low Level	Water	Amber Glass	40 mL	None	None		28 Days	IC	EPA 300.1
Carbamates	Water	Amber Glass	1 x 40 mL	MCAA	MCAA/thiosulfate		28 Days	HPLC	EPA 531.1
COD	Water	Poly	250 mL	H_2SO_4	H_2SO_4		28 Days	Colorimetric	EPA 410.4
Chloral Hydrate	Water	Glass	2 x 60 mL	Sulfite/buffer	Sulfite/buffer		14 days	GC/ECD	EPA 551.1
Chlorate	Water	Amber Glass	40 mL	EDA	EDA		28 Days	IC	EPA 300.1
Chloride	Water	Poly	250 mL	None[7]	None[7]		28 Days	IC	EPA 300.0
Chlorine Dioxide	Water	Amber Glass	250 mL	None	None		24 Hours	Colorimetric	SM 4500CLO2D
Chlorine Residual	Water	Amber Glass	250 mL	None	None		15 Minutes[2]	Colorimetric	SM 4500CL-G
Chlorite	Water	Amber Glass	40 mL	EDA	EDA		14 Days	IC	EPA 300.1
Chlorophyll-a	Water	Amber Poly	2 x 1 L	None			48 Hours	Spectrophotometric	SM 10200H
Chromium, Hexavalent	Water	Poly	250 mL	$(NH_4)_2SO_4$ buffer pH 9.3-9.7	$(NH_4)_2SO_4$ buffer pH 9.3-9.7		24 Hours	Spectrophotometric	SM3500CR-D

Weck Laboratories, Inc. - Sampling Guidelines

Test Name	Matrix	Bottle Type	Bottle size	Preservative (chill all[6], unless noted) Unchlorinated Water (Raw)	Chlorinated Water (Treated)	Soil/Solid	Holding Time until start of analysis	Analytical Technique	Analytical Method
Chromium, Hexavalent	Water	Poly	250 mL	$(NH_4)_2SO_4$ buffer pH 9.3-9.7	$(NH_4)_2SO_4$ buffer pH 9.3-9.7		24 Hours	IC	EPA 7199
Chromium, Hexavalent	Soil/solid	Glass	4 oz	None	None		30 days	Spectrophotometric	EPA 3060/7196
Chromium, Hexavalent (low-level)	Water	Poly	250 mL	$(NH_4)_2SO_4$ buffer pH 9.3-9.7	$(NH_4)_2SO_4$ buffer pH 9.3-9.7		24 Hours (DW) 28 days (WW)	IC	EPA 218.6
Chromium, Hexavalent (low-level)	Soil/solid	Glass	4 oz	None	None		30 days	IC	EPA 3060/7199
Color	Water	Glass	500 mL	None	None		48 Hours	Visual	SM2120B
Conductivity (Specific Conductance)	Water	Poly	250 mL	None	None		28 Days	Electrometric	SM2510B
Cyanide	Water	Poly	500 mL	NaOH	NaOH/ascorbic		14 Days	FIA-Colorimetric	EPA 335.2/335.4
Dioxin-Sub	Water	Glass	2 x 1 L	None	None		1 year	HR GC/ MS	EPA 1613/8290
Dioxin-Sub	Soil/Solid	Glass	4 oz	None	None		1 year	HR GC/ MS	EPA 8280/8290
Diquat/Paraquat	Water	Amber poly	1 L	None	Thiosulfate		7 Days	HPLC	EPA 549.2
Disinfection by- products	Water	Glass	2 x 60 mL	Sulfite/buffer	Sulfite/buffer		14 days	GC/ECD	EPA 551.1
Diuron	Water	Amber Glass	1 L (*)	None	None		7 days	HPLC/UV	EPA 632
Diuron-UCMR	Water	Amber Glass	1 L (*)	$CuSO_4$/Trizma	$CuSO_4$/Trizma		14 days	HPLC/UV	EPA 532
EDB and DBCP	Water	Glass	2 x 40 mL	None	Thiosulfate		14 Days	GC/ECD	EPA 504.1
Endothall	Water	Amber Glass	250 mL	None	None		7 days	GCMS	EPA 548.1
Ethanol	Water	Glass	1 x 40 mL	None	None		14 Days	Dir. Inj./FID	EPA 8015B
Explosives	Water	Amber Glass	1 L (*)	None	Thiosulfate		7 days	HPLC/UV	EPA 8330A
Explosives	Soil/Solid	Amber Glass	4 oz	None	None		14 days	HPLC/UV	EPA 8330A
Fluoride	Water	Poly	250 mL	None[7]	None[7]		28 Days	IC	EPA 300.0
General Minerals (excluding metals)	Water	Poly	1 L	None	None		Various	Wet Chem methods	various
General Minerals (metals only)	Water	Poly	250 mL	HNO_3[3]	HNO_3[3]		6 Months	ICP-AES	EPA 200.7
General Physical (Color, Odor, Turbidity	Water	Glass	500 mL	None	None		24 Hours	Wet Chem methods	various
Glyphosate	Water	Amber Glass	1 x 40 mL	None	Thiosulfate		14 Days	HPLC	EPA 547
HAAs	Water	Amber Glass	250 mL (*)	NH_4Cl	NH_4Cl		14 days	GC/ECD	EPA 552.2
HAAs-Formation Potential	Water	Amber Glass	1 L	None	None		14 days	GC/ECD	SM 5710B/EPA 552.2
Herbicides-DW	Water	Amber Glass	250 mL (*)	None	Thiosulfate		14 days	GC/ECD	EPA 515.3
Herbicides-GW	Water	Amber Glass	2 x 1 L (*)	None	Thiosulfate		7 Days	GC/ECD	EPA 8151A
Herbicides-Soil	Soil/solid	Glass	4 oz	None	None		14 Days	GC/ECD	EPA 8151A
Mercury	Water	Glass jar	250 mL	HNO_3	HNO_3		28 Days	Cold Vapor AAS	EPA 245.1/7470
Mercury in soil/solid/sludge	Soil/Solid	Glass jar	4 oz.	None	None		28 Days	Cold Vapor AAS	SW 7471
Metals	Water	Poly	250 mL	HNO_3[3]	HNO_3[3]		6 Months	ICP/MS or ICP-AES	EPA 200.8/200.7

Weck Laboratories, Inc. - Sampling Guidelines

Test Name	Matrix	Bottle Type	Bottle size	Preservative (chill all[6], unless noted) Unchlorinated Water (Raw)	Chlorinated Water (Treated)	Soil/Solid	Holding Time until start of analysis	Analytical Technique	Analytical Method
Metals	Soil/solid	Glass/Poly	4 oz	None	None		6 Months	ICP/MS or ICP-AES	EPA 6010B/6020
Methanol	Water	Glass	1 x 40 mL	None	None		14 Days	Dir. Inj./FID	EPA 8015B
NDMA	Water	Amber Glass	2 x 1 L (*)	None	Thiosulfate		7 days	GC/MS/CI SIM	EPA1625M
Nitrate	Water	Poly	250 mL	None	None		48 Hours	IC or FIA	EPA 300.0/353.2
Nitrite	Water	Poly	250 mL	None	None		48 Hours	IC or FIA	EPA 300.0/353.2
Nitrite+Nitrate as N	Water	Poly	250 mL	H_2SO_4	H_2SO_4		28 Days	FIA-Colorimetric	EPA353.2
Nitrogen, Total Kjeldahl (TKN)	Water	Poly	250 mL	H_2SO_4	H_2SO_4		28 Days	FIA-Colorimetric	EPA 351.2
Nitrogen-Ammonia	Water	Poly	250 mL	H_2SO_4	H_2SO_4		28 Days	FIA-Colorimetric	EPA 350.1
Nitrogen-Ammonia in ww with distillation	Water	Poly	250 mL	H_2SO_4	H_2SO_4		28 Days	FIA-Colorimetric	EPA 350.1
Nitrosamines	Water	Amber Glass	2 x 1 L (*)	None	Thiosulfate		14 days	GC/MS/CI SIM	EPA 521
Odor	Water	Glass	500 mL	None	None		24 Hours	Odor	SM 2150B
Oil and Grease	Water	Glass	1 L	HCl	HCl		28 Days	Gravimetric	EPA1664
Organotins (tributyltin)	Water	Glass	1 L (*)	None	None		7 Days	GC/MS	GC/MS
Oxygen, Dissolved	Water	Glass	BOD bottle	None	None		15 Minutes[2]	O_2 Probe	SM 4500-OG
PBDEs	Water	Amber Glass	2 x 1 L (*)	None	None		14 days	GC/MS SIM	EPA 1614M
Perchlorate	Water	Poly	250 mL	None[7]	None[7]		28 Days	IC	EPA 314
Perchlorate - Low Level by LC/MS/MS	Water	Poly Sterile	125 mL	Sterile field filtration	Sterile field filtration		28 Days	LC/MS/MS	EPA 331/332
Perchlorate in soils	Soil	Glass jar	4 oz	None	None		28 Days	IC	EPA 314M
PCBs - GW	Water	Amber Glass	2 x 1 L (*)	None	Thiosulfate		7 Days	GC/ECD	EPA 8082
Pesticides-Organophosphorus	Water	Amber Glass	2 x 1 L (*)	None	Thiosulfate		7 Days	GC/NPD	EPA8141
Pesticides- Chlorinated (DW)	Water	Amber Glass	2 x 1 L (*)	None	Thiosulfate		7 days	GC/ECD	EPA 508
Pesticides- Chlorinated WW/GW	Water	Amber Glass	2 x 1 L (*)	None	Thiosulfate		7 Days	GC/ECD	EPA 608/8081
Pesticides- N/P -DW	Water	Amber Glass	2 x 1 L (*)	None	Thiosulfate		14 days	GC/ NPD	EPA 507/8141
Pesticides- All & PCBs Soil/solid	Soil/solid	Glass jar	4 oz	None	None		14 days	GC/ ECD or NPD	EPA 8081/8141/8082
pH	Water	Poly	250 mL	None	None		15 Minutes[2]	Electrometric	SM4500H
Phenolics	Water	Amber Glass	500 mL	H_2SO_4	H_2SO_4		28 Days	Spectrophotometric	EPA 420.1
Phosphate, Ortho	Water	Poly	250 mL	None	None		48 hours	FIA-Colorimetric	EPA 365.1
Phosphate, Total	Water	Poly	250 mL	H_2SO_4	H_2SO_4		28 Days	FIA-Colorimetric	EPA 365.1
Polynuclear Aromatics (PNAs) Low level	Water	Amber Glass	2 x 1 L	None	Thiosulfate		7 Days	GC/MS SIM mode	EPA 625/8270SIM
Polynuclear Aromatics (PNAs) Low level	soil/solid	Glass jar	4 oz	None	None		14 Days	GC/MS SIM Mode	EPA 625/8270SIM
PPCP Alkyl Phenols	Water	Amber Glass	1 L (*)	H_2SO_4	H_2SO_4		28 Days	GC/MS SIM	In-house

Weck Laboratories, Inc. - Sampling Guidelines

				Preservative (chill all[6], unless noted)					
Test Name	**Matrix**	**Bottle Type**	**Bottle size**	**Unchlorinated Water (Raw)**	**Chlorinated Water (Treated)**	**Soil/Solid**	**Holding Time until start of analysis**	**Analytical Technique**	**Analytical Method**
PPCP Hormones, Morphine, Pharma-Neg, Pharma-Pos	Water	Amber Glass	2 x 1 L (*)	Sodium azide, Ascorbic acid	Sodium azide, Ascorbic acid		28 Days	LC/MS/MS	EPA 1694M
Radiological-Gross Alpha	Water	Poly	1 L	None[5]	None[5]		6 Months	GPC	EPA 900.0
Radiological-Gross Alpha high TDS	Water	Poly	1 L	None[5]	None[5]		6 Months	Coprecipitation-GPC	SM7110C
Radiological-Gross Beta	Water	Poly	1 L	None[5]	None[5]		6 Months	GPC	EPA 900.0
Radiological-Radium 226-Sub	Water	Poly	2 x 1 L	HNO_3	HNO_3		6 Months		EPA 903.0/903.1 Sub
Radiological-Radium 228-Sub	Water	A-Poly	2 x 1 L	HNO_3	HNO_3		6 Months		RA-05 Sub
Radiological-Radon 222-Sub	Water	Glass	2 x 40 mL	None	None		4 Days (DW), 8 Days (WW)	LSC	SM7500-RN
Radiological-Strontium 90-Sub	Water	Poly	1 L	HNO_3	HNO_3		6 Months		EPA 905.0 sub
Radiological-Tritium-Sub	Water	Amber Glass	2x125 mL	None	None		6 Months	LSC	EPA 906.0 sub
Radiological-Uranium-	Water	Poly	250 mL	HNO_3	HNO_3		6 Months	ICP-MS	EPA 200.8
Semivolatile Organics (BNA) - GW or WW	Water	Amber Glass	2 x 1 L	None	Thiosulfate		7 Days	GC/MS	EPA 625/8270C
Semivolatile Organics (BNA) - Soil/Solid	Soil/solid	Glass jar	4 oz	None	None		14 Days	GC/MS	EPA 8270C
Silica by ICP	Water	Poly	250 mL	None	None		28 Days	ICP	EPA 200.7
SOCs - Drinking Water	Water	Amber Glass	2 x 1 L	HCl	Sulfite/HCl		14 days	GC/MS	EPA 525.2
SOCs - Special Analytes	Water	Amber Glass	2 x 1 L	HCl	Asc., EDTA, Diazol. Urea, Buffer		14 days	GCMS	EPA 526
SOCs - Phenolics	Water	Amber Glass	2 x 1 L	HCl	Sulfite/HCl		14 days	GCMS	EPA 528
Solids, Settleable	Water	Poly	1 L	None	None		48 Hours	Gravimetric	EPA 160.5
Solids, TDS	Water	Poly	500 mL	None	None		7 Days	Gravimetric	SM2540C
Solids, Total	Water	Poly	500 mL	None	None		7 Days	Gravimetric	SM2540B
Solids, TSS	Water	Poly	500 mL	None	None		7 Days	Gravimetric	EPA 160.2
Solids, TVS	Water	Poly	500 mL	None	None		7 Days	Gravimetric	EPA 160.4
Solids, VSS	Water	Poly	500 mL	None	None		7 Days	Gravimetric	SM 2540E
Sulfate	Water	Poly	250 mL	None	None		28 Days	IC	EPA 300.0
Sulfide, Dissolved	Water	Poly	250 mL	ZnAc/NaOH	ZnAc/NaOH		7 Days	Colorimetric	SM4500S2D
Surfactants (MBAS)	Water	Poly	500 mL	None	None		48 Hours	Colorimetric	SM5540C
t-Butyl Alcohol	Water	Glass	2 x 40 mL	none	None		14 Days	GC/MS	EPA 524.2
THMs	Water	Amber Glass	2 x 40 mL	Thiosulfate	Thiosulfate		14 Days	GC/MS	EPA 524.2
THMs-Formation Potential	Water	Amber Glass	1 L	None	None		14 Days	GC/MS	SM5710/EPA 524.2
Total Organic Carbon	Water	Amber Glass	250 mL	H_3PO_4	H_3PO_4		28 Days	UV-Persulfate	SM5310C

Weck Laboratories, Inc. - Sampling Guidelines

				Preservative (chill all[6], unless noted)					
Test Name	**Matrix**	**Bottle Type**	**Bottle size**	**Unchlorinated Water (Raw)**	**Chlorinated Water (Treated)**	**Soil/Solid**	**Holding Time until start of analysis**	**Analytical Technique**	**Analytical Method**
Total Organic Halides	Water	Amber Glass	500 mL	H_2SO_4	Sulfite/H_2SO_4		14 Days	Pyrolysis/ Coulometric	SM5320B/EPA 9020
Turbidity	Water	Poly	250 mL	None	None		48 Hours	Nephelometric	EPA 180.1
UCMR2-PBDEs	Water	Amber Glass	2 x 1 L	Ascorbic, EDTA, Citrate	Ascorbic, EDTA, Citrate		14 days	GCMS	EPA 527
UCMR2-Explosives	Water	Amber Glass	2 x 1 L	CuSO4/Trizma Buffer	CuSO4/Trizma Buffer		14 days	GCMS	EPA 529
UCMR2-Acetanilide Degradates	Water	Amber Glass	2 x 500 mL	NH_4Cl	NH_4Cl		14 days	LC/MS/MS	EPA 535
UCMR2-Acetamide Pesticides	Water	Amber Glass	2 x 1 L	Sulfite/HCl	Sulfite/HCl		14 days	GCMS	EPA 525.2
UCMR2-Nitrosamines	Water	Amber Glass	1 x 1 L	Thiosulfate	Thiosulfate		14 days	GCMS	EPA 521
UV254	Water	Amber Glass	250 mL	None	None		48 Hours	Spectrophotometric	SM 5910B
Volatile Organics-DW	Water	Glass	3 x 40 mL	HCl	Ascorbic/HCl		14 Days	GC/MS	EPA 524.2
Volatile Organics-Aromatics only	Water	Glass	2 x 40 mL	HCl	Thiosulfate/HCl		14 Days	P&T/PID	EPA 602
Volatile Organics-WW/GW	Water	Glass	2 x 40 mL	HCl	Thiosulfate/HCl		14 Days	GC/MS	EPA 624/8260B
Volatile Organics-Soil/Solid	Soil/solid	Glass Jar/other[6]	4 oz/other[6]	None	None		14 Days	GC/MS	EPA 8260B
Gasoline -TPH	Water	Glass	2 x 40 mL	HCl	Thiosulfate/HCl		14 Days	P&T/FID	EPA 8015B
Gasoline -TPH soil/solid	Soil/solid	Glass Jar/other[6]	4 oz/other[6]	None	None		14 Days	P&T/FID	EPA 8015B
Diesel/Oil-TPH	Water	Amber Glass	1 L (*)	HCl	Thiosulfate/HCl		7 Days	GC/FID	EPA 8015B
Diesel/Oil-TPH	Soil/Solid	Glass jar	4 oz	None	None		14 Days	GC/FID	EPA 8015B

Notes:

(1): Formaldehyde and acetaldehyde only

(2): This is field test; if requested to be performed at the lab it will be done ASAF

(3): Samples can be received unpreserved and preserved at the lab at least 24 hours before analys

(4): Al,Sb,As,Ba,Be,B,Cd,Ca,Na,Mg,K,Cr,Co,Cu,Fe,Pb,Li,Mn,Mo,Ni,Se,Ag,Sr,Tl,Ti,V,Zr

(5): Preserve at the lab with Nitric acid to pH <2 and wait 24 hours before analysis start

(6): No headspace required or preferably EPA Method 5035 sample collection. Consult the laboratory for special requiremen

(7): No cooling required

(8): Chill samples to< 6ºC, but above freezing.

(*): Needs extra bottles for QA/QC for certain projects

Effective as of 7/15/11

Appendix E

CITY OF SANTA MONICA DEPT OF PUBLIC WORKS
WATER RESOURCES PROTECTION PROGRAMS
2500 MICHIGAN AVENUE, BLD 1, SANTA MONICA CA 90404 • (310) 458-8235 • FAX (310) 393-6697

WASTEWATER/STORMWATER INSPECTION REPORT

Date: _____ **Time In:** _____ **Time Out:** _____ **Permit #:**_____**Permit Expiration:**_____

Business: _____

Address: _____Category:_____SIC #:_____

Phone #: _____ Purpose of Inspection: _____

Responsible Party *or*
Authorized Representative: _____ Title: _____

Contact Person: _____ Title: _____

INSPECTION CHECKLIST:	**INSPECTED**			**VIOLATIONS**			**REFERENCE/COMMENTS:**
	YES	**NO**	**N/A**	**YES**	**NO**	**UNDETERMINED**	
Process Discharge Stream	☐	☐	☐	☐	☐	☐	
Non – discharging Process	☐	☐	☐	☐	☐	☐	
Pretreatment Equipment	☐	☐	☐	☐	☐	☐	
Flow Monitoring	☐	☐	☐	☐	☐	☐	
Sample Station(s)	☐	☐	☐	☐	☐	☐	
Hazardous Chemical Storage	☐	☐	☐	☐	☐	☐	
Hazardous Waste Storage	☐	☐	☐	☐	☐	☐	
Spill Containment	☐	☐	☐	☐	☐	☐	
Boiler(s)	☐	☐	☐	☐	☐	☐	
Cooling Tower(s)	☐	☐	☐	☐	☐	☐	
Slug Discharge Plan	☐	☐	☐	☐	☐	☐	
Storm Drains	☐	☐	☐	☐	☐	☐	
Illicit Discharge/Illicit Connection	☐	☐	☐	☐	☐	☐	
Storm Water BMP	☐	☐	☐	☐	☐	☐	
Plan/BMP for Non-storm discharges	☐	☐	☐	☐	☐	☐	
Waste Hauling Records	☐	☐	☐	☐	☐	☐	
Housekeeping/Cleaning	☐	☐	☐	☐	☐	☐	
Pollution Prevention	☐	☐	☐	☐	☐	☐	
Sample Effluent Collected	☐	☐	☐	☐	☐	☐	
Pellets used	☐	☐	☐	☐	☐	☐	
Pellet/trash BMPs	☐	☐	☐	☐	☐	☐	
Process Flow	☐	☐	☐			Meter ☐ Est. ☐ _____ gpm	

Manifests/Records/Conditions:	**INSPECTED**			**APPROVED**	
Oil/Transmission Fluid	☐	☐	☐	☐	☐
Battery Storage/Disposal	☐	☐	☐	☐	☐
Coolant/Brake Fluid	☐	☐	☐	☐	☐
SDS on File	☐	☐	☐	☐	☐
Clarifier/ Interceptor/Trap Size Gal.:_____	☐	☐	☐	☐	☐
Grease Container Capacity: _____	☐	☐	☐	☐	☐

Inspection Summary:

I certify that I have submitted to this inspection.

(Print Name) (Signature)

Received By:		
Inspector:		

City of Santa Monica Water Resources Protection Program Inspection Supplemental Page

Business:_____ Permit#:_____
Date of this event:_____ Type of event:_____

Report Prepared By:_____ Report Received By:_____

Date:_____ Date:_____

THE ADVANTAGES ARE CLEAR

- Reduction of plumbing repair bills
- Prevention of costly property damage, business interruption and/or expensive, unpleasant cleanup due to clogged sewers and overflows
- Protection from potential health hazards caused by the accumulation of fats, oils, grease and food particles in your sewer pipes
- Protection for marine life and swimmers from health risks and beach closures due to sewage overflows spilling into our storm drain system.
- Protection for our sanitary sewer system and the Hyperion Water Treatment Plant.

COMPLIANCE IS MANDATORY

All restaurants, eateries and food preparation facilities must have a valid Industrial Wastewater Permit. This permit defines discharge limitations established by the City Ordinance 5.20.40 and the U.S. Environmental Protection Agency under the Federal Clean Water Act. Your permit may also require the installation of a pretreatment equipment.

We encourage business and property owners to take pro-active steps towards preventing fats, oils, and grease from entering the sewer system by implementing " Best Management Practices" (BMP's). We regularly monitor wastewater entering the sewer and stormdrain systems from your facilities and alert you to any discharges that exceed the limits specified in your Industrial Wastewater Permit. Our staff will help you identify the source of the problem, recommend solutions and give you time to correct the situation. In the event non-compliance continues without resolution, we may be forced to deny sewer service to your facility.

WE ARE HERE TO ANSWER YOUR QUESTIONS

If you have questions about the permitting process, pretreatment systems, or testing, please don't hesitate to call us at **310-458-8235.**

For water conservation information, please call **310-458-8972 ext 1.**

We are pleased to provide you with the practical and technical information you need to protect your business, the public health, and our environment.

Use of an in-ground grease interceptor prevents grease, oil and fat from reaching Santa Monica Bay.

Constant testing of wastewater discharges into the sewer and stormdrains helps to ensure the health of the public and Santa Monica Bay.

Stop the F.O.G. From *Rolling In...*

City of Santa Monica℠

Make Our Bay A Safe Place To Swim & Play

City of Santa Monica℠

Water Pollution Prevention
Industrial Waste Section
City of Santa Monica
1212 5th Street, 3rd Floor
Santa Monica, CA 90404
Tel: 310-458-8235
http://epwm.santa-monica.org/epwm

CITY OF SANTA MONICA WATER POLLUTION PREVENTION FOR FOOD ESTABLISHMENTS

http://epwm.santa-monica.org/epwm

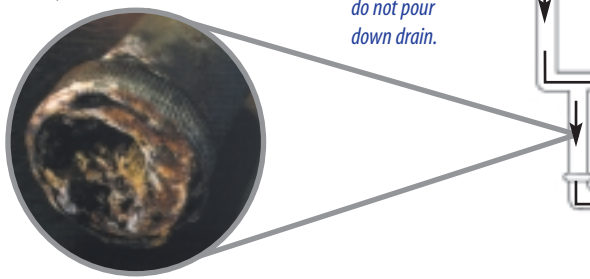
A "GRADE A" BAY...
WHY NOT?

Clean beaches, storm drains, and sewers are just good business. You do everything you can to keep customers coming back. Obviously, sewer overflows and backups are not conducive to repeat business.

Often, cooking by-products containing grease are washed into your plumbing system through the sinks and floor drains in your food preparation areas. Over time, the grease clogs your pipes, sewer lines become blocked, and you have a costly, inconvenient problem to fix, *but your problem can become everyone else's problem, too.*

Once sewer lines become blocked, wastewater full of fat, oil and grease are forced up through manhole (utility) covers onto our streets and into our storm drain system. The untreated sewage flows through our storm drains to the beach (see diagram below). Our beaches get poor grades for cleanliness and sometimes are closed to the public due to significant health risks. The dangerous pathogens found in waste water are not favorable to marine citizens and businesses.

Our Water Pollution Prevention Program is designed to protect public health, our environment and your business.

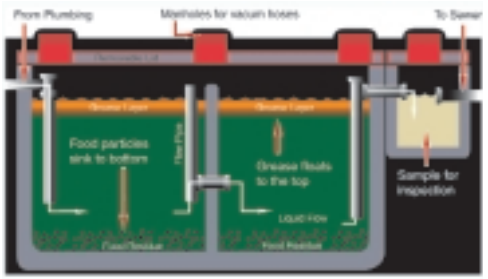


Clogged drain.

THE SOLUTION...
BEST MANAGEMENT PRACTICES

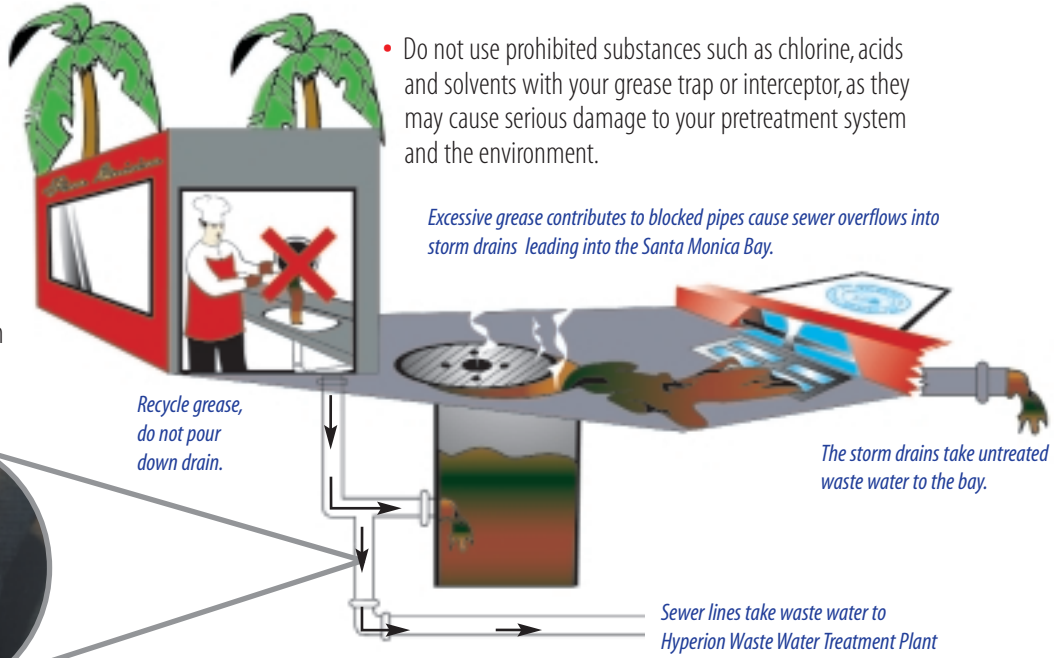
Prevent fats, oils and grease from entering your pipes and the sewer system. These simple "Best Management Practices" will enable your restaurant to operate efficiently, safely and cost effectively.

- Install an appropriately sized grease trap or interceptor in your place of business.



The above diagram shows how an underground grease interceptor prevents fats, oils, and grease from entering the sanitary sewer system.

- Maintain, clean and service your grease trap or interceptor regularly.
- Filter screens should not be washed on-site. A filter cleaning service must be used, unless you have a grease interceptor.
- Do not use prohibited substances such as chlorine, acids and solvents with your grease trap or interceptor, as they may cause serious damage to your pretreatment system and the environment.



Excessive grease contributes to blocked pipes cause sewer overflows into storm drains leading into the Santa Monica Bay.

- Be cautious of chemicals and additives that claim to dissolve grease (including soaps and detergents). Often, these substances move the grease down your pipes only to clog sewer lines elsewhere.
- Collect used grease and oil in a proper container that provides secondary containment and recycle. Do not pour grease into sink, floor drains, or in dumpsters.
- Scrape solids and food scraps from cooking surfaces, plates and utensils into the trash can. Recycle food scraps whenever possible. The use of garbage disposals is strictly prohibited.
- Wash mats and equipment indoors, near kitchen floor drain, or in janitor's sink. Remember, untreated water in our storm drains flow into the ocean.

- In the event of a grease spill in the alley or parking lot, use dry method for spill cleanup such as kitty litter. Do not hose down spills.
- Sweep up food particles, cigarette butts, dirt, sediment and trash from outside areas before rinsing or steam cleaning surfaces. Use equipment that minimizes water useage and runoff. Do not use toxic bleaches or detergents which could run into storm drains. Mop up excess water and dispose of in toilet, sink, or floor drains connected to the sanitary sewer.

Appendix F

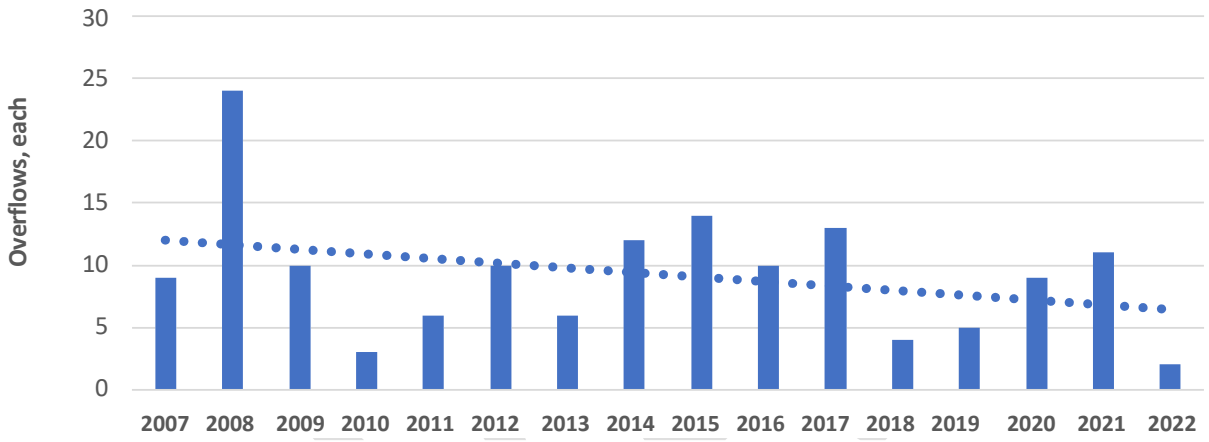


Figure 1: Annual Sewer Overflows

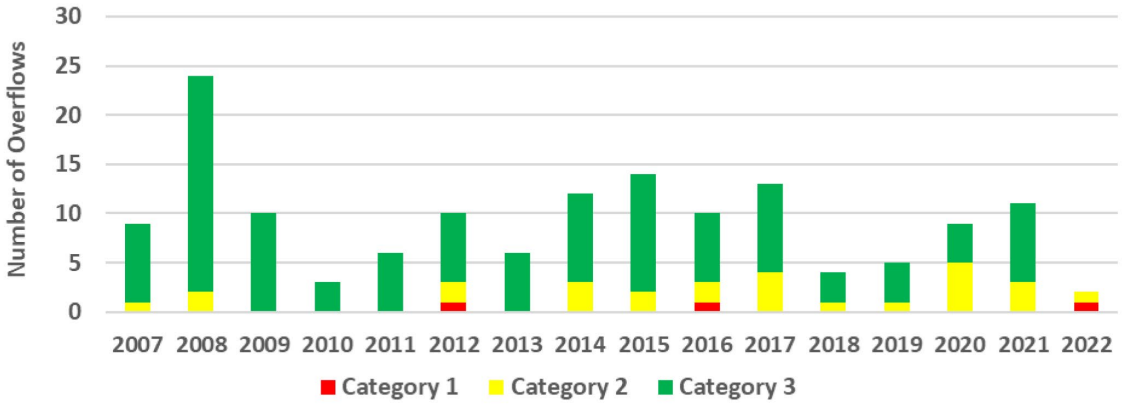
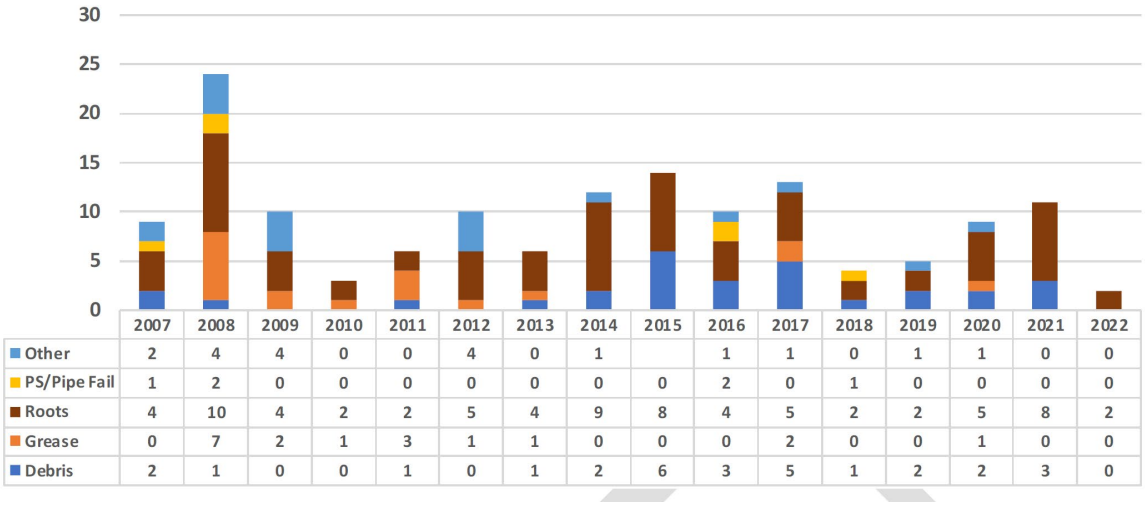


Figure 2: Overflows by SWRCB Category



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Other	2	4	4	0	0	4	0	1		1	1	0	1	1	0	0
PS/Pipe Fail	1	2	0	0	0	0	0	0	0	2	0	1	0	0	0	0
Roots	4	10	4	2	2	5	4	9	8	4	5	2	2	5	8	2
Grease	0	7	2	1	3	1	1	0	0	0	2	0	0	1	0	0
Debris	2	1	0	0	1	0	1	2	6	3	5	1	2	2	3	0

Figure 3: Number of Annual Overflows by Cause

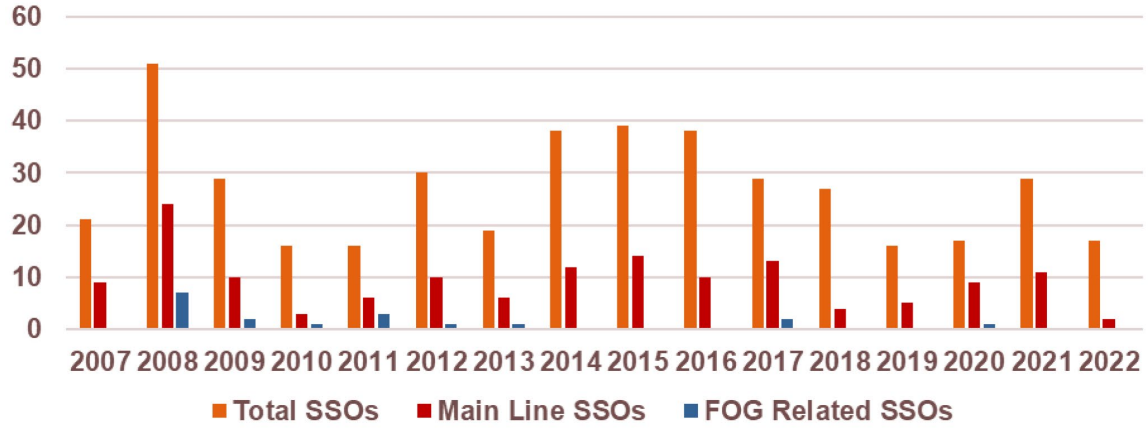


Figure 4: City SSO Incidents by Calendar Year

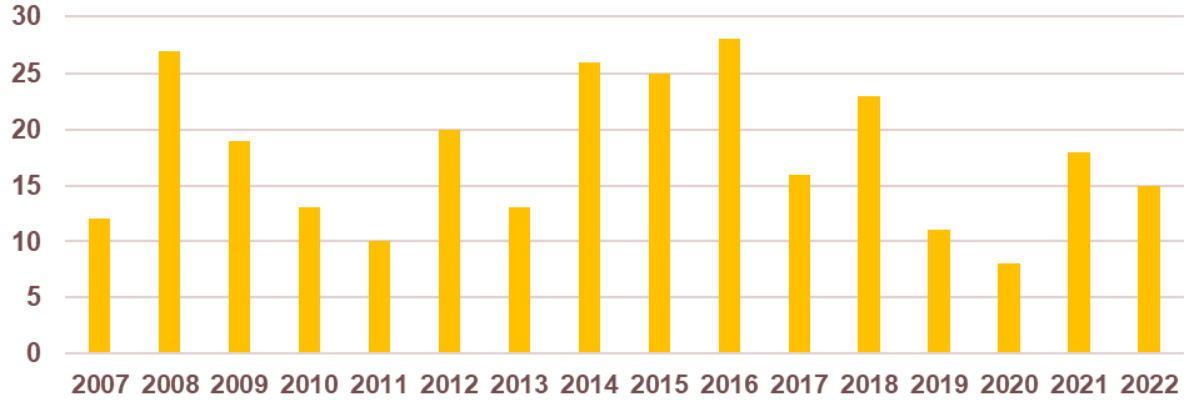
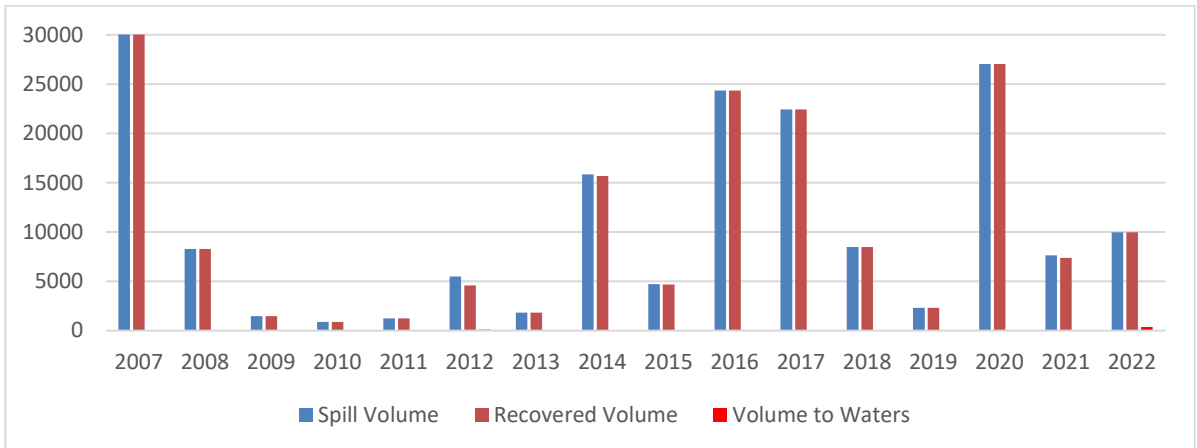


Figure 5: Annual Private Sewer Lateral Discharges



Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Spill Volume	50921	8275	1480	900	1230	5494	1835	15830	4710	24360	22425	8475	2320	27053	7630	9960
Recovered Volume	50921	8275	1480	900	1230	4583	1830	15690	4670	24360	22425	8475	2320	27053	7388	9960
Volume to Waters	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	364

Figure 6: Spill Volumes by Type

Appendix G

City of Santa Monica®

Sewer System Operations Systematic Audit Checklist **Date: _____**

Element	Title	Requirement	Compliant	Current	Comments
1	**Goals**	Reduce, prevent, & mitigate SSOs			
		Prevent public health hazards			
		Meet all applicable regulatory notification, monitoring, and reporting requirements			
		Minimize the frequency and magnitude of SSOs			
		Prevent damage to public and private property that could result from SSOs			
		Ensure funds available for sewer operations are utilized in the most efficient manner			
		Convey wastewater to treatment with a minimum of I/I and exfiltration			
		Provide adequate capacity to convey peak wastewater flows			
		Control corrosion and minimize odor releases			
		Perform all operations in a safe manner to avoid personal injury and property damage			
2	**Organization**	Designate Legally Responsible Official (LRO)			
		Organization Chart			
		Names & phone numbers of key personnel			
3	**Legal Authority**	Prevent illicit discharges to sanitary sewer system			SMMC 5.20.010

Element	Title	Requirement	Compliant	Current	Comments
		Require sewers and connections are properly designed and constructed			SMMC 7.04.480, 7.04.490, 7.04.520; Chapter 8.12 – Building Code (California Building Code, International Building Code) Chapter 8.32 – Plumbing Code (California Plumbing Code and Uniform Plumbing Code)
		Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the City			SMMC 5.20.430
		Limit the discharge of fats, oils, and grease and other debris that may cause blockages			SMMC 5.20.040(a)(4)(7), 5.20.090, 5.20.110
		Enforce any violation of sewer ordinances			SMMC 5.20.490 – 5.20.630 CSM WRPP Enforcement Response Plan
		Other relevant, appropriate, and applicable rules and regulations			SMMC Article 5: Sanitation and Health - Chapter 5.16 Toxic Chemical Disclosure - Chapter 5.24 Hazardous Materials Release SMMC Article 7: Public Works - Chapter 7.04 Streets, Sewers, etc. - Chapter 7.08 Wastewater Control - Chapter 7.12 Utility Division (WRD)
4	**O&M Program**	Maintain up-to-date maps of the sanitary sewer system			
		Adequate planning, resources and budget to support effective sewer system management and long term goals			
		Describe routine preventative maintenance program			
		Document completed preventative maintenance program			
		Adequate I/I monitoring			

Element	Title	Requirement	Compliant	Current	Comments
		Rehabilitation and replacement plan that identifies and prioritizes sanitary sewer system defects			
		Provide regular technical training for sewer system staff			
		Require contractors to provide training for their workers who work in the City's sewer system facilities			
		Maintain equipment inventory			
		Maintain critical spare part inventory			
5	**Design & Performance Provisions**	Design and construction standards for new sanitary sewer system facilities			
		Design and construction standards for repair and rehabilitation of existing sanitary sewer system facilities			
		Procedures for the inspection and acceptance of new sanitary sewer system facilities			
		Procedures for the inspection and acceptance of repaired and rehabilitated sanitary sewer system facilities			
6	**Overflow Emergency Response Plan (OERP)**	Procedures for the notification of primary responders			
		Procedures for the notification of regulatory agencies			
		Proper reporting of all SSOs			
		Procedure to ensure City Staff are aware of and follow OERP			

Element	Title	Requirement	Compliant	Current	Comments
		Procedure to ensure City staff are trained in the OERP			
		Procedures to address emergency operations such as traffic and crowd control			
		Program to prevent the discharge of sewage to surface waters			
		Program to minimize or correct the impacts of any SSOs that occur			
		Program of accelerated monitoring to determine the impacts on surface waters of any SSOs that occur			
7	**FOG Control Program**	Identification of "hot spots" with FOG related problems			
		Public outreach program that promotes the proper disposal of FOG			
		Plan for the disposal of FOG generated within the City's service area			
		Demonstrate that the City has allocated adequate resources for FOG control			
		Program of preventative maintenance for sanitary sewer system facilities that have FOG related problems			
8	**System Evaluation and Capacity Assurance Program**	Identification of elements of the sanitary sewer system that experience or contribute to SSOs caused by hydraulic deficiencies			
		Establish design criteria that provide adequate capacity			

Element	Title	Requirement	Compliant	Current	Comments
		Short term CIP that addresses known hydraulic deficiencies			
		Long term CIP that provides for future capacity needs			
		Procedures that provide for the analysis, evaluation, and prioritization of hydraulic deficiencies			
		The short and long term CIPs include schedules for the correction of each identified hydraulic deficiency			
9	**Monitoring, Measurement and Program Modifications**	Maintain relevant information to establish, evaluate, and prioritize SSMP activities			
		Monitor implementation of the SSMP			
		Measure, where appropriate, performance of the elements of the SSMP			Minimize SSOs: - # of Category 3 SSOs - # of Category 2 SSOs - # of Category 1 SSOs - Percent spill recovery - SSOs # of repeats - Critical asset failures
		Access success of the preventative maintenance program			
		Update SSMP program elements based on monitoring or performance			
		Identify and illustrate SSO trends			
10	**SSMP Audits**	Conduct periodic audits			
		Record results of the audit in a report			

Element	Title	Requirement	Compliant	Current	Comments
		Record changes made and/or corrective actions taken			
11	**Communication Program**	Communicate with the public regarding the preparation of the SSMP			
		Communicate with the public regarding SSMP performance			Placed ad in local newspaper/CSM website
		Communicate with satellite sewer systems			Contract cities meeting with the City of Los Angeles
12	**MAPS Emergency Power Station**	Describe routine preventative maintenance program			
		Document completed preventative maintenance program			
		Describe emergency response procedures			
		Names and contact numbers of key personnel			
13	**Water Quality Monitoring Plan**	Describe sampling procedures, field documentation, and equipment cleaning			

Appendix H

Emergency Phone Contact List for SSO

NOTE: FOR EACH DEPARTMENT, CALL FROM TOP TO BOTTOM UNTIL CONTACT IS MADE.

Wastewater	Water Resources Protection Program (310) 458-8235 – Main Office	Risk Management (in case of property damage)
Dispatch (310)458-8532	George Rodriguez Water Resources Protection Programs Coordinator (310)901-7069	Oles Gordeev Risk Manager (310)458-8910 office (310)463-4580 cell
Danny Gomez Wastewater Supervisor (310)629-9436	David Tu Senior Water Resources Protection Specialist (310)901-8145	Michael Mack Liability Claims Adjuster (310)458-2201 ext. 5944 (310)993-3557 cell
Val Guzman Wastewater Crew Leader (310)629-9419	Corey Bracken Water Resources Protection Specialist (310)490-3184	
Joe Felix Wastewater Crew Leader (310)729-8628	Sunny Wang Water Resources Manager (424) 330-9636	

After Hours: (310) 826-6712

Fire Department: (310) 458-8660 **Police**: (310) 458-8491