PORT OF OAKLAND

SEWER SYSTEM MANAGEMENT PLAN

September 2020

(This SSMP supplements all prior versions)

CIWQS WDID: **2SSO11430**

Port of Oakland

530 Water Street

Oakland, CA 94607

(510) 627-1100

Table of Contents

Appendices

EXECUTIVE SUMMARY

Regulatory Background

On May 2, 2006, the State Water Resources Control Board ("State Water Board") adopted the Statewide General Waste Discharge Requirements ("WDR") Order No. 2006-0003 for all publicly owned sanitary sewer collection systems. The intent of the WDR is to collect information on the causes and sources of sanitary sewer overflows ("SSO") statewide to determine the full impact on public health and the environment. An SSO occurs when sewage spills onto a public right of way and/or private property because sewer lines are blocked, clogged, or obstructed. Under the terms of the WDR, publicly owned collection systems that own and operate more than one mile of pipes are required to take necessary steps to prevent SSOs, to comply with the reporting requirements, and to implement a Sewer System Management Plan ("SSMP").

In May 2010, the Port of Oakland ("Port") adopted a Port-wide Sewer System Management Plan ("2010 SSMP") pursuant to the requirements of the State Water Board's WDR. The 2010 SSMP was later updated in July 2015 ("2015 SSMP") in compliance with the amended Monitoring and Reporting Plan ("MRP") requirements of the WDR, which became effective on September 9, 2013 (WQ 2013-0058-EXEC). This SSMP Update ("2020 SSMP") has been prepared in compliance with the WDR and supplements all prior versions of the SSMP. In the event of any conflict or inconsistency between this version or prior versions, the 2020 SSMP prevails.

Organization of SSMP

The Port SSMP describes how the Port manages, operates, and maintains its sanitary collection system by addressing each of the eleven (11) elements as specified in the WDR:

Element 1. Goals

Element 2. Organization

Element 3. Legal Authority

Element 4. Operation and Maintenance Program

Element 5. Design and Performance Provisions

Element 6. Overflow Emergency Response Plan

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

Element 8. System Evaluation and Capacity Assurance Plan

Element 9. Monitoring, Measurement, and Program Modifications

Element 10. SSMP Audits

Element 11. Communication Program

Summary of Changes

Following is a summary of changes that are included in the Port 2020 SSMP:

1. Rewrite the entire SSMP to remove outdated information and to provide a clear, relevant, and concise SSMP that is easy to follow;

2. Update the Port's goals for managing and operating a sanitary sewer collection system that services its tenants and customers and complies with regulatory requirements;
3. Update the Port's organizational chart and all contact information for Port staff responsible for sewer system operations across all divisions;
4. Provide context to the 2014 federal consent decree;
5. Add references to the Port's Private Sewer Lateral ("PSL") Ordinance adopted in 2018 and Condition Assessment Plan ("CAP") approved in 2019;
6. Update the Port's operations and maintenance programs including new system mapping, gravity main and lift station inspections, and training programs;
7. Make corrections to the Port's design and performance standards by referencing the applicable design and construction standards maintained by the City of Oakland ("City") and performance testing standards as specified in the East Bay Municipal Utility District ("EBMUD") Regional PSL Ordinance;
8. Add a new link to the City who has jurisdictional authority to approve grease control devices for food services establishments;
9. Provide updated capital improvement program;
10. Update the Port's performance indicators for tracking SSOs and measuring the effectiveness of the SSMP implementation; and
11. Delete several appendices that are outdated and no longer applicable.

Port staff will bring the SSMP 2020 to the Board of Port Commissioners ("Board") for consideration and approval. Staff will upload a final adopted version to the State Water Board's website.

Port of Oakland Overview

The Port of Oakland was established in 1927 by Section 701 of the Charter of the City of Oakland as a department of the City. Under the City Charter, exclusive control and management of the Port is vested in the Board of Port Commissioners, consisting of seven members nominated by the Mayor of Oakland and appointed by the Oakland City Council. All Port lands and assets are held in a public trust, commonly known as the Tidelands Trust, for the benefit of the people of the State of California. The Board has control and jurisdiction of the Port Area as defined in Section 706 of the City Charter. Land properties owned by the Port within the Port Area are shown in **Appendix 1**.

The Port has three revenue divisions: Aviation, Maritime, and Commercial Real Estate ("CRE"). The Aviation Division is responsible for managing, developing, and operating activities at the Oakland International Airport ("OAK") in support of commercial airlines services, air cargo operations, and general aviation. The Maritime Division is responsible for managing, promoting, developing, and maintaining the seaport facilities on the Oakland Outer Harbor, Middle Harbor, and Inner Harbor, which consist of marine container terminals, intermodal rail terminals, logistics warehouses, and other ancillary maritime support services. The CRE Division is responsible for managing, promoting, and overseeing roughly 837 acres of land along the Oakland Estuary. The centerpiece of the CRE is Jack London Square, which consist of hotels, restaurants, offices, retail shops, public

parking, marinas, as well as public open space. The CRE portfolio also includes the Airport Business Park located near OAK.

Sewer System Overview

The Port owns and operates a sanitary sewer collection system that serves OAK, the Seaport, and CRE properties. The Port's collection system consists of approximately 26 miles of gravity sewer mains and laterals, 26 lift stations, and approximately 4 miles of force mains. All of the Port's sewer facilities ultimately discharge to the East Bay Municipal Utility District's ("EBMUD") large-diameter interceptor systems, either directly at OAK or via the City's collection system. Sewage is then treated at the EBMUD Main Wastewater Treatment Plant located in West Oakland. Within its wastewater service boundary, EBMUD also owns and operates three wet weather facilities, pump stations, and other overflow structures some of which are located within the Port Area and serves the Port. The Sanitary Sewer System Overview Map is included in **Appendix 2** for reference.

The table below provides a summary of the sanitary sewer facilities in each area. The Port will update the Sanitary Sewer Collection System Summary Table as new information becomes available.

Port of Oakland Sanitary Sewer Collection System Summary

Gravity Mains and Laterals	Aviation	Maritime	Commercial Real Estate	Total
Approximate Length (miles) (1)	9.9	11.3	4.7	25.9
No. of Lift Stations (2)	12	14	0	26

Notes:

(1) Includes sewers owned and maintained by the Port and Port tenants. Sewers owned and managed by the City of Oakland are not included.

(2) Port owned and maintained only. Not included are lift stations AP926P owned and maintained by College of Alameda Aviation Facility; AP881P owned and maintained by Chevron (Hangar 10/Building L-881); small grinder pump stations at OFFC and FedEx facilities; EBMUD owned and maintained pump stations "G" (Airport), "K" and "L" (Seaport)

ELEMENT 1 – GOALS

The Port is committed to the following goals to provide the essential sanitary sewer collection infrastructure and services to its tenants and customers at OAK, the Seaport, and CRE areas:

1) Provide a plan to effectively manage, operate, and maintain the Port's sanitary sewer collection system;
2) Provide adequate capacity to convey peak flows and reduce infiltration and inflow ("I/I") into the system;
3) Develop a capital improvement program ("CIP") to rehabilitate and maintain the existing sewer infrastructure facilities, to improve system reliability, and to provide adequate capacity to accommodate future flows;
4) Reduce the frequency of sanitary sewer overflows ("SSOs");
5) Minimize the impacts of SSOs; and
6) Prevent public health hazards and damages to public and private properties caused by SSOs.

ELEMENT 2 – ORGANIZATION

This section identifies Port staff responsible for implementing the 2020 SSMP. This section also includes the designation of the authorized representative to meet State Water Board requirements for completing and certifying SSO reports.

2.1. Legally Responsible Official

The following position classifications serve as the Legally Responsible Officials ("LRO") (i.e., authorized representatives) for the implementation and certification of all provisions set forth in the WDR and the 2020 SSMP:

- Harbor Facilities Maintenance Manager
- Commercial Real Estate Manager
- Director of Environmental Programs and Planning
- Environmental Health & Safety Specialist
- Water Systems Engineer

LROs are authorized to submit and certify electronic spill reports and all other reports required for compliance with the WDR and any local regulations placed on the Port sewer system by local regulatory agencies. They may obtain designation from the Executive Director to act as authorized representatives to prepare and help submit all other required reports to other applicable agencies as required or directed by those agencies. The LROs are also authorized to appoint Data Submitters for purposes of entering SSO data into the State of California Integrated Water Quality System ("CIWQS") and designate contacts to correspond with the California Office of Emergency Services ("Cal OES").

2.2. Responsibility for SSMP Implementation and Update

The Office of the Chief Operating Officer's Engineering Division has the ultimate responsibility for development and implementation of all elements of the 2020 SSMP. However, immediate response and significant maintenance responsibilities rest with the revenue divisions. The responsibility for day to day implementation of each of the 2020 SSMP elements is described in Section 2.3 below. The Chief Operating Officer oversees Port-wide operations and compliance with government regulations and Board policies related to operations.

The Engineering Division provides scoping, design, project management, construction management, cost estimating, scheduling, facility inspections/assessments, inspection of tenant improvement, and technical studies to support the revenue divisions' infrastructure, planning, and development needs.

2.3. Organization Chart and Position Descriptions

Appendix 3 depicts the Port's organization chart for staff involved in implementing the 2020 SSMP. Position descriptions are explained as follows:

- **Board of Port Commissioners**

  The Board is vested with exclusive control and management of the Port. The Board is responsible for establishing policies, ordinances, and the overall approval of the SSMP, as well as the approval of funding expenditures related to the 2020 SSMP program elements.

The Executive Director, Port Attorney, Board Secretary, and Chief Audit Officer report directly to the Board.

- **Executive Positions**

  As further described below, senior Port executives provide leadership and direction to all Port divisions. This includes strategic and business planning, policy development, communications, human resources, social responsibility, community affairs, and government relations. The roles and responsibilities of the executive positions that are relevant to the 2020 SSMP are described below:

  - **Executive Director:** The Executive Director is responsible for the administration and operations of the Port and is the agency official who designates Port staff to serve as Port LROs.
  - **Chief Audit Office**r: The Chief Audit Officer is responsible for all internal audits of the Port organization.
  - **Port Attorney:** The Port Attorney is responsible for verifying that the Port, through service agreements, ordinances, or other legally binding provisions, has the authority to implement the programs and activities documented or recommended in the 2020 SSMP.
  - **Chief Financial Officer:** The Chief Financial Officer is responsible for the Port's overall finance and budget, risk management, purchasing, and accounting services.
  - **Chief Operating Officer:** The Chief Operating Officer is responsible for Port-wide operations and compliance with government regulations and Board policies.
  - **Director of Aviation:** The Director of Aviation is responsible for the overall management and operations of OAK.
  - **Director of Maritime:** The Director of Maritime is responsible for the overall management and operations of the seaport area.
  - **Director of Commercial Real Estate:** The Director of Commercial Real Estate is responsible for managing the Port's CRE portfolios.

- **Aviation Division**

  The Aviation Division is responsible for the planning, development, operation and maintenance of OAK and associated facilities. The roles and responsibilities of specific positions, as relevant to the 2020 SSMP, are described below:

  - **Assistant Director of Aviation:** The Assistant Director of Aviation is responsible for the day to day operations of OAK.
  - **Aviation Planning and Development Manager:** The Aviation Planning and Development Manager is responsible for developing and coordinating capital improvement expenditures related to OAK sanitary sewer system.
  - **Aviation Facilities Maintenance Manager:** The Aviation Facilities Maintenance Manager is responsible for implementing all infrastructure facilities operation and maintenance ("O&M") programs within the Aviation Division. As relevant to the SSMP, the Aviation Facilities Manager oversees the budgeting process for O&M

expenditures and supervises maintenance positions responsible for maintaining OAK sewer collection system.

- **Maintenance/Construction Supervisor and Foremen:** As related to the 2020 SSMP, the Maintenance/Construction Supervisor and foremen are responsible for coordinating the maintenance of the gravity sewer collection system and for coordinating the response to SSOs within the gravity collection system. They also oversee the in-house repair, replacement, or construction of the sewer collection system.
- **Utilities Supervisor and Foremen:** As related to the 2020 SSMP, the Utilities Supervisor and Foremen are responsible for the O&M of sewer lift stations outside of the terminal area. They are also responsible for responding to SSOs caused by sewer lift station failure.
- **Equipment Systems Superintendent, Senior Equipment Systems Engineers, Equipment Systems Engineers:** The Equipment Systems Superintendent, Senior Equipment Systems Engineers, Equipment Systems Engineers are responsible for the O&M of sewer lift stations, building sewers, and other sewer appurtenance in the terminal area of OAK sanitary sewer system. They are also responsible for coordinating the response to SSOs that occur due to failure of these facilities.
- **Facility Support Supervisor:** The Facilities Support Supervisor is responsible for coordinating O&M activities and tenant request maintenance activities within the Port's computerized maintenance management system ("CMMS").

- **Maritime Division**

The Maritime Division is responsible for the planning, development, operation and maintenance of the Seaport and associated facilities, including Port owned gravity sewers located within the CRE area. The roles and responsibilities of specific positions, as relevant to the 2020 SSMP, are described below:

- **Administrative/Financial Services Manager:** The Administrative/Financial Services Manager is responsible for developing and coordinating capital improvement expenditures related to the Seaport sanitary sewer system.
- **Chief Wharfinger and Wharfingers:** The Chief Wharfinger and Wharfingers serve as the liaison between the Port and its maritime tenants and are responsible for notifying Port staff in the event of an SSO.
- **Harbor Facilities Maintenance Manager:** The Harbor Facilities ("HF") Maintenance Manager is responsible for implementing all infrastructure facilities O&M programs of the Maritime Division. As relevant to the 2020 SSMP, the HF Manager oversees the budgeting process for O&M expenditures and supervises lower level maintenance positions responsible for maintaining the Seaport sewer collection system. The HF Manager serves as one of the Port LROs.
- **Maintenance/Construction Supervisor and Foremen:** As related to the 2020 SSMP, the Maintenance/Construction Supervisor and foremen are responsible for coordinating the maintenance of the gravity sewer collection system and for coordinating the response to SSOs within the gravity collection system. They also

oversee the in-house repair, replacement, or construction of the sewer collection system.

- **Utilities Supervisor and Foremen:** As related to the 2020 SSMP, the Utilities Supervisor and foremen are responsible for the O&M of sewer lift stations in the Maritime area. They are also responsible for responding to SSOs caused by sewer lift station failure.
- **Facility Support Supervisor:** The Facilities Support Supervisor is responsible for coordinating O&M activities and tenant request maintenance activities within the Port's CMMS.

- **Commercial Real Estate Division**

The CRE Division manages Jack London Square, the Airport Business Park, and other CRE areas along the Oakland Estuary. The roles and responsibilities of specific positions as relevant to the 2020 SSMP are described below:

- **Commercial Real Estate Manager:** The CRE Manager is responsible for the direct coordination of the tenant/leasehold agreements including maintenance responsibilities. For any sewers not maintained by the tenants the CRE Manager coordinates with the HF Manager to perform these maintenance functions. The CRE Manager serves as one of the Port LROs.
- **Commercial Real Estate Representatives:** The CRE Representatives serve as the liaison between commercial real estate tenants and HF.

- **Chief Operating Office**

The Chief Operating Office is responsible for Port-wide operations and coordination with staff across the organization. Departments in the Chief Operating Office include Engineering Project Design and Delivery (Aviation and Maritime), Engineering Services, Utilities, Environmental Programs and Planning, and Information Technology. The roles and responsibilities of specific positions as relevant to the 2020 SSMP are described below:

- **Director of Environmental Programs and Planning:** The Director of Environmental Programs and Planning and his/her staff are responsible for regulatory compliance and environmental protection. The Director of Environmental Programs and Planning also serves as one of the Port LROs.
- **Utilities Administration Manager:** The Utilities Administration Manager manages all aspects of utility services as well as the Port's utility business, including the buying and selling of electricity, water, and gas; provides master planning on the Port's utility systems; and supports infrastructure developments.
- **Engineering (Aviation/Maritime Design & Delivery and Engineering Services):** The Engineering (Aviation/Maritime Design & Delivery and Engineering Services) Departments are responsible for the design and delivery and support services for all Aviation, Maritime, and CRE capital improvements and major maintenance projects.
- **Water Systems Engineer:** The Water Systems Engineer is responsible for the regulatory compliance of the water distribution and wastewater collection system at the Port. The Water Systems Engineer serves as one of the Port LROs.

- **Finance and Administration Division**

  The Finance and Administration Division provides the Port with short and long-term financial guidance in the areas of financial management and planning, capital project funding, and internal and external financial reporting. This division is also responsible for risk management, accounting, purchasing, and enterprise resources planning.

- **Human Resources Department**

  The Human Resources ("HR") Department is responsible for servicing and advising the Port on matters related to HR administration including personnel and employee services, payroll and benefits, workers' compensation, organizational training, employee health and safety, and other HR functions. The roles and responsibilities of the specific positions, as relevant to the 2020 SSMP, are described below:

  – **Environmental Health and Safety Specialist.** The Environmental Health and Safety ("H&S") Specialist is responsible for Port-wide H&S program including safety monitoring and occupational safety and health administration ("OSHA") training. This position also serves as the Port's primary emergency/disaster and spill responder and coordinates cleanup and mitigation of SSOs as well as reporting SSOs to Cal OES. The Environmental H&S Specialist also serves as one of the Port LROs.

ELEMENT 3 - LEGAL AUTHORITY

This section describes the regulatory background and relevant ordinances applicable to the operations and maintenance of the Port sewer collection system. This section also describes the Port's legal authority to comply with the State Water Board's WDR requirements, as provided in the Port sewer ordinances.

3.1. Regulatory Background

The United States Environmental Protection Agency ("EPA"), the State Water Board, and the San Francisco Regional Water Quality Control Board ("Regional Board") regulate discharges into the San Francisco Bay, pursuant to the federal Clean Water Act and the California Water Code.

At the national level, SSOs have been in the regulatory spotlight since 1995, when the EPA formed the Sanitary Sewer Overflow Federal Advisory Subcommittee ("SSO Subcommittee") to examine the need for national consistency in permitting and enforcement of SSOs. From 1995 to 1999, the SSO Subcommittee met twelve times to discuss policy issues associated with SSOs. In 1999, the SSO Subcommittee supported basic principles requiring the following:

- Capacity, management, operation, and maintenance programs for municipal sanitary sewer collection systems;
- A prohibition on SSOs, which includes a closely circumscribed framework for raising a defense for unavoidable discharges;
- Reporting, public notification, and record-keeping requirements for municipal sanitary sewer collection systems and SSOs.

The recommendations of the SSO Subcommittee were then incorporated into the proposed "SSO Rule," which was published in the Federal Register in January 2001. For a variety of reasons, however, the proposed SSO Rule has yet to be formally adopted by the EPA.

At the State level, the Regional Board implemented new monitoring and reporting requirements related to SSOs in 2014 and subsequently issued a letter requiring the development of an SSMP. The new requirements were in response to a growing emphasis on the reduction of overflows and applied only to agencies within its region. On May 2, 2006, the State Water Board adopted the WDRs, establishing new monitoring and reporting requirements, and SSMP development requirements for all agencies that own or operate a collection system with more than one mile of pipe that discharges to a municipal sewage treatment plant.

The WDRs prohibit any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States or that causes a "nuisance," as defined in California Water Code Section 13050(m). In the event of an SSO, all feasible steps must be taken to limit the released volume and prevent untreated water from entering storm drains, creeks, etc. SSOs must be reported through a new statewide online reporting system (commonly known as CIWQS), which is a computer system used by the State Water Board and the Regional Board to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

In 2011 the staff of the State Water Board initiated a comprehensive review of the waste discharge requirements based upon the experience and information collected for the first five years of the program. This resulted in the State Water Board WQ 2013-0058-EXEC which became effective on September 9, 2013 and modified the previous Monitoring and Reporting Plan by changing the

categories of sanitary sewer overflows, the notification and recordkeeping requirements for SSOs, the requirements regarding the public availability of an approved SSMP, the addition of both a Water Quality Monitoring Plan and a SSO Technical Report for SSOs of greater than 50,000 gallons.

At the local level, EBMUD owns and operates the main wastewater treatment plant and the large diameter interceptor sewers which convey sewage from collection systems in the East Bay within its service boundary. EBMUD regulates wastewater discharge into its system through the Wastewater Control Ordinance and imposes local limits for select pollutants. The Oakland Municipal Code establishes the City's legal authority to operate and maintain its collection system.

In February 2010, in response to a lawsuit that was brought by the EPA, the State Water Board, the Regional Board, and other plaintiffs, EBMUD adopted a Regional Private Sewer Lateral ("PSL") Ordinance and amended its wastewater control ordinance. The City also amended its municipal codes to enforce the provisions of the EBMUD Regional PSL Ordinance.

In September 2014, EBMUD - and other agencies within EBMUD's wastewater service area - reached a settlement agreement in the form of a federal Consent Decree ("CD"), requiring a regional collaboration to improve the aging sewer infrastructure and protect the San Francisco Bay from sewage spills.

The Port, although not a party to the CD, has been collaborating since 2014 with the City and EBMUD to ensure appropriate compliance strategies. As a result, the Board adopted Port Ordinance 4474 (Ordinance Adopting By Reference Oakland Municipal and Planning Codes Sections 13.08.590 Through 13.08.620 As Modified Herein, Requiring Port Tenants to Comply with Such Private Sewer Lateral Regulations, and Directing Port Staff to Prepare Plans to Assess and Repair Port-Owned Private Sewer Laterals) on May 10, 2018 ("Port Ordinance 4474" or "Port PSL Ordinance").

3.2. Port Sewer Ordinances

Port Ordinance 4113 (Ordinance Establishing Design, Construction, Testing, and Inspection standards for Sanitary Sewer Facilities, and Limits on the Type, Character, and Volume of Allowable Discharges to the Sanitary Sewer System was developed during the preparation of the Port's 2010 SSMP and adopted by the Board on November 17, 2009 ("Port Sewer Use Ordinance"), to strengthen the Port's ability to regulate the type of wastewater discharged into the Port sanitary sewer system and to require that sewers and connections be properly designed and constructed in conformity with EBMUD's wastewater control ordinance and the City's sanitary sewer design standards and provisions.

Port Ordinance 4474 adopts, by reference, Oakland Municipal Code Sections 13.08.590 through 13.08.620 with certain modifications that require Port tenants to comply with the private sewer lateral regulations established by the City and EBMUD whenever Port tenant's actions trigger the application of those ordinances, including the responsibilities of inspecting, maintaining, repairing, and replacing sewer laterals.

Port ordinances are not meant to supersede any existing or future statutes, rules, regulations, and/or ordinances established by any government body that regulates the discharge of wastewater into the sanitary sewer collection system. Rather, they are meant for the Port to provide additional clarity or to exercise its legal authority in the implementation of specific 2020 SSMP elements. The following section summarizes the provisions of the ordinances as applicable to the WDR requirements. Both ordinances are included in **Appendix 4** for reference.

3.2.1. Illicit Discharges

Section 5 of Port Ordinance 4113 provides prohibitions as well as limitations of the types of substances that may be discharged into the Port's sewer system. This generally includes wastewater discharges that result in contamination, pollution, or a nuisance.

3.2.2. Design and Construction Requirements

Section 3 of Port Ordinance 4113 places the authority to the Chief Engineer to develop and enforce standards for design, construction, inspection, and testing of new or rehabilitated sanitary sewers within the Port's jurisdiction. Element 5 describes the design and construction standards in greater details.

3.2.3. Sewer Service Lateral Maintenance

Section 6 of Port Ordinance 4113 grants the authority of Port staff, under the direction of the Executive Director or his designated representative, to secure access to any buildings, structures, or premises under Port jurisdiction to inspect, repair, or maintain sanitary sewer facilities.

Section 3 of Port Ordinance 4774 requires Port tenants to obtain all required permits, to perform necessary inspection, repair, or replacement of all building sewers, in compliance with EBMUD's and the City's codes and ordinances for sewer service laterals located within leasehold property in which the tenant has the maintenance responsibility under the lease agreement. The Port is responsible for all Port owned sanitary sewer pipes within Port owned and controlled properties ("Port Controlled Laterals") that are not the responsibility of the tenants.

For the Port Controlled Laterals, Section 4 of Port Ordinance 4474 requires Port staff to prepare a Port-wide Condition Assessment Plan ("CAP") no later than June 30, 2019 to assess the conditions of these sewer pipes and a follow-up Corrective Action Work Plan ("CAWP") no later than June 30, 2023 to bring all defective sewer pipes into compliance with the standards set forth in EBMUD Regional PSL Ordinance and Oakland Municipal Codes ("OMC") Section 13.08.610.

3.2.4. Enforcement

Section 7 of Port Ordinance 4113 provides the policies and procedures including abatement by the Port, recovery of attorney fees and costs if and when there is a public nuisance created by any person or entity within the Port jurisdictional area as set forth in the California Water Code and the City Charter. Any violation of the provisions of the Port ordinance may be punishable by a fine and penalty not exceeding five hundred dollars ($500), or six (6) months imprisonment, or both.

ELEMENT 4 – OPERATIONS AND MAINTENANCE PROGRAM

This section discusses the Port's wastewater collection system O&M program including mapping, preventive maintenance, repair, and training.

4.1. Regulatory Requirements

Section D.13 of the WDR includes the following provisions for the SSMP Operations and Maintenance Program:

a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities;
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 a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;
d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and
e) Provide equipment and replacement part inventories, including identification of critical replacement parts.

4.2. Collection System Mapping

A number of Port buildings and facilities including the sewer collection system infrastructure in the Maritime and Aviation areas have been in existence for many decades. The Seaport and OAK functioned as critical military installations during World War II. While most of the infrastructure have since been rebuilt as part of the Port's continuous developments over the past 30 years, other sections of the collection system, which are remaining in service, have passed their design life.

Since the adoption of the original SSMP in 2010, the Port has expended considerable effort to assemble available records into a comprehensive set of maps. The results from this effort have been compiled in several mapbooks and later imported into the Port's Enterprise Geographical Information System ("GIS"), referred to as PortView. The GIS platform supports asset inventory and management functions (i.e., pipe length, diameter, material, manhole data, etc.), allowing users to locate and review available asset characteristics using a mapping interface. In 2019, for the preparation of the Port-wide CAP, the Port conducted extensive field work to verify the

locations of sanitary sewer lines, manholes, and cleanouts within Port-owned property where confidence in the integrity of the Port's available mapping was questionable due to either age or modifications to the collection system that have occurred over the years. The verification effort is an ongoing effort.

Appendix 2 provides an overview of the Port sanitary sewer collection system which is divided into three main subsystems: Aviation, Maritime, and CRE. Due to the size and geographical locations of Port properties, sewage from the Port discharges to several distinct locations. All of Aviation facilities discharge directly to the EBMUD Pump Station G. The Seaport facilities and CRE properties discharge to the City collection system which then connects to the EBMUD regional large-diameter interceptor system.

The Port's sewer asset inventory and GIS mapping will require regular updating as the sanitary sewer system is modified or changed as a results of new system upgrades, new developments, and improvements by Port tenants.

4.3. Preventive Maintenance

4.3.1. Computerized Maintenance Management System ("CMMS")

The Port utilizes a CMMS software application, currently Oracle Enterprise Asset Management (Oracle eAM - part of Oracle E-Business Suite), for tracking all maintenance and repair activities, managing work requests and work orders, scheduling routine preventive maintenance, and tracking emergency responses.

The Port has integrated the unique pipe IDs, lift stations, and other sewer facilities from the collection system maps into the Oracle eAM software, and most of the maintenance activities are assigned with unique work order numbers, giving the Port the ability to track maintenance activities for specific assets. In addition to managing the assets on the Oracle eAM, the Port also uses other software tools such as AutoCAD, Excel, and Enterprise GIS PortView to track maintenance activities as described above.

4.3.2. Gravity Sewer Maintenance Program

To effectively manage the sewer collection system the Port performs cleaning, closed-circuit television ("CCTV") inspection, and using these CCTV data to assess the condition of the gravity sewers in accordance with the National Association of Sewer Service Company ("NASSCO") condition assessment guidelines. In addition to identifying pipe defects and possible blockages, CCTV inspections data can also be used for locating sources of infiltration and inflows into the collection system. As mentioned in Element 3, the Board approved a Port-wide CAP for its sewer assets following the adoption of Port Ordinance 4474 which directs Port staff to prepare plans to assess and repair Port owned sanitary sewer facilities. A condition assessment schedule and assessment method for all existing gravity sewer lines and service laterals are described in detail in the CAP. Understanding the condition of an asset at a specific point in its lifecycle has been proven to be a good tool to estimate the remaining reliable life and to prioritize capital improvement.

Since the adoption of the SSMP in 2010, the Port has been using outside consultants and contractors to perform CCTV inspections within the Port owned properties. The Port has recently accelerated the inspection and assessment of all lines and help to complete the CAP in one focused project during 2020. Completing the inspection work will allow the Port to prioritize rehabilitation

projects according to actual improvement anticipated. Of the 26 gravity miles, the Port inspected approximately 6.47 miles of sewer mains and laterals in FY 2019-20. As of September 30, 2020, the Port has cumulatively inspected approximately 17.7 miles (or 68%) of the Port's 26 miles of gravity sanitary sewer pipeline system since 2009.

Following sewer inspection and condition assessment of the sewer assets, the Port plans to update the system with capital improvement projects to ensure that the system condition and capacity meets the service requirements. The planned sewer rehabilitation and upgrade projects are discussed in detail in Element 8.

4.3.3. Lift Station Maintenance Program

As discussed in the overview of the Port's sewer collection system, the Port currently operates and maintains a total of 26 lift stations (12 at OAK and 14 at the Seaport). In addition, there are several smaller pump stations privately maintained by Port tenants and other sewage pump stations that the City and EBMUD owns, operates, and maintains that serve the Port area separately. Port maintenance staff performs vast amount of maintenance activities including regular inspections, cleaning and washdown, minor repairs, and other preventive maintenance not only to prolong the life of these critical facilities but to ensure system reliability to prevent sewer overflows.

Since the adoption of the SSMP in 2010, the Port has completed capacity evaluation and assessment of most, if not all, sanitary sewer lift stations and continues to rehabilitate and upgrade these facilities as prioritized in the condition assessment reports. A list of lift station rehabilitation projects is included in Element 8.

4.3.4. Staffing and Training Program

Sewer maintenance and repair activities are performed by Port staff in the respective Aviation Division and Harbor Facilities Department with supplemental support services from outside contractors. Port maintenance staff also maintains other utilities such as water, power, storm drain system, etc. and performs maintenance for other Port facilities.

Training for maintenance staff are provided through the specific training program within each revenue division or through the Port-wide training program. Ongoing training for Port staff is provided through a combination of informal and on-the-job training and other focused training classes or seminars. Following the adoption of 2015 SSMP, the Port retained a consultant to provide several training sessions focusing on regulatory compliance and SSO reporting for Port staff and invited Port tenants to attend these sessions. The Port engineering staff periodically attend training sessions with regards to the new programs or policies hosted by the State Water Board and local agencies. Several Port staff also has received and maintain certification for NASSCO.

4.3.5. Equipment and Replacement Part Inventories

The Port maintains adequate inventory of common spare pipes, pump parts, and other parts needed to perform emergency repair work on the collection system. The Port has equipment for trench excavation if required by underground sewer repair work or has the ability to rent such equipment. The Port, however, does not own CCTV inspection and hydraulic cleaning trucks but has vendors and/or on-call contractors to provide this service or equipment.

ELEMENT 5 - DESIGN AND PERFORMANCE STANDARDS

Since the Port sanitary sewer facilities discharge into the City's and EBMUD's sewer collection systems, the Port generally follows the established guidelines and standards for design, inspection, and testing for sanitary sewer facilities from these two agencies.

5.1. Regulatory Requirements

Section D.13 of the WDR specifies the SSMP must include the following design and performance provisions:

a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and
b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

5.2. Design and Construction Standards

The Port currently does not maintain its own set of guidelines or standards for the design and construction of new or replacement sewer system facilities. In lieu of an official set of design guidelines, Port engineering staff reviews each sewer system design to ensure conformance with the City's standards. Port staff and its design consultants normally refer to the City's "Sanitary Sewer Design and Construction Standards" at the following website address: https://www.oaklandca.gov/documents/sewer-design-standards

This document has an effective date of August 2008 and is maintained by the Oakland Public Works Department's Engineering Design and Construction. In addition to this document, the City has also developed and maintained a set of standard details drawings for sanitary sewer facilities. The Port normally refers to the City's standard details for sanitary sewer design and make modification to details as needed. The City's standard details are at the following website address: http://www2.oaklandnet.com/government/o/PWA/o/EC/s/DGP/OAK025902

In addition to the above, the City has adopted the "Standard Specifications for Public Works Construction", commonly known as the "Greenbook", to ensure that sanitary sewers are installed, rehabilitated, or repaired properly. This document is normally republished every three years by the City. The Port uses the City's specifications documents for reference but prepares its own special provisions (i.e., project manual) specific for each project.

5.3. Inspection and Testing Standards

The Port makes references and directs Port tenants and contractors to the City's and EBMUD's inspection and testing standards. OMC Section 13.02 "Sewer System" provides definition of the sanitary sewer system. OMC Section 13.08 "Building Sewers" codifies the regulations and set forth the requirements for the construction, reconstruction, repair, or abandonment of building sewers including the requirements for compliance with EBMUD's Regional PSL Ordinance as discussed in Element 3. Sections 5 and 7 of EBMUD's Regional PSL Ordinance set forth the standards for maintenance, inspections, repair and verification testing requirements for sewer laterals and apply to all sewer laterals within the Port's collection system. The regional ordinance including

testing and compliance guidelines and other resources can be found at the following website address: https://www.eastbaypsl.com/eastbaypsl/.

ELEMENT 6 – SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PLAN

This section summarizes the Port's Overflow Emergency Response Plan ("OERP"), which provides for an effective response plan in the event of an SSO. Except for changes in key personnel within the Port organization the OERP prepared in SSMP 2015 Update is still in effect. The Port's OERP is a standalone document and may be updated as necessary to reflect any changes in staffing or notification requirements. A copy of the OERP is included in **Appendix 5**.

6.1. Regulatory Requirements

Section D.13 of the WDR specifies the SSMP must include an OERP that includes, at a minimum, the following:

a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
b) A program to ensure an appropriate response to all overflows;
c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the 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 National Pollutant Discharge Elimination Program (NPDES) permit requirements. The SSMP should identify the officials who will receive immediate notification;
d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
f) A program to ensure that all reasonable steps are taken to contain and prevent discharge of untreated or partially treated wastewater to waters of the United States and to minimize or correct any adverse impact of 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.

In addition, to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled to surface waters, the State Water Board in 2013 amended the MRP and issued the WQ 2013-0058-EXEC with specified provisions for SSO Water Quality Monitoring Program and Technical Report requirements.

6.2. Goals

The Port's goals with respect to responding to SSOs are to:

1) Respond quickly to minimize the volume of the SSO;
2) Contain the spilled wastewater to the extent feasible to prevent damage to public and private properties;
3) Clean up and mitigate the impact of SSO to protect public health and the environment;
4) Meet the regulatory reporting requirements; and

5) Eliminate the cause of SSO.

6.3. Summary of OERP Components

The components of the OERP are briefly explained below:

6.3.1. Technical Definitions and Spill Categories

CATEGORIES	DEFINITIONS [see Section A on page 5 of Order 2006-0003-DWQ, for Sanitary Sewer Overflow (SSO) definition]
CATEGORY 1	Discharges of untreated or partially treated wastewater of **any volume** resulting from an enrollee's sanitary sewer system failure or flow condition that: • Reach surface water and/or reach a drainage channel tributary to a surface water; or • Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
CATEGORY 2	Discharges of untreated or partially treated wastewater of **1,000 gallons or greater** resulting from an enrollee's sanitary sewer system failure or flow condition that **do not** reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
CATEGORY 3	All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
PRIVATE LATERAL SEWAGE DISCHARGE (PLSD)	Discharges of untreated or partially treated wastewater resulting from blockages or other problems **within a privately owned sewer lateral** connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be voluntarily reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

The OERP includes technical definition of an SSO and lists the three categories of SSOs from the public sewer system and private lateral sewage discharges. The category of SSO determines specific regulatory requirements.

6.3.2. Key Personnel

Specific Port personnel are identified as applicable to overflow response procedures for responding, reporting, and/or mitigating an SSO event. References are made to job titles, rather than individual names. The purpose of this is to simplify the process of updating the document as staff changes occur. These staff receive training on the contents of the OERP. New employees receive training before they are placed in a position of responsibility for SSO response and current employees receive periodic refresher training on the procedures in the OERP.

6.3.3. Overflow Response Procedure

The Port has specific reporting structures for the Aviation, Maritime, and CRE areas.

For sewer overflows at OAK, calls from Port tenants or the public regarding potential overflows or any SSO events are generally received through either the Airport Operations at (510) 563-3361 or the Airside Operations at (510) 563-6432. The Airport Operations is staffed 24/7. The Manager on Duty at the Airport Operations or his/her designated representative then records the overflow

information and forwards it to the Aviation Facilities Maintenance and to the Port's Spill Responder, when appropriate.

In the Maritime area, calls from Port tenants or the public regarding potential overflows or any SSO events are generally received through the Port Wharfinger(s). The Port Wharfinger then records the overflow information and forwards it to the Harbor Facilities Maintenance Department and to the Port's Spill Responder, when appropriate. Sewer overflows in the Maritime area detected by Port staff in the course of their normal duties are reported immediately to the Harbor Facilities Maintenance Department. Personnel dispatched to respond to the SSO record all relevant overflow information and provide it to the LRO.

Calls from Port tenants or the public regarding potential overflows in the CRE area are generally routed through the Commercial Real Estate Representative(s) for appropriate responses. In some instances, the City's Call Center may receive calls from the public in public area within the Port jurisdiction and will contact the Port for appropriate actions.

6.3.4. Overflow Containment and Clean up

The response crew is trained to immediately locate, isolate, and secure all upstream sources of sewer spills to mitigate the spill volume. Once the spill has been contained, the crew determines the cause(s) of the SSO and determines the impact to the surrounding properties, storm drains, and surface water and applies additional measures (i.e., water quality monitoring, appropriate signage, etc.) as required.

The response crew takes appropriate cleanup actions. In many cases, the Port utilizes the services of an emergency hazardous material spill response contractor for cleanup and disinfection. Upon arrival, the facility that overflowed is secured to prevent contact until the site has been thoroughly cleaned. The cleanup actions include thoroughly cleaning the area of any sewage or wash-down water. Solids and debris are swept, raked, or otherwise picked-up, and transported for proper disposal. This includes any wash-down water. The facility remains secured until the cause of the overflow is known and corrected.

6.3.5. Regulatory Reporting

The OERP includes procedures, timelines, and staff responsibilities for reporting SSOs to the State Water Board's online SSO database (CIWQS). The crew supervisor/superintendent is responsible for confirming that the Sanitary Sewer Overflow Field Report is completed and that the available information is forwarded to one of the Port LROs for reporting and certifying the SSO Report with to the State Water Board and other applicable regulatory agencies.

6.3.6. SSO Investigation and Documentation

The OERP contains a description and procedures for completing an SSO field form. The SSO field form documents the specifics of an SSO event and any follow up investigative actions (e.g., CCTV inspections, repairs, etc.). Each SSO event record contains completed field form(s), volume estimation, and photographs (if applicable). The SSO record will be analyzed in for follow-up actions including repair or rehabilitation/replacement considerations.

6.3.7. SSO Water Quality Monitoring Program

The Port will utilize its best judgment to determine if sampling is appropriate on a case-by-case basis. The Port will collect and analyze samples of the receiving water for those SSOs that may

pose any imminent danger to human health and the environment when it is feasible and safe to do so. The OERP contains detailed water quality sampling and monitoring program.

ELEMENT 7 - FATS, OILS, AND GREASE CONTROL PROGRAM

The purpose of the fats, oil, and grease ("FOG") control program is to minimize the amount of FOG material from restaurants and food services establishments ("FSE") that may enter the sanitary sewer collection system and create the formation of blockages in the pipes. The Port primarily relies on the FOG control programs established and administered by EBMUD and the City.

7.1. Legal Authority

EBMUD's Wastewater Control Ordinance provides legal authority for EBMUD to regulate discharges into its wastewater collection and treatment facilities. The ordinance established strict local limits on the volumes and strength of the wastes, including FOG material, that can be discharged into the sanitary sewer system. EBMUD's limit for FOG is 100 mg/L.

OMC Section 13.08 "Building Sewers" also includes regulations that provide the City authority to regulate discharge of sewage in a manner that does not endanger the condition, operation or capacity of its collection system; to prohibit the discharge of FOG into the sanitary sewer system; and to disconnect buildings from the sanitary sewer system at the owner's expense.

Port Ordinance 4413 provides the Port authority to regulate the type of wastewater including FOG discharged into the Port sanitary sewer system.

7.2. FOG Control Plan

The Port facilities are covered under the FOG control programs developed and administered by EBMUD and the City. Both of these programs include a wealth of information and outreach materials (i.e., maintenance of grease traps and interceptors, best management practices, brochures, posters, flyers, etc.) for commercial restaurants and FSEs. Therefore, it is not necessary for the Port to develop a redundant FOG program. Most relevant to the Port is the operations of food and beverage concessions at OAK. FOG control program details can be found at the following website addresses for EBMUD and the City, respectively:

https://www.ebmud.com/wastewater/bay-friendly-waste-disposal/fats-oils-and-grease/

https://www.oaklandca.gov/topics/fats-oils-and-grease-fog

7.3. Source Control and Pretreatment Requirements

Source control and pretreatment are currently regulated and enforced through the EBMUD's Wastewater Control Ordinance and the California Plumbing Code as amended by the City. EBMUD and the City may require certain FSEs to install and properly maintain grease control devices ("GCD") in compliance with applicable regulations.

Since 2010, OAK has installed a number of grease interceptors and is responsible for conducting periodic inspections and maintenance of the GCDs and overseeing the disposal of grease in accordance with EBMUD's requirements.

ELEMENT 8 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

This section presents the Port's system evaluation and capacity assurance plan ("SECAP"). The purpose of the SECAP is to provide the design criteria of the Port sanitary sewer system facilities, to identify, evaluate, and develop feasible alternatives to correct these deficiencies, and to develop a capital improvement program for sanitary sewer utility infrastructure including budget and schedule for improvements.

8.1. Regulatory Requirements

Section D.13 of the WDR requires the Port prepare and implement a CIP that will provide hydraulic capacity for peak dry weather flows as well as the appropriate design storm or wet weather event. The SSMP must address, at a minimum, the following:

a) Evaluation. Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to a sanitary sewer overflow (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;

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

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

8.2. Planning and Design Criteria

Capacity analysis of the wastewater collection system was performed in accordance with the criteria established in the SECAP completed in May 2010. This section summarizes the most important planning criteria that were used in the SECAP.

8.2.1. Gravity Sewers

Sewer pipe capacities are dependent on many factors, including roughness of the pipe, the maximum allowable depth of flow, minimum velocity, and slope of pipe. Relevant criteria are summarized below:

- **Manning Coefficient (n).** The Manning coefficient 'n' is a friction coefficient and varies with respect to pipe material, size of pipe, depth of flow, smoothness of pipe and joints,

and extent of root intrusion. For sewer pipes, the Manning coefficient typically ranges between 0.011 and 0.017, with 0.013 being a representative value used for sewer system planning.

- **Flow Depth Criteria (d/D).** The primary criterion used to identify capacity deficient trunk sewers or to size new improvements is the maximum flow depth to pipe diameter ratio (d/D). The d/D value is defined as the depth (d) of flow in a pipe during peak flow conditions divided by the pipe's diameter (D).
  - **Flow Depth for Existing Sewers.** Using a conservative d/D ratio when evaluating existing sewers may lead to unnecessary replacement of existing pipelines. Therefore, a d/D ratio of 1.0 was used to evaluate the existing sewer system for peak wet weather flow ("PWWF") (this is typically the maximum hourly flow in the collection system). If the flow depth was greater than the maximum allowed, then the sewer was deemed deficient and a larger sewer was proposed to provide greater flow capacity.
  - **Flow Depth for New Sewers.** When designing new sewers, it is common practice to adopt variable flow depth criteria for different pipe sizes. Design d/D ratios typically range from 0.5 to 0.92. The maximum d/D ratio under the design flow condition depends on the pipe diameter as shown in **Table 8.1**.
- **Design Velocities and Minimum Slopes.** In order to minimize the settlement of sewage solids, gravity sewers should be designed for a minimum velocity of 2 feet per second ("fps") (based on roughness coefficient of 0.013). At this velocity, the sewer flow will typically provide self-cleaning for the pipe. **Table 8.2** lists the recommended minimum slopes and their corresponding maximum flows for maintaining self-cleaning velocities (equal to or greater than 2 fps) when the pipe is flowing at its maximum depth.

Table 8.1 Maximum Allowable d/D Ratio for New Sewers
Port of Oakland Sewer System Management Plan

Pipe Diameter (in.)	Maximum d/D Ratio (at Design Flow)
Less than 12	≤ 0.50
12 to 18	≤ 0.67
Larger than 18	≤ 1.00

Table 8.2 Minimum Slope for New Sewer Pipes Port of Oakland Sewer System Management Plan				
Pipe Diameter (in.)	**Minimum Slope [1],[2] (ft/ft)**	**Calculated Flow at Maximum d/D Criterion [2],[3]**		
		d/D	**(cfs)**	**(mgd)**
8	0.0033	0.50	0.35	0.23
10	0.0025	0.50	0.55	0.35
12	0.0019	0.67	1.23	0.80
15	0.0014	0.67	1.92	1.24
18	0.0011	0.67	2.77	1.79
21	0.0009	1.00	4.81	3.11
24	0.0008	1.00	6.28	4.06
27	0.0007	1.00	7.95	5.14
30	0.0006	1.00	9.82	6.35
36	0.0006	1.00	16.38	10.59
42	0.0006	1.00	24.71	15.97

Notes:
1. Recommended minimum slope for design flow at maximum d/D and at minimum velocity of 2 ft/s.
2. Manning's n = 0.013
3. Calculated flow is determined using the minimum slope and the maximum allowable d/D presented in Table 8.1.

8.2.2. Lift Stations and Force Mains

- **Submersible pump**. A minimum of two (2) non-clog, submersible pumps specifically designed for conveying raw wastewater should be installed in each lift station. If two pumps are to be installed, each should be capable of independently conveying the design flow with the second pump serving as standby. If three or more pumps are to be installed, the firm capacity of the lift station, which is defined as the total pumping capacity of the lift station less the capacity of the largest pump, should be sufficient to convey the design flow.
- **Force main**. Force main piping should be sized to provide a minimum velocity of 3 fps at the design flow rate of the lift station and no more than 8 fps. For the determination of head loss, the Hazen Williams Equation was used with a C factor of 100.

8.3. Flow Monitoring, Hydraulic Model Development, and Capacity Evaluation

The Port conducted Port-wide flow monitoring in 2010 and 2011 and developed the hydraulic model for the Port sanitary sewer system during the preparation of the 2010 SSMP. The primary purpose of flow monitoring is to measure flow contributions from different tributary areas of the collection system. Flow monitoring also provide useful data for identifying infiltration and inflow ("I/I") into the collection system and for developing and calibrating the wastewater collection system hydraulic model for dry weather and wet weather flow.

In addition, the Port conducted flow monitoring at OAK from December 2018 to February 2019 to develop updated flow measurements for a hydraulic model and to validate the model. Analysis of the flow monitoring data revealed a likely source of direct inflow from the Terminal Area of OAK. Subsequently, the Port set an interim goal of reducing this inflow by at least 50 percent through identification and future capital improvements.

The Port conducted additional flow monitoring at OAK from January 2020 to March 2020 to identify the source of the inflow identified in the prior study. This flow monitoring was successful in identifying the likely source of the inflow and the Port prioritized the rehabilitation of the identified pipe segment in its 5-year capital improvement program. The model also showed that there was insufficient reserve capacity in line segments along Airport Drive and Earhart Road for future development. The Port utilized this information to determine the necessary capacity improvements in its planned upgrades of Airport Drive and Earhart Road.

8.4. Capital Improvement Program ("CIP")

This section summarizes the sewer rehabilitation and upgrade projects completed since the 2015 SSMP Update to address system issues including I/I elimination and reduction in SSO as well as to accommodate Port developments. This section also provides a list of ongoing and 5-year proposed capital improvement projects for the Port sanitary sewer collection system. Implementing these sewer rehabilitation and upgrade projects will require a significant amount of capital resources and prioritization and coordination with the revenue divisions.

Table 8.3 provides a list of sewer system related projects completed from 2015 to 2019, and **Table 8.4** provides a list of proposed sanitary sewer capital improvement projects for FY21-25.

Table 8.3 Port of Oakland Sanitary Sewer Projects since 2015

Projects	Year of Completion
Rehabilitate 2200 feet of 15-inch sewer gravity main on 7th Street and former Ferry Street in the Maritime area	2015
Abandon existing sanitary sewer infrastructure and replace with new sanitary sewer trunk lines, force mains, laterals, and lift stations on Maritime Street as part of the redevelopment of the former Oakland Army Base	2015-18
Rehabilitate Lift Station AP01P at OAK	2017

Table 8.3 Port of Oakland Sanitary Sewer Projects since 2015	
Abandon existing sanitary sewer infrastructure and replace with a new collection system including complete rehabilitation of lift station D09P as part of the tenant development of the Cool Port Oakland in the Maritime area	2018
Replaced 45 feet 4-inch sewer drain line in Building M-101, at Terminal 1, OAK	2019

Table 8.4 Port of Oakland Capital Improvement Program for Sanitary Sewer System

Location	Description	5-Year CIP Budget ($1,000)	FY21 ($1,000)	FY22 ($1,000)	FY23 ($1,000)	FY24 ($1,000)	FY25 ($1,000)
Aviation							
Parking Bowl	LS 2 Rehab	1,775	1,775	0	0	0	0
Terminal 1	LS 12 & 15 Rehab	1,900	1,500	400	0	0	0
Terminal 1	LS 6 and 8 Rehab	1,500	0	1,500	0	0	0
Airport Drive	Airport Drive SS Rehab	4,120	120	4,000	0	0	0
Earhart Road	Earhart Road SS Rehab	7,500	1,200	6,300	0	0	0
Neil Armstrong Way	Pipe-505 SS Rehab	780	580	200	0	0	0
Terminal 1 Sewer Rehab (added to CIP)	Repair of Pipe-38	1,200	1,000	200	0	0	0
Airport Drive	LS 1 Rehab – Pump Replacement	2,215	0	415	1,800	0	0
Air Cargo Way	LS 155P Rehab	1,350	0	400	950	0	0
Edward White Way	LS 137P Rehab	1,300	0	400	900	0	0
ARFF Facility	LS 911P Rehab	1,300	0	400	900	0	0
GRE Facility	LS 912P Rehab	1,400	0	400	1,000	0	0
Aviation Totals		**26,340**	**6,175**	**14,615**	**5,550**	**0**	**0**

Maritime							
Outer Harbor Berths 20-24	Sanitary Sewer Lines Rehab	2,200	2,200	0	0	0	0
OICT East Power Shop and East Reefer Cleaning Area	Oil Water Separator Rehab	350	350	0	0	0	0
Outer Harbor Berth 20, OICT Berths 55-56	Lift Station Rehab	1,000	1,000	0	0	0	0
Ben E Nutter Berths 35-38, Portview Park	Sanitary Sewer Lines Rehab	1,500	300	1,200	0	0	0
OICT Berths 57-59	Lift Station Rehab	1,500	1,500	0	0	0	0
JIT, Maritime St	Sanitary Sewer Lines Rehab	3,500	500	1,500	1,500	0	0
TraPac Berths 25-33, Middle Harbor Shoreline Park, 7th St	Sanitary Sewer Lines Rehab	3,500	500	1,500	1,500	0	0
OICT Berths 55-59	Sanitary Sewer Lines Rehab	2,500	500	1,000	1,000	0	0
7th St	Lift Station Rehab	700	200	500	0	0	0
Middle Harbor Rd	Lift Station Rehab	700	200	500	0	0	0
Maritime Total		**17,450**	**7,250**	**6,200**	**4,000**	**0**	**0**

Commercial Real Estate (CRE)							
To be determined		0	0	0	0	0	0
CRE Total		0	0	0	0	0	0

Port of Oakland Total	**43,790**	**13,425**	**20,815**	**9,550**	**0**	**0**

Notes:

Other sewer improvements may be constructed as needed, pending the results of the inspection and assessment program.

ELEMENT 9 – MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

This section discusses how the Port monitors implementation of the 2020 SSMP and measures the effectiveness of 2020 SSMP elements in reducing SSOs. Performance indicators have been selected to meet the SSMP goals of the Port as stated in Element 1. SSO trends, frequencies, locations, and volumes are also reported as set forth in the SSMP provisions of the WDR.

9.1. Regulatory Requirements

Section D.13 of the WDR specifies that the Port 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 preventive maintenance program;
d) Update program elements, as appropriate, based on monitoring or performance evaluations; and
e) Identify and illustrate sanitary sewer overflows (SSO) trends, including frequency, location, and volume.

9.2. Performance Indicators

1) Number of SSOs by locations per year;
2) Percentage of SSOs greater than 100 gallons in volume;
3) Annual quantity and cumulative sum and percentage of total length of sanitary sewer pipes inspected; and
4) Annual quantity and cumulative sum and percentage of total length of sanitary sewer pipes rehabilitated.

9.3. SSMP Implementation, Monitoring, Measurement, and Program Modification

To gauge the progress of the 2020 SSMP implementation, the Port will periodically evaluate the performance of its sanitary sewer collection system using the performance indicators identified in Section 9.1 above or other measures that the Port deems appropriate to align with its strategic business goals.

As mentioned in Element 4 above, following the adoption of Port Ordinance 4474 in May 2018, the Port completed the CAP in May 2019 and since then has accelerated ahead of the implementation schedule as outlined in the CAP. Except for the sewer facilities in certain areas that may be subject to future redevelopments, the Port intends to complete the condition assessment of the majority of the sanitary sewer lines in the Aviation and Maritime area before the end of fiscal year 2021. The Port will use these inspection and assessment data to develop the CAWP by June 30, 2023, with the goal to complete all necessary repairs and rehabilitation of the Port owned and maintained sewer assets by 2036 in alignment with the term of the CD.

The Port will determine the need to modify update the 2020 SSMP based on the results of the next biennial audit as discussed in Element 10 below and the overall performance of its sanitary

sewer system. The Port may also choose to revise the 2020 SSMP at any time and as necessary after significant changes to its current operations and/or new business developments that may have an impact on the operations and maintenance of the sewer collection systems. Port staff will seek approval of an update SSMP by the Board when there are significant changes that warrant a revised SSMP. The authority for approval of minor changes such as employee names, contact information, or minor procedural changes is delegated to the Executive Director or his designated representative(s).

9.4. SSO Trend

Table 9.1 summarizes SSOs since 2015. The Port documented the cause of each SSO event and implemented follow-up projects to address the issue causing SSO to eliminate SSO events at the same location. A detailed table showing the cause of SSO events, list of follow-up projects, and an SSO chart is provided in **Appendix 6**. The total SSO volume reported in 2016 included the overflow volumes from the three SSO events caused by mechanical and power failures during the City redevelopment of its portion of the former Oakland Army Base. The Port reported these events on behalf of the City's Redevelopment Agency under the previous utility management agreement.

Table 9.1 SSO Trend Tracking Table

SSO Statistic[1]	Year						Totals
	2015	2016[2]	2017	2018	2019	2020[3]	
Total Number of SSO's	3	5	2	3	3	1	17
Category 1	0	1	0	1	1	0	3
Category 2	2	3	0	0	0	0	5
Category 3	1	1	2	2	2	1	9
Greater than 1000 gals	1	2	0	0	0	0	3
Less than 1000 gals	2	3	2	3	3	1	14
Total Volume of SSO's (gals)	**2,275**	**11,930**	**35**	**1,050**	**86**	**30**	**15,406**
Volume recovered	40	10	0	0	45	0	95
Volume to surface water	0	30	0	75	1	0	106
Percent to surface water (%)	0.0%	0.3%	0.0%	7.1%	1.2%	0.0%	0.7%

Notes:

1. Source of SSO data is the public SSO database, CIWQS. Information displayed is current as of July 2020.
2. The total volume of SSO in 2016 includes three SSO events that occurred at Lift Station LS 18 in the former Oakland Army Base Area. These SSOs were caused by mechanical and power failures during the City's redevelopment of its portion of the former Oakland Army Base.
3. As of 6/30/2020

ELEMENT 10 – SSMP AUDITS

The Port has an Office of Audit Services which provides independent and objective reviews and evaluations of the Port's financial and operational activities to ensure compliance with all applicable laws and regulations. Since 2015, the Port has focused its effort on the development of the Port PSL Ordinance and the CAP and has delayed the SSMP program audit. The decision to engage the Port's internal audit staff or to use an outside independent auditor who is familiar with the SSMP audit process has not been made. However, it is anticipated that the Port will conduct the next biennial audit in fiscal year 2023, the same year as the completion of the CAWP mentioned above. The performance indicators listed in Element 9 may be used to evaluate the success of 2020 SSMP implementation as well as reduction in SSO. The results of this audit will be included in the next SSMP Update in 2025.

ELEMENT 11 – COMMUNICATION PROGRAM

11.1. Communication Plan

The Port's website at https://www.portofoakland.com/community/environmental-stewardship/programs/ provides the public with information regarding the Port's environmental stewardship program including a link to the current SSMP.

The Port held public meetings before the Board formally approved and adopted the SSMP in 2010 and the SSMP Update in 2015, respectively. **Appendix 7** includes copies of Port Resolutions No. 10-58 and No. 15-073 formally approving and adopting the 2010 SSMP and 2015 SSMP.

To satisfy the Communication Program Element, the Port regularly communicates with the its tenants and other stakeholders through a variety of community outreach programs, bulletins, and Board meetings for certain sewer program, workplan or projects that may have any impact to the surrounding communities.

11.2. Final Certification

The Port LRO is required to certify that all sections of the SSMP are in compliance with the requirements set forth in the WDR. This will be accomplished by completing the re-certification process in the CIWQS Online Database. The Port continues to monitor and update its sanitary sewer compliance program to align with the Port's strategic goals and will re-certify the SSMP by the Board when significant changes are made. At a minimum, the Port will update and certify this report with the State Water Board every five years.

APPENDIX 1

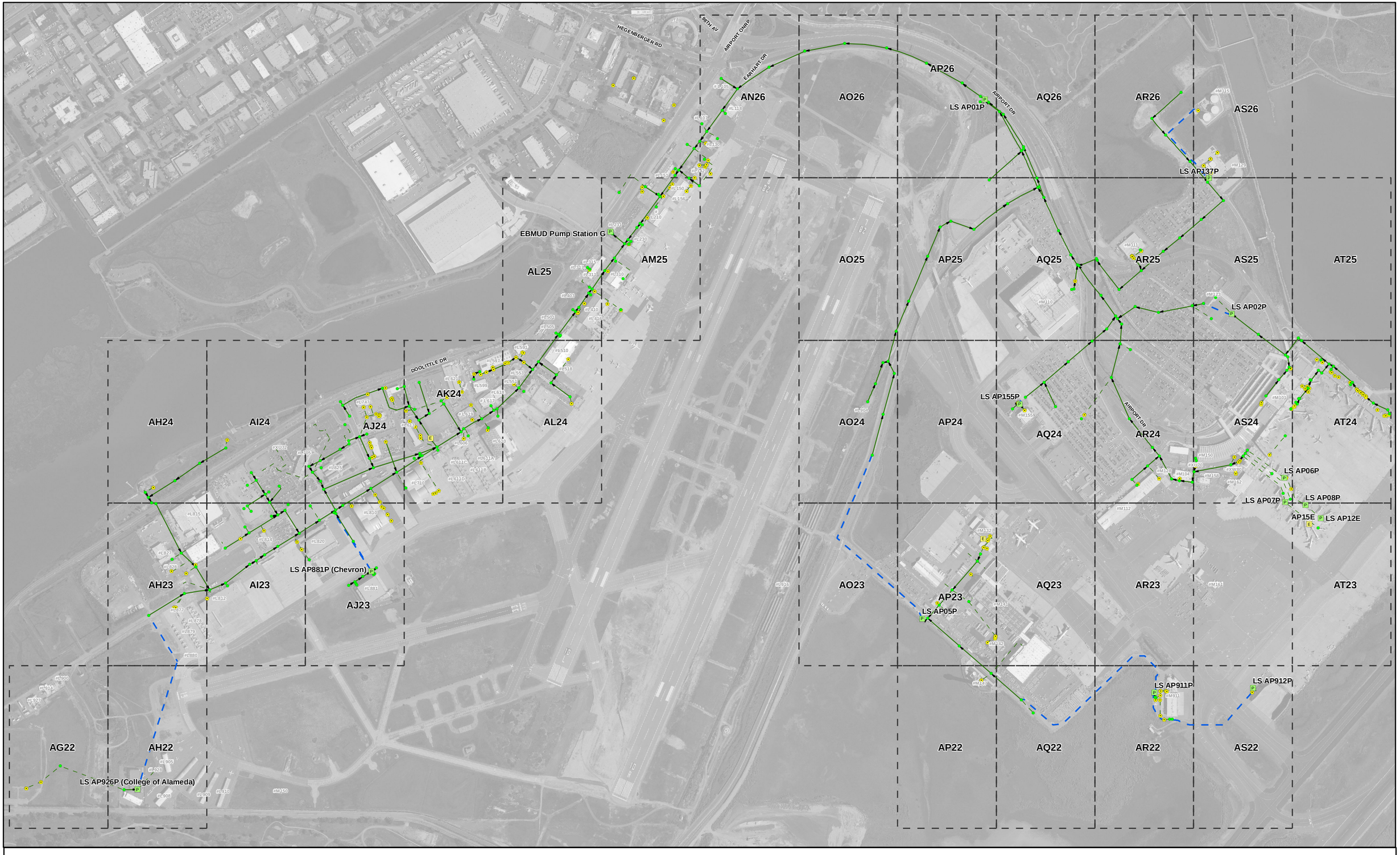
Port of Oakland Property Map

PROPERTY OWNED BY PORT OF OAKLAND

APPENDIX 2

Port of Oakland

Sanitary Sewer System Overview Map



Ejector
Lift Station
Manhole
Clean Out
Gravity Main
Lateral
Pressurized Main
Match Line

Aerial - 2015

PORT OF OAKLAND

SEWER COLLECTION SYSTEM

AVIATION AREA INDEX

05/2019

MOTT MACDONALD

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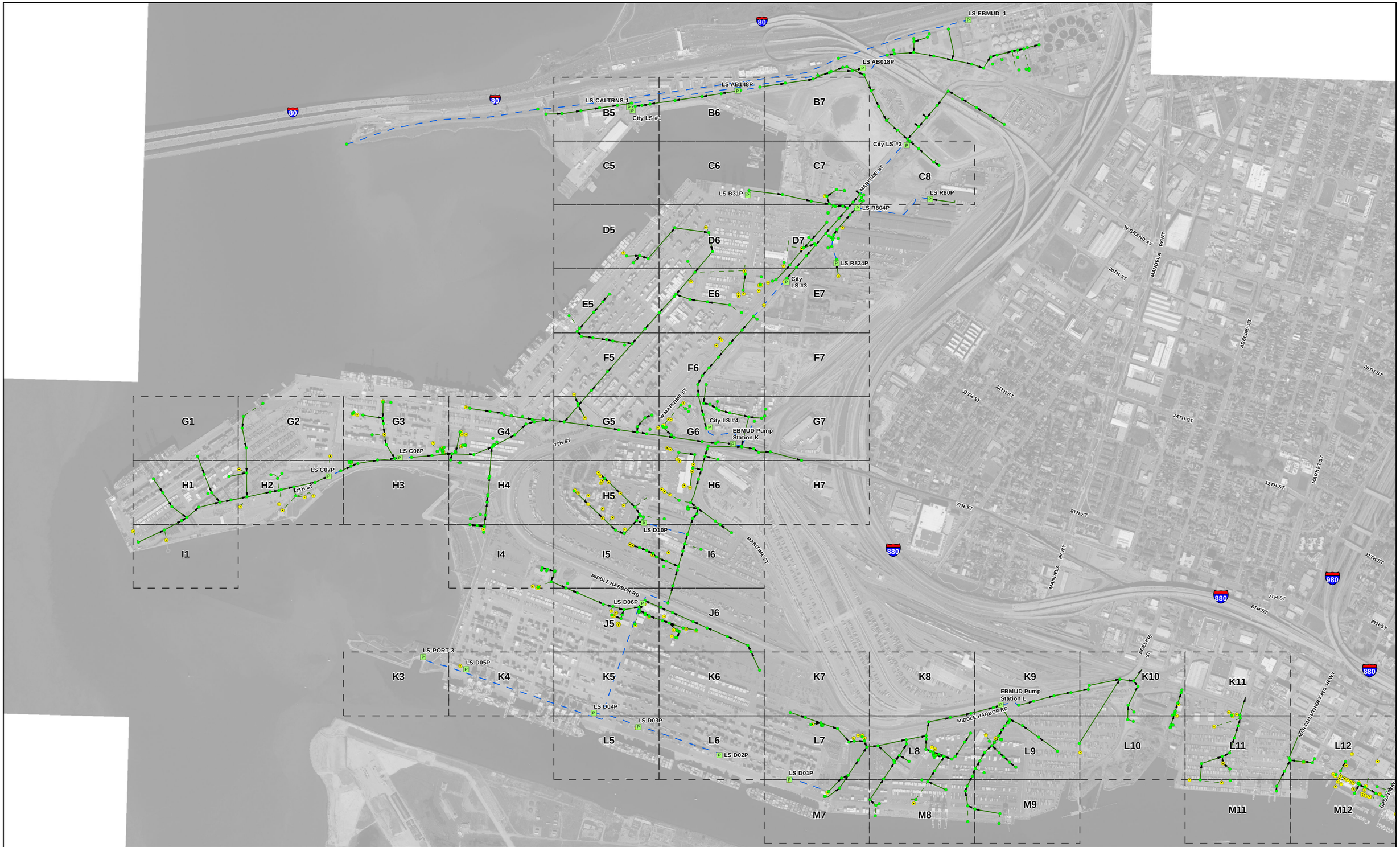

- EBMUD Wet Weather Facility
- Ejector
- Lift Station
- Manhole
- Clean Out
- Gravity Main
- Lateral
- Pressurized Main
- Match Line *
- Aerial - 2015

* Detailed map book are generated for areas that contain Port owned sewer assets only. City & EBMUD owned sewer assets are shown for reference.

PORT OF OAKLAND

SEWER COLLECTION SYSTEM

MARITIME AREA INDEX

05/2019

MOTT MACDONALD

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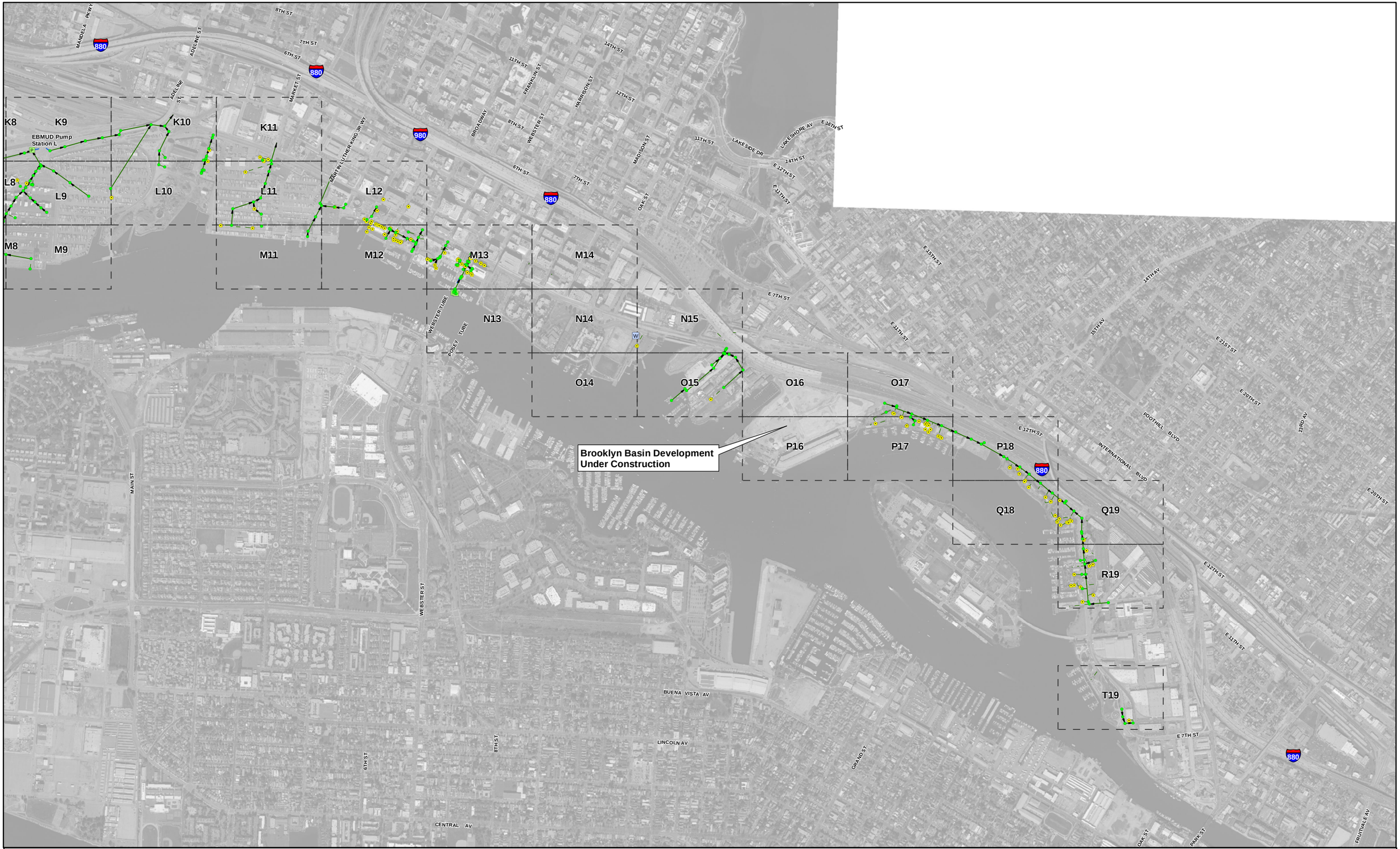

EBMUD Wet Weather Facility
Ejector
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Manhole
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Lateral
Pressurized Main
Match Line *
Aerial - 2015

* Detailed map book are generated for areas that contain Port owned sewer assets only. City & EBMUD owned sewer assets are shown for reference.

PORT OF OAKLAND

SEWER COLLECTION SYSTEM

COMMERCIAL REAL ESTATE AREA INDEX

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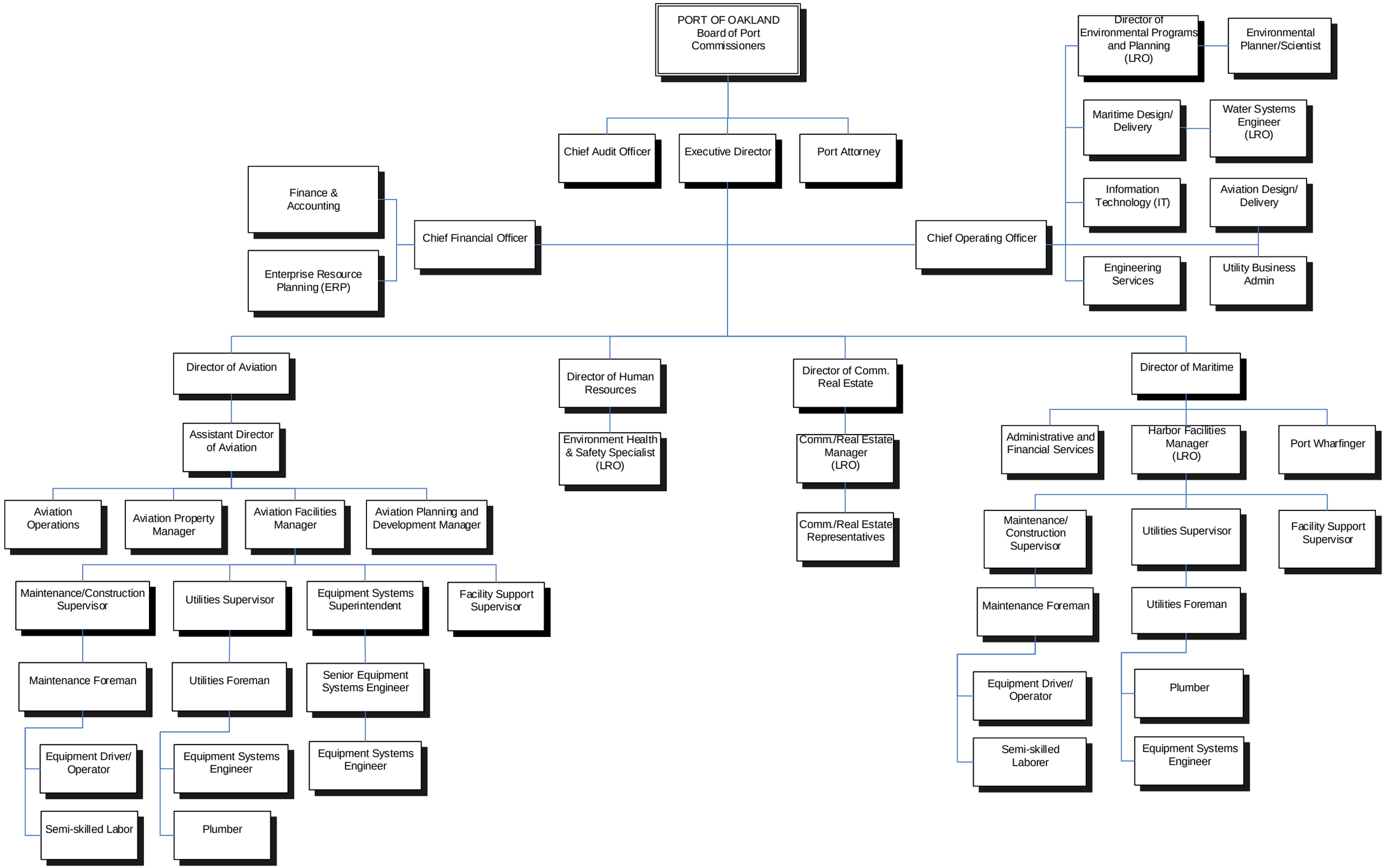
APPENDIX 3

Port of Oakland Organization Chart &
Key Personnel Contact Information



- (LRO) = Legally Responsible Official

PORT OF OAKLAND

PORT SSMP KEY PERSONNEL CONTACT INFORMATION
Port-Wide Sewer System Management Plan
Port of Oakland

Position	Name	Phone
Executive		
Executive Director	Danny Wan	(510) 627-1212
Port Attorney	Michele Heffes	(510) 627-1348
Chief Audit Officer (Acting)	Arnel Atienza	(510) 627-1257
Chief Operating Officer	Kristi McKenney	(510) 627-1178
Chief Financial Officer (Acting)	Julie Lam	(510) 627-1138
Aviation		
Director of Aviation	Bryant L. Francis	(510) 563-6421
Assistant Director Aviation (Acting)	Craig Simon	(510) 563-6425
Aviation Planning and Development Manager	Joan Zatopek	(510) 563-6530
Aviation Facilities Maintenance Manager (vacant)		
Superintendent Equipment Systems Engineer	Terry (T-C) Padilla	(510) 563-3939
Utilities Supervisor	Michael Henning	(510) 563-3942
Maintenance/Construction Supervisor	DeJon Iglehart	(510) 563-3947
Facilities Support Supervisor	Vanessa Valderrama	(510) 563-3977
Commercial/Real Estate		
Director of Commercial Real Estate	Pam Kershaw	(510) 627-1168
Commercial Real Estate Manager	Dorin Tuitin	(925) 352-4846
Maritime		
Director of Maritime	Bryan Brandes	(510) 627-1243
Chief Wharfinger	Eric Napralla	(510) 627-1403
Wharfingers	Ralph Reynoso Richard Taylor Mark Simpson Kevin Wong	(510) 384-3163 (925) 451-6119 (925) 627-1407 (925) 639-5637
Administrative and Financial Services Manager	Delphine Prevost	(510) 627-1141
Harbor Facilities Maintenance Manager	Bill Morrison	(510) 773-9981
Utilities Supervisor	Ernest Richmond	(510) 773-9964
Facilities Support Supervisor	Eric Fan	(510) 627-1298
Chief Operating Office (Environmental Program &Planning, Utility, Engineering)		
Director of Environmental Programs and Planning	Richard Sinkoff	(510) 627-1182
Utilities Administration Manager	Jared Carpenter	(510) 627-1167
Port Principal Engineer - Aviation	Robert Andrews	(510) 627-1273

PORT SSMP KEY PERSONNEL CONTACT INFORMATION
Port-Wide Sewer System Management Plan
Port of Oakland

Position	Name	Phone
Port Principal Engineer - Maritime	Thanh Vuong	(510) 627-1266
Port Principal Engineer - Engineering Services	Steve Low	(510) 627-1890
Water Systems Engineer	Liem Nguyen	(510) 627-1636
Human Resources		
Environmental Health & Safety Specialist	Desmond DeMoss	(510) 773-9991

APPENDIX 4

Port of Oakland Sewer Ordinances

BOARD OF PORT COMMISSIONERS
CITY OF OAKLAND

PORT ORDINANCE 4113

ORDINANCE ESTABLISHING DESIGN, CONSTRUCTION, TESTING, AND INSPECTION STANDARDS FOR SANITARY SEWER FACILITIES, AND LIMITS ON THE TYPE, CHARACTER, AND VOLUME OF ALLOWABLE DISCHARGES TO THE SANITARY SEWER SYSTEM

BE IT ORDAINED by the Board of Port Commissioners of the City of Oakland as follows:

SECTION 1 - DEFINTIONS. As used in this ordinance:

"Board" means the Board Port of Commissioners.

"City" means the City of Oakland.

"Contamination" means an impairment of the quality of the waters of the State by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease. Contamination shall include any equivalent effect resulting from the disposal of wastewater, whether or not waters of the state are affected.

"Director" means the Executive Director, or his or her designated representative.

"EBMUD" means the East Bay Municipal Utility District.

"Engineer" means the Chief Engineer, or his or her designated representative.

"Lateral" means the particular sanitary sewer which lies between the building or structure it serves, to and including its connection with the sanitary sewer system and which carries wastewater and liquid wastes from the serviced building or structure to the sanitary sewer system.

"Misfeasor" means any person or entity, or their agents, assigns, designees, employees, or successors, who causes or allows to be caused a Nuisance under this ordinance.

"Nuisance" shall have the meaning set forth in California Water Code Section 13050(m), as it may be amended from time to time. Any violation of, noncompliance with, or refusal to comply with any of

the provisions of this ordinance, or any of the provisions incorporated herein, is deemed a "Nuisance" under this ordinance..

"Pollution" means an alteration of the quality of the waters of the State by waste to a degree which unreasonably affects (1) such waters for beneficial use or (2) facilities which serve such beneficial uses.

"Port" means the Port of Oakland.

"Private Sewer" means a pipe, conduit, or channel, not maintained by the Port, used to carry wastewater.

"Public Sewer" means a pipe, conduit, or channel, maintained by the Port and used to carry wastewater.

"Sanitary Sewer" means any building sewer, private sewer, or public sewer used to carry wastewater.

"Sanitary Sewer System" means either the entire network or a portion of that network of publicly and privately maintained pipes, conduits, channels, manholes, pump stations, and all appurtenances thereto, under the jurisdiction of the Port, used to collect, store, and transport wastewater.

"Wastewater" means water carrying waste from residences, commercial, and industrial establishments, or any combination of such wastes, but excluding storm water when conveyed in a separate storm water system.

"Wastewater Control Ordinance" means EBMUD Ordinance Number 311A.03, or any subsequent amendment thereof.

"Wastewater Treatment Plant" means the EBMUD Main Wastewater Treatment Plant.

SECTION 2 - PURPOSE. The purpose of this ordinance is to regulate the design, construction, inspection, testing, and abandonment of the sanitary sewer system, and to define the allowable and prohibited discharges to the sanitary sewer system. This ordinance shall not supersede any existing or future statute, rule, regulation, or ordinance of any public agency, State, or Federal regulatory body governing wastewater and water discharges into the sanitary sewer system.

SECTION 3 - AUTHORITY TO DEVELOP DESIGN, CONSTRUCTION, INSPECTION, TESTING STANDARDS. The Board hereby approves, and authorizes the Engineer for and on behalf of the Board to develop, publish, and enforce standards for the design, construction, inspection, testing and abandonment of the sanitary sewer system and for updating the standards from time to time. Such standards shall apply to all sanitary sewers under Port jurisdiction regardless of whether they are public sewers or private sewers.

SECTION 4 - ALLOWABLE DISCHARGES. Wastewater may be discharged into the Port sanitary sewer system provided that it does not violate the limitations established in this ordinance and further provided that the discharger obtains permission of the Port, EBMUD, and City, as applicable, to discharge into the sanitary sewer system.

SECTION 5 - PROHIBITED DISCHARGES.

(A) General Prohibition. The discharge of wastewater into the Port sanitary sewer system that results in contamination, pollution, or a nuisance is prohibited.

(B) Prohibited Effects. Wastewater or a substance of any kind shall not be discharged or otherwise deposited into the Port sanitary sewer system in such quantities or qualities which, either alone or by interaction with other wastewater, cause or threaten to cause:

1. Danger to the life or safety of any person.

2. Damage to Port facilities.

3. Interference with the operation or capacity of the Port sanitary sewer system.

4. Obstruction of flow in sanitary sewers.

5. Interference with the wastewater treatment and disposal process.

6. Flammable or explosive conditions.

7. Interference with the ability for reclamation and reuse of wastewater.

8. Any noxious or malodorous gas or substance capable of creating a public nuisance.

9. Violation of receiving water quality limitations.

10. Violation of any statute, rule, regulation, or ordinance of any public agency, State, or Federal regulatory body governing wastewater and water discharges into the sanitary sewer system.

11. The presence of toxic gases, fumes, or vapors in quantities that endanger the health and safety of Port personnel.

(C) Prohibited Substances. No person shall discharge, by either direct or indirect means, any of the following into the Port sanitary sewer system, or any substance for which discharge is prohibited by the City Municipal Code or by the current EBMUD Wastewater Control Ordinance:

1. Any storm water or other unpolluted water that meets the requirements for and is acceptable for discharge to storm drains or receiving waters of the State.

2. Any unpolluted industrial process water.

3. Any substance which creates a fire or explosion hazard.

4. Any liquid or vapor having a temperature detrimental to the Port sanitary sewer system.

5. Any water or waste, which contains excessive amounts of fats, oil, and/or grease.

6. Any garbage, except garbage from dwellings and establishments where food is prepared and consumed on the premises, and which has been ground to such a degree that all particles will be carried freely under the flow conditions prevailing in the sanitary sewer system.

7. Any heavy solid, viscous substance, or other matter of such a nature as to obstruct the flow in sanitary sewers or cause interference with the proper operation of the sanitary sewer system, including but not limited to sand, cement, lime, plaster, cinders, ashes, metal, glass, straw, shavings, animal hair, feathers, paunch manure, fibrous matter, tar, asphalt, resins, or plastics.

8. Any substance having a corrosive property capable of causing damage or other hazard to structure, equipment, or personnel.

9. Any toxic or poisonous substances in sufficient quantity to constitute a hazard to humans, animals, or fish, or to create a hazard in the waters receiving effluent from the wastewater treatment plant.

10. Any waters or wastes containing suspended solids or dissolved matter of such character and quantity that unusual attention or expense is required to handle such materials in the sanitary sewer system or at the wastewater treatment plant.

(D) Prohibition on Dilution Waters. No user shall increase the use of process water, or in any other way attempt to dilute a discharge in order to meet applicable pretreatment standards or to comply with this or any other applicable resolution or ordinance, unless otherwise permitted to do so.

(E) Radioactive Limits. No person shall discharge or cause to be discharged any radioactive wastewater into any sewer, unless the person is authorized to use radioactive material by the Nuclear Regulatory Commission or other governmental agency empowered to regulate the use of radioactive materials, the wastewater is discharged in strict conformity with Nuclear Regulatory Commission regulations and recommendations for safe disposal, and the discharge is in compliance with all rules and regulations of State and local regulatory agencies.

(F) Wastewater Strength Limits. No user shall discharge wastewater into a sewer lateral or otherwise introduce into the Port sanitary sewer system wastewater that exceeds the numerical limits established in EBMUD Ordinance Number 311A.03, or any subsequent amendment thereof, or the City Municipal Code, whichever is more stringent.

(G) Wastewater Flow Rate Limits. No person shall discharge wastewater into any sewer in such a quantity or at such a rate of flow as to overload or have a harmful or adverse impact on Port facilities or the wastewater treatment plant.

SECTION 6 - RIGHT OF ENTRY. Duly authorized representatives of the Director may enter and inspect any building, structure, or premises with Port jurisdiction to secure compliance with, or prevent a violation of, any provision of this ordinance under the following conditions:

(A) Whenever the Director shall have reasonable cause to believe that conditions which do not conform to this ordinance exist in a particular building, structure, or premises.

(B) Whenever the Director authorizes and directs the inspection of all buildings, structures, or premises subject to the provisions of this ordinance in a defined area of the Port.

(C) Whenever the Director shall authorize and direct inspections of buildings, structures, or premises as a part of a routine spot check.

(D) Whenever the Director authorizes the performance of needed maintenance or repair activities.

(E) No premises shall be inspected until a reasonable notice is given to the discharger or occupant, or to the agent of either.

SECTION 7 - POLICIES FOR VIOLATION.

(A) Notice of violation. Whenever the Director finds that any Misfeasor is causing or allowing to be caused a Nuisance, the Director shall serve notice on the Misfeasor stating the existence of the Nuisance, requiring abatement of the Nuisance, and specifying the measures necessary for abatement. Such notice shall be served personally on the Misfeasor or by mailing such notice to the Misfeasor by U.S. Mail , and by posting a copy of such notice on the property whereupon the Nuisance is being caused.

(B) Abatement by Misfeasor. It shall be the duty of the Misfeasor to abate the Nuisance within one hundred eighty days of personal service or mailing of such notice.

(C) Abatement by the Port. If the Misfeasor should neglect or refuse to abate the Nuisance pursuant to such notice, the Director may

abate the Nuisance at the expense of the Port and the Port may recover the amount of such expense, including the costs of inspection, enforcement and correction to the full extent permitted by Government Code Section 54988 as it may be amended from time to time.

(D) Recovery of attorneys fees and costs. The Port may in its discretion commence legal actions and/or equitable proceedings in a court of competent jurisdiction to abate the Nuisance and/or to collect and recover Port abatement costs. If the Port prevails in such action and/or proceeding, it shall be entitled to recover costs and attorneys' fees in addition to any taxes, fees, assessments, penalties and interest. The remedies provided for herein shall be cumulative and not exclusive, and shall not preclude the Port from any other relief which otherwise is available.

(E) Abatement costs made nuisance abatement lien or special assessment lien. Notwithstanding any other provision of this ordinance to the contrary, the costs incurred by the Port in the abatement of a Nuisance subject to the provisions of this ordinance may be placed against any privately owned and affected property as either a nuisance abatement lien or a special assessment lien pursuant to Government Code Section 38771, et seq. as amended from time to time or a lien pursuant to Government Code Section 54988 as amended from time to time. The Port may enforce a lien under this chapter in any manner permitted by law, including filing a civil action to either foreclose on its liens or to obtain a money judgment or both, or pursuing non-judicial foreclosure. The Port may elect, upon 30 days notice to all known and record owners of the privately owned and affected property, to convert any nuisance abatement lien authorized by this chapter to a special assessment lien, or vice versa. Costs recoverable under this ordinance shall include those categories of costs and fees set forth in Civil Code Section 3496, regardless of the type of nuisance involved.

(D) Protest filing procedure. Any alleged Misfeasor desiring to protest against the Director's determination that the alleged Misfeasor is causing or allowing to be caused a Nuisance may file with the Director's office a protest in writing within ten days after receiving notice to abate the Nuisance. Any Misfeasor desiring to protest against the costs incurred by the Port in abating a Nuisance may file with the Director's office a protest in writing within ten days after receiving notice of the cost incurred by the Port in abating the Nuisance.

(F) Protest hearing. Upon the filing of a protest, the Director shall conduct a public hearing. At such hearing, the Director may affirm, modify, or reverse the prior determination. The Director's decision at the end of such hearing shall be final.

(G) Criminal penalties. Every person or persons, firm, company or corporation, who shall violate, disobey, or refuse to comply with any of the provisions of this ordinance, or any of the provisions

incorporated therein, shall, upon conviction, be punishable by fine and penalty, not exceeding Five Hundred Dollars ($500.00) or six (6) months imprisonment, or both. Each day constitutes a separate violation.

The Board of Port Commissioners, Oakland, California, November 3, 2009. Passed to print for one day by the following vote: Ayes: Commissioners Batarse, Calloway, Gonzales, Gordon, Head, Katzoff, and President Uno - 7. Noes: None.

John T. Betterton
Secretary of the Board

Adopted at a regular meeting held November 17, 2009
by the following vote:

Ayes: Commissioners Gonzales, Gordon, Head, Katzoff, and President Uno – 5
Excused: Commissioners Batarse, and Calloway – 2
Noes: None

President.

Attest: _____
Secretary.

Approved as to form and legality:

_____
Port Attorney

BOARD OF PORT COMMISSIONERS
CITY OF OAKLAND

PORT ORDINANCE NO. 4474

ORDINANCE ADOPTING BY REFERENCE OAKLAND MUNICIPAL AND PLANNING CODES SECTIONS 13.08.590 THROUGH 13.08.620 AS MODIFIED HEREIN, REQUIRING PORT TENANTS TO COMPLY WITH SUCH PRIVATE SEWER LATERAL REGULATIONS, AND DIRECTING PORT STAFF TO PREPARE PLANS TO ASSESS AND REPAIR PORT-OWNED PRIVATE SEWER LATERALS

WHEREAS, in 2009, the United States Environmental Protection Agency ("EPA") and the California State Water Resources Control Board, and the California Regional Water Quality Control Board, San Francisco Bay Region filed lawsuits against the East Bay Municipal Utility District ("EBMUD") and six satellite agencies, including the City of Oakland (the "City"), citing violations of the Clean Water Act and the California Water Code and requesting that defendants fix old, cracked sanitary sewer pipes (the "CWA Lawsuits"). Also in 2009, the EPA filed an Administrative Order against the City directing it to fix the sewer system, including adopting a private sewer lateral program (Docket No. CWA 309(a)-10-009) (the "EPA Administrative Order");

WHEREAS, many pipes in the City are in need of repair to prevent the infiltration of rainwater, which can overwhelm wastewater treatment facilities and lead to the release of partially treated wastewater into the Bay. In response to the CWA Lawsuits and EPA's Administrative Order, EBMUD and the City took several actions to address old sanitary sewer pipes, including phasing in a Regional Private Sewer Lateral ("PSL") Ordinance (the "East Bay Regional Private Sewer Lateral Program"). Under the program, affected property owners must obtain a certificate from EBMUD certifying that all of their PSLs are leak-free and have passed a verification test. Property owners may also choose to have their laterals tested and certified;

WHEREAS on February 9, 2010, EBMUD adopted Ordinance No. 353-10, which amended Ordinance No. 311 by adding Title VIII thereto, establishing the East Bay Regional Private Sewer Lateral Program and enacting regulations for the inspection, testing, repair, replacement, and ongoing maintenance of PSLs within the program area, including the City. EBMUD amended the EBMUD Regional PSL Program on July 23, 2013 (Ordinance No. 359-13), which deleted Title VIII and re-enacted its modified provisions as a new standalone ordinance, and amended Ordinance No. 359-13 again on October 28, 2014 (Ordinance No. 362-14) (Ordinance 359-13 and all existing and future amendments thereto are collectively

referred to herein as the "EBMUD Regional PSL Ordinance");

WHEREAS, the EBMUD Regional PSL Ordinance requires "property owners" to obtain a "compliance certificate" upon the happening of certain events including title transfer, construction or remodeling the permitted work cost of which exceeds $100,000 or change in water services. Under the EBMUD Regional PSL Ordinance, a "property owner" includes "a person that owns a parcel of real property, or that person's representative including a tenant or contractor." A public entity, including the Port is not defined as a property owner for the purposes of the EBMUD Regional PSL Ordinance;

WHEREAS, the City has enacted Sections 13.08.590 through 13.08.620 to the Oakland Municipal and Planning Codes ("OMC") by adopting Ordinance No. 13026 and Ordinance No. 13080, respectively (and collectively referred to as the "City PSL Ordinance"), which adopted by reference the EBMUD Regional PSL Ordinance and directed the City's Building Official to enforce the provisions of the EBMUD Regional PSL Ordinance and other City ordinance requirements relating to sewer laterals;

WHEREAS, pursuant to Article VII, Section 706(4) of The Charter of the City of Oakland ("Charter"), the Board of Port Commissioners ("Board" or "Port") has been vested with the complete and exclusive power, and it shall be its duty on behalf of the City to have control and jurisdiction of the "Port Area" (as defined in the Charter), as it may be amended from time to time;

WHEREAS, pursuant to Article VII, Section 706(27) of the Charter, the Board has been vested with the complete and exclusive power, and it shall be its duty on behalf of the City to adopt and enforce such ordinances, orders, regulations and practices as are necessary for the proper administration, management and government of the Port and its facilities; and

WHEREAS, the intent of this ordinance is to: 1) confirm the applicability and enforceability of the City PSL Ordinance, and the EBMUD Regional PSL Ordinance incorporated therein, within the Port Area and on Port-owned property within the City of Oakland as set forth in this ordinance, and 2) to establish a "Local Ordinance Requirement" as defined in the EBMUD Regional PSL Ordinance establishing that Port tenants shall be "property owners" for the purposes of complying with the City PSL Ordinance, and the EBMUD Regional PSL Ordinance incorporated therein, with certain exceptions as outlined herein; now, therefore,

BE IT ORDAINED by the Board of Port Commissioners of the City of Oakland as follows:

Section 1. In acting upon this matter, the Board has exercised its independent judgment based on substantial evidence in the record and adopts and relies upon the facts, data, analysis, and

findings set forth in the Agenda Report and in related agenda materials and in testimony received.

Section 2. The Board hereby finds and determines as follows:

A. Keeping Port owned sewer lines free from the infiltration and inflow ("I/I") of storm water and ground water reduces sewer overflows from Port property into surface waters like the San Francisco Bay, which pose a threat to public health, safety and the environment, and to reduce I/I into Port owned sewer lines, the Board finds it necessary and prudent to adopt this ordinance; and

B. The proposal to adopt the City PSL Ordinance, and the EBMUD Regional PSL Ordinance incorporated therein, as modified herein and to apply it to the Port Area and all Port owned property in the City of Oakland was reviewed in accordance with the requirements of the California Environmental Quality Act ("CEQA") and the Port CEQA Guidelines. The proposal is categorically exempt from CEQA pursuant to Section 15308 of the Port CEQA Guidelines in that the proposal constitutes a regulatory action taken to assure the maintenance, restoration, enhancement, or protection of the environment. Accordingly, the Board hereby finds and determines that the proposal will not have a significant effect on the environment and is therefore exempt from the provisions of CEQA.

C. The Port has the authority as a property owner acting in its proprietary capacity to regulate certain uses and activities on Port property; and

D. Charter Section 706(3) requires the Port to "take charge of, control, and supervise … all the water front properties, and lands adjacent thereto, … which are now or may hereafter be owned or possessed by the City, and the purpose of this ordinance is consistent with the Port's authority under the Charter Section 706(27) to adopt ordinances and regulations necessary for the proper administration and management of Port facilities.

E. "Property Owners", as defined in Section 3(A)(3) below, shall be expressly required to obtain a Compliance Certificate from EBMUD as specified in the City PSL Ordinance, and the EBMUD Regional PSL Ordinance incorporated therein, as modified herein.

Section 3. The Board hereby adopts by reference Oakland Municipal and Planning Codes Sections 13.08.590 through 13.08.620 (Chapter 13.08 of Title 13) and declares those provisions, in particular the EBMUD Regional PSL Ordinance incorporated therein, to be enforceable within the Port, subject to the following additions and modifications:

A. For the purpose of this ordinance, the following definitions and clarifications are hereby added:

1. "Leasehold Property" means the property contained within the boundaries of any property lease, assignment agreement, license and concession agreement, temporary rental agreement, contract or any other tenancy or occupancy agreement between the Port and a tenant (such agreement referred to herein as a "Lease" for purposes of this ordinance) for a property located in the Port Area or on Port property in the City of Oakland, which may include more than one Assessor's Parcel Number or less than a full Assessor's Parcel Number.

2. The term "Parcel" as used in the EBMUD Regional PSL Ordinance means, for purposes of implementing this ordinance, the Leasehold Property.

3. "Property Owner". In addition to the persons and entities included within the EBMUD Regional PSL Ordinance definition of 'property owner', a 'property owner' also includes any person or party using or occupying any lands or other real property owned by the Port pursuant to any Lease as defined above."

B. Within the Port Area and on Port-owned property within the City of Oakland, Property Owners, as defined above, shall be responsible for inspecting building sewers, obtaining all required permits, performing all necessary building sewer repair or replacement, scheduling inspections with EBMUD, passing a verification test witnessed by EBMUD, obtaining and filing with the City a compliance certificate from EBMUD as set forth in the EBMUD Regional PSL Ordinance for the entire building sewer (upper building sewer

lateral and lower building sewer lateral) when one or more of the triggering events in OMC Sections 13.08.600 A, B, or C occurs, except as modified below for Leasehold Properties with sanitary sewers totaling greater than 1000 feet in length.

C. The first sentence of OMC Section 13.08.600 is hereby amended to add the following text at the beginning of the sentence: "Unless otherwise excepted under Sections F and H below,".

D. Subsection "E" of OMC Section 13.08.600 is amended to read as follows:

"Properties with Sanitary Sewers Totaling Greater than 1000 Feet in Length. Within one year of occurrence of any event specified in Subsection A, B or C of this section [OMC Section 13.08.600], Property Owners of real property or Leasehold Property that contains sanitary sewers totaling greater than 1000 feet in length shall submit for EBMUD approval, a condition assessment plan with a schedule to perform testing to assess the condition of all of the sewer laterals on the property to determine compliance with the EBMUD Regional PSL Ordinance. Within 6 years of triggering compliance requirements, such Property Owners shall complete all condition assessment testing and submit a corrective action work plan for EBMUD approval with a copy to the Port's Director of Engineering.

E. Subsection "H" (Port Exemption) is hereby added to OMC Section 13.08.600 to read as follows:

"(H) Port Exception:

1. A Property Owner may be excepted by written agreement between said Property Owner and the Port by which a party other than the Property Owner, expressly assumes the responsibility for compliance with the City PSL Ordinance, and the EBMUD Regional PSL Ordinance incorporated therein".

Section 4. The Board hereby finds and directs that:

A. The Port is not a "Property Owner" for the purposes of the EBMUD Regional PSL Ordinance, the City PSL

Ordinance or this ordinance. Nonetheless, the Port is committed to participating and furthering the goals of the East Bay Regional Private Sewer Lateral Program.

B. Notwithstanding the finding in Section 4.A above, the Port will voluntarily proceed where feasible to assess the condition of all Port owned sewer lines on all properties owned by the Port ("Port Controlled Property"), except those sewer lines that are within a Leasehold Property and serve only one tenant. The purpose of such assessment will be to determine whether such Port owned sewer lines comply with standards set forth in Section 5 of the EBMUD Regional PSL Ordinance and OMC Section 13.08.610 (collectively, "Compliance Standards"), which for purposes of this ordinance, will apply to all sewer lines assessed by the Port and not, for the avoidance of doubt, only to private sewer laterals. To this end, the Board directs Port staff to prepare a "condition assessment plan" for Board approval as soon as feasible, but no later than June 30, 2019. The condition assessment plan will include a schedule for the performance of testing to assess the condition of all Port owned sewer lines on Port Controlled Property.

C. Once the Port has implemented the condition assessment plan, the Board directs Port staff to prepare a "corrective action work plan" for Board approval which shall describe the type, quantity and schedule of work needed to bring all Port-owned sewer lines on Port Controlled Property into compliance with the Compliance Standards. Port staff shall present such corrective action work plan to the Board no later than June 30, 2023.

D. After the Board approves the corrective action work plan, the Port shall complete the work described in the approved corrective action work plan, subject to budget appropriations adopted by the Board as part of the Port's capital improvement program or other available sources of funding.

Section 5. The requirements of this ordinance are Local Ordinance Requirements within the meaning of the EBMUD Regional PSL Ordinance. This ordinance is neither intended nor shall it be construed, to alter, or diminish the powers and responsibilities of the Board under the Charter or the Port's practice in the carrying out of its powers and responsibilities.

Section 6. This ordinance shall be effective thirty (30) days after the adoption of this ordinance by the Board.

The Board of Port Commissioners, Oakland, California, April 26, 2018. Passed to print for one day by the following vote: Ayes: Commissioners Colbruno, Cluver, Hamlin, Martinez, Yee and President Story - 6. Excused: Commissioner Butner - 1. Noes: 0.

Daria Edgerly
Secretary of the Board

Adopted at a Regular Meeting held May 10, 2018
by the following vote:

Ayes: Commissioners Butner, Colbruno, Cluver, Hamlin, Martinez, Yee and President Story – 7
Noes: 0

President.

Attest:

Secretary.

Approved as to form and legality:

Port Attorney

APPENDIX 5

Port of Oakland Overflow Emergency Response Plan

PORT OF OAKLAND

530 Water Street
Oakland, CA 94607
(510) 627-1100

OVERFLOW EMERGENCY RESPONSE PLAN

July 2015

In Consultation With:

Causey Consulting
733 Cree Ct
Walnut Creek, CA 94598
(925) 323-6520
causeywc@comcast.net

PORT OF OAKLAND

OVERFLOW EMERGENCY RESPONSE PLAN

TABLE OF CONTENTS

Page

LIST OF TABLES

LIST OF FIGURES

1.0 INTRODUCTION

The Port of Oakland (Port) is committed to the effective management, operation, and maintenance of its sanitary sewer system, providing world-class infrastructure facilities to serve its airport, seaport, and commercial real estate tenants and customers.

Wastewater flows generated within the Port service area are conveyed through the Port collection system to the City of Oakland (City) sanitary sewer system or directly to sewer interceptors owned and maintained by the East Bay Municipal Utility District (EBMUD). All Port wastewater flow is treated at EBMUD's Main Wastewater Treatment Plant (MWWTP).

This Overflow Emergency Response Plan (OERP) has been developed as part of the Port-Wide Sewer System Management Plan (SSMP), which focuses on the reduction of sanitary sewer overflows (SSOs). The effective date of this plan is May 2010.

1.1 Background

SSOs are overflows from sanitary sewer systems of domestic, commercial, or industrial wastewater. SSOs often cause a public nuisance, particularly when raw untreated wastewater is discharged to areas with high public exposure, such as streets or surface waters used for drinking, fishing, or body contact recreation. SSOs may pollute surface or ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters.

In an effort to reduce SSOs in the State of California, the State Water Resources Control Board (SWRCB), as part of State General Waste Discharge Requirements Order No. 2006-0003 (GWDRs), has established that all municipalities and districts with over one mile of sanitary sewer pipelines develop an SSMP. As part of the requirements for the completion of an SSMP, the SWRCB has required that municipalities and districts develop a site-specific OERP. Similar requirements have also been established by the San Francisco Bay Area Regional Water Quality Control Board (RWQCB).

1.2 Technical Definition of a Sanitary Sewer Overflow

A SSO is defined as any overflow, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. There are four categories of SSOs as established by the MRP revisions of September 9, 2013:

Category 1: Discharges of untreated or partially treated sewage of any volume resulting from the Enrollee's sanitary sewer system failure or flow condition that:

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

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

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

As part of the GWDRs, all agencies that own or operate sanitary systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility are required to report Category 1, 2, and 3 SSOs. There are no privately owned laterals within the Port. Therefore, the reporting of Private Lateral Sewage Discharges is not applicable to the Port.

1.3 Objectives

This report is intended to serve as a Port specific OERP. The primary objectives of the OERP are to protect public health and the environment and to establish procedures to streamline and optimize the Port's SSO response activities.

Additional objectives of the OERP are as follows:

- Establish a formalized SSO reporting procedure for Port staff to follow in the event of any SSO, regardless of its size;
- Provide appropriate customer service;
- Protect collection system personnel;
- Minimize the risk of enforcement actions against the Port;
- Protect the collection system and all appurtenances; and
- Protect private and public property beyond the collection system.

This plan should be updated and modified as necessary to more closely reflect operating conditions and changes that may occur in SSO response and remediation procedures.

Additionally, this plan has been developed to meet the GWDRs requirements. This plan shall not supersede existing standard operating procedures, unless otherwise specified by the Executive Director or his designated representative.

1.4 Organization

The key elements of the OERP are addressed individually as follows:

- Section 1: Introduction
- Section 2: Regulatory Requirements
- Section 3: Overflow Response Procedure
- Section 4: Public Advisory Procedure
- Section 5: Regulatory Agency Notification Procedure
- Section 6: Media Notification Procedure
- Section 7: Distribution and Maintenance of OERP

Certain aspects or provisions of this OERP, such as SSO clean up procedures, are specific to each of the Port's three major divisions, while others apply to the entire Port regardless of division. Individual sections of this document are organized by Port division, where applicable.

1.5 Key Personnel

The report contains references to specific Port personnel as applicable to overflow response procedures. References are made to job titles, rather than individual names. The purpose of this is to simplify the process of updating the document as staff changes occur. Appendix A contains a list of the key personnel identified in this report and their contact information. This list should be updated as necessary.

1.6 Safety Provisions

When responding to the reported location of a potential SSO, Port staff may encounter emergency situations requiring immediate action. Specific actions to be taken will vary greatly depending on the type of overflow and its underlying cause (e.g., main blockage, lift station failure, etc.). While swift action may be required to mitigate the negative impacts associated with an overflow, it is important to perform these actions in a safe and competent manner that is consistent with existing standard operating procedures.

1.7 Abbreviations

To conserve space and to improve readability, the following abbreviations are used in this report. The abbreviations are spelled out in the text the first time the phrase or title is used in each chapter and subsequently identified by abbreviation only.

City	City of Oakland
EBMUD	East Bay Municipal Utility District
gpm	gallons per minute
GWDRs	General Waste Discharge Requirements Order No. 2006-0003
MRP	Monitoring Reporting Program
MWWTP	Main Wastewater Treatment Plant
NPDES	National Pollutant Discharge Elimination Program
OERP	Overflow Emergency Response Plan
Port	Port of Oakland
RWQCB	San Francisco Bay Area Regional Water Quality Control Board
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SWRCB	State Water Resources Control Board
WDR	Waste Discharge Requirements

1.8 Reference Material

The following documents were referenced primarily in the preparation of this report:

- City of Oakland, Sanitary Sewer Management Plan, August 2008.
- EBMUD, Sewer System Management Plan, May 2008.

2.0 REGULATORY REQUIREMENTS

SWRCB Requirements

The GWDRs specify that an Enrollee shall develop and implement an Overflow Emergency Response Plan (OERP) that identifies measures to protect public health and the environment. At a minimum, the plan must include the following:

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

b. A program to ensure an appropriate response to all overflows;

c. Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the monitoring reporting program (MRP), the California Water Code, other State Law, and other applicable Regional Water Board waste discharge requirements (WDR) or National Pollutant Discharge Elimination Program (NPDES) permit requirements. The SSMP should identify the officials who will receive immediate notification;

d. Procedures to ensure that appropriate staff, tenants/lease holders and contractor personnel are aware of and follow the Overflow Emergency Response Plan and are appropriately trained;

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

f. A program to ensure that all reasonable steps are taken to contain and prevent discharge of untreated or partially treated wastewater to waters of the United States and to minimize or correct any adverse impact of 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.

3.0 OVERFLOW RESPONSE PROCEDURE

This section presents a strategy for Port staff to mobilize labor, materials, tools, and equipment to mitigate any condition, which may cause or contribute to an SSO. The plan considers a wide range of potential system failures that could create an overflow to surface waters, land, or buildings.

3.1 Receipt of Information Regarding a SSO

An overflow may be detected by the general public, Port tenants, Port staff through routine maintenance activities, other public agencies, or by others. This section summarizes the

various ways in which Port staff may become aware of a potential SSO, and how the information is documented and transferred to the appropriate Port personnel.

To effectively respond to calls regarding potential SSOs, operators should obtain all relevant information regarding the potential spill from the caller. This includes in general, the following:

a. Time and date call was received;

b. Specific location;

c. Description of problem;

d. Time possible overflow was noticed by the caller;

e. Caller's name and phone number;

f. Observations of the caller (e.g., odor, duration, back, or front of property); and

g. Other relevant information that will enable the responding Port staff and crews, if required, to quickly locate, assess, and stop the overflow.

Until verified by Port staff, the report of a possible overflow should not be referred to as a "sanitary sewer overflow."

More specific information related to the Aviation, Maritime, and Commercial/Real Estate divisions is provided below.

3.1.1 Aviation Division

Calls from Port tenants or the public regarding potential overflows in the vicinity of the Oakland International Airport are generally received through the Airport Airside Operations Department (Operations Department) at (510) 563-3361. The Operations Department is staffed 24 hours per day, every day of the year (including weekends, non-business hours, and holidays).

The Airport Operations Dispatch at the Operations Department or his/her designated representative then records the overflow information and forwards it to the Aviation Facilities Maintenance Department (Aviation Facilities Manager) and to the Port's SSO Responder, the Environmental Health & Safety Specialist, when appropriate. From time to time, representatives of the maritime or commercial/real estate divisions may not be available to field calls regarding potential overflows. For this reason, the Aviation Operations Department may also receive calls regarding potential overflows in the vicinity of the harbor or commercial/real estate areas. In this case, the Airport Operations Dispatch (or Manager on Duty or his/her representative) will record the relevant information and forward it to the Port Wharfinger or Port Commercial/Real Estate Representative.

Sewer overflows in the vicinity of the Oakland International Airport detected by Port staff in the course of their normal duties shall be reported immediately to the Aviation Facilities

Maintenance Department. Dispatching personnel in the aviation division should record all relevant overflow information and dispatch response crews, as needed (see Section 3.2).

3.1.2 Maritime Division

Calls from Port tenants or the public regarding potential overflows in the maritime area are generally received through the Port Wharfinger. Should the Port Wharfinger be unavailable, all calls regarding potential overflows are routed through the Airport Operations Department (see Section 3.1.1).

The Port Wharfinger (or the Manager on Duty at the Airport Operations Department or his/her representative) then records the overflow information and forwards it to the Harbor Facilities Maintenance Department and to the Port's SSO Responder, the Environmental Health & Safety Specialist, when appropriate.

Sewer overflows in the maritime area detected by Port staff in the course of their normal duties shall be reported immediately to the Port Wharfinger or Harbor Facilities Maintenance Manager if the Wharfinger is unavailable. Dispatching personnel in the maritime division should record all relevant overflow information and dispatch response crews, as needed (see Section 3.2).

3.1.3 Commercial/Real Estate Division

Calls from Port tenants or the public regarding potential overflows in Jack London Square or other commercial/real estate areas are generally received through the Commercial/Real Estate Representative. Should the Commercial/Real Estate Representative be unavailable, all calls regarding potential overflows are routed through the Operations Department (see Section 3.1.1).

The Airport Operations Dispatch (or the Manager on Duty at the Airport Operations Department or his/her representative) then records the overflow information and forwards it to the Harbor Facilities Maintenance Department and to the Port's SSO Responder, the Environmental Health & Safety Specialist, when appropriate.

Sewer overflows in Jack London Square or other commercial/real estate areas detected by Port staff in the course of their normal duties shall be reported immediately to the Port Commercial/Real Estate Representative. Dispatching personnel in the maritime division should record all relevant overflow information and dispatch response crews, as needed (see Section 3.2).

3.2 Dispatch of Appropriate Crews to Site of Sanitary Sewer Overflow

Failure of any element within the Port sewer system that threatens to cause or causes a SSO will trigger an immediate response to isolate and correct the problem. Crews and equipment shall be available to respond to any SSO location and shall be dispatched to the site of a reported SSO immediately. Also, additional maintenance and contract personnel

shall be “on call” should extra crews be needed. Figure 1 summarizes the Aviation SSO Field Response Action Plan, while Figure 2 summarizes the Maritime and Commercial/Real Estate SSO Field Response Action Plan.

Figure 1 Airport Facilities SSO Field Response Action Flow Chart

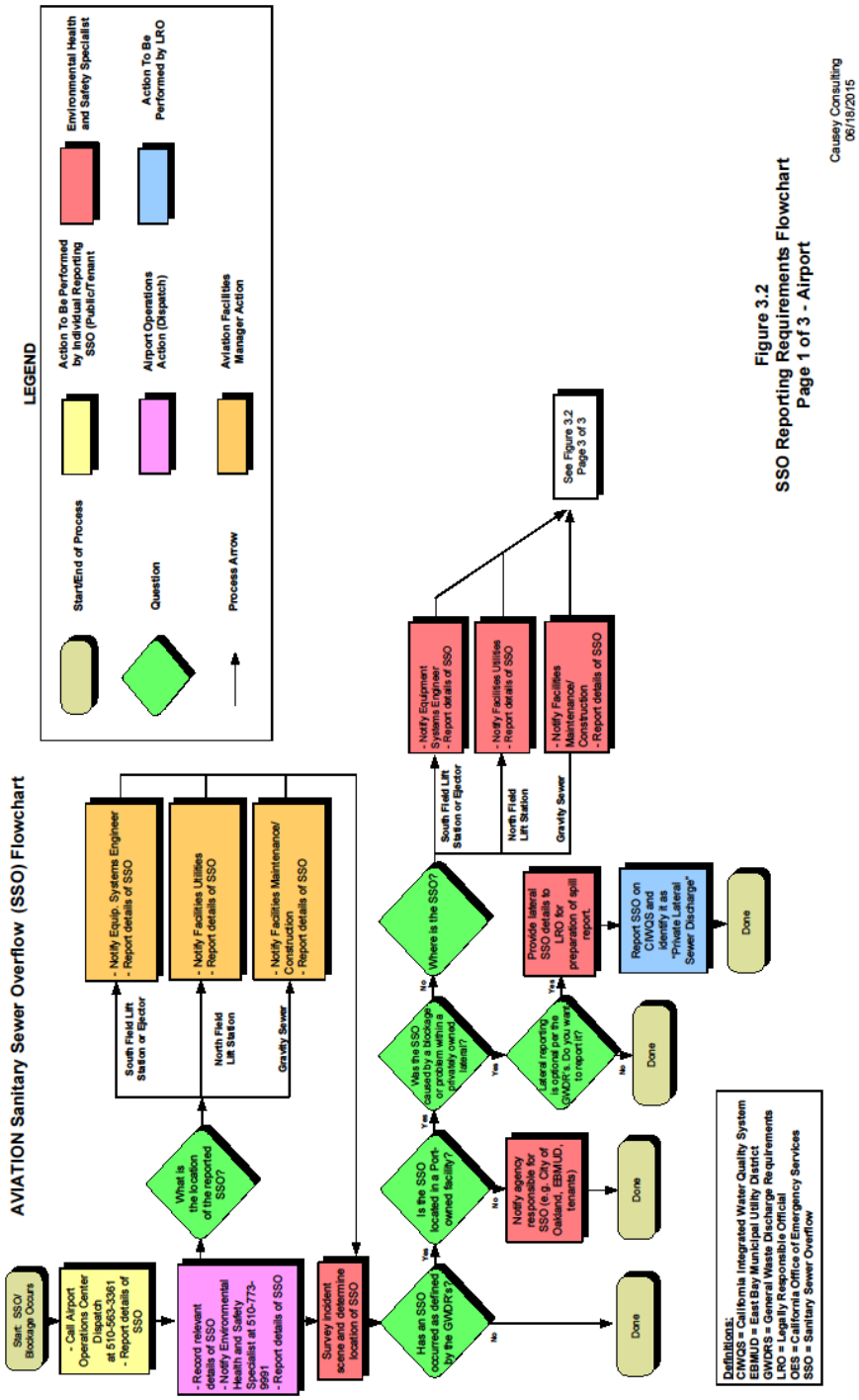
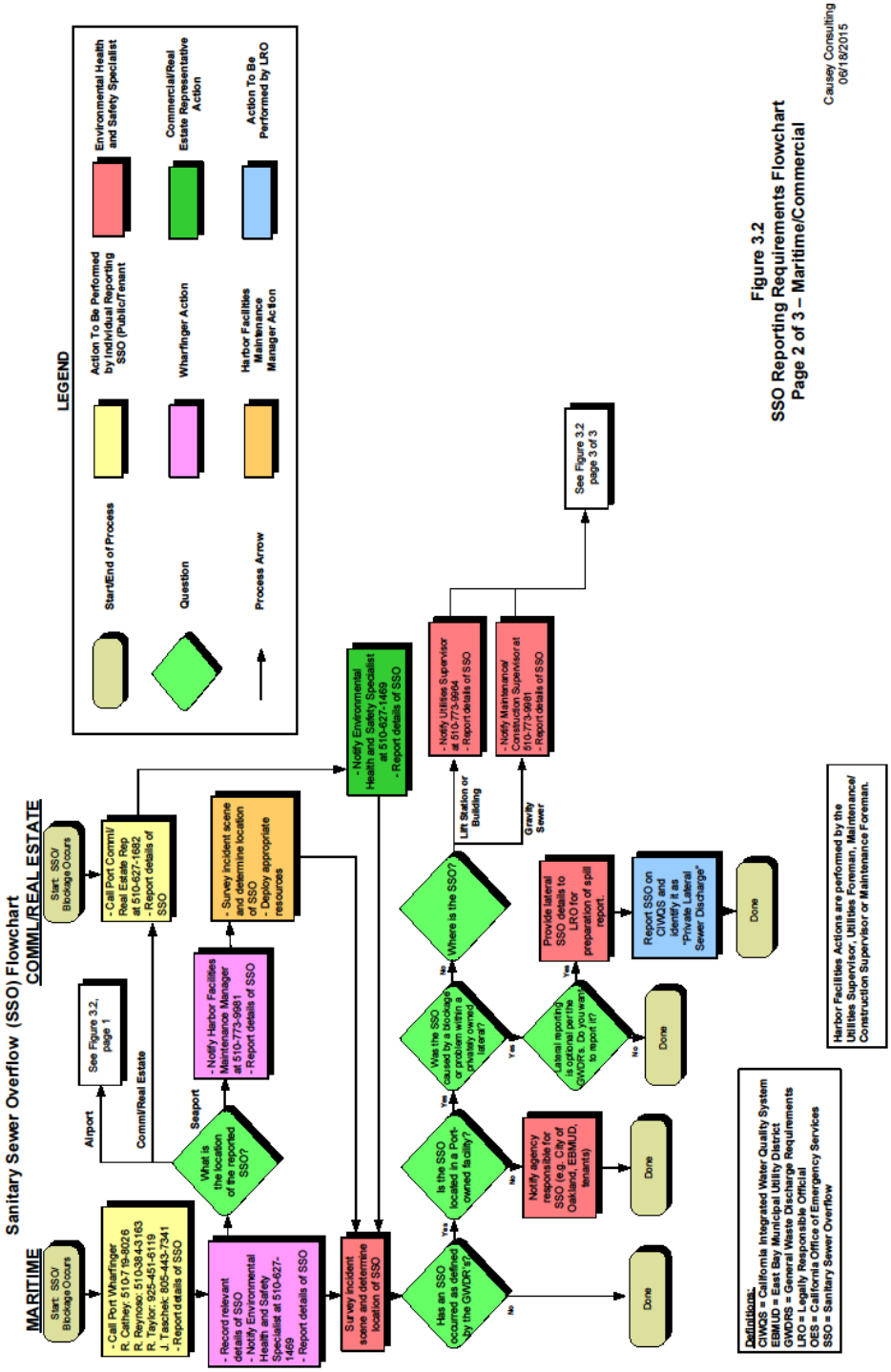


Figure 3.2
SSO Reporting Requirements Flowchart
Page 1 of 3 - Airport

Causey Consulting
06/18/2015

Figure 2 Maritime/Comm. Facilities SSO Field Response Action Flow Chart



3.2.1 Dispatching Duties

Dispatchers should receive notification of SSOs as outlined in Section 3.1 and dispatch the Environmental Health & Safety Specialist , who will assess the situation and request that appropriate crews and resources as required are dispatched. Dispatching duties are assigned based on the division responsible for maintaining the sewers where the SSO occurred (e.g., Aviation, Maritime), as summarized below.

In the Port, the dispatcher is also responsible for the coordination of the spill response activities, and shall maintain frequent contact with the response crew throughout the SSO response and mitigation process.

3.2.1.1 Aviation Division

The Aviation Maintenance/Construction Supervisor, Utilities Supervisor, or Senior Equipment Systems Engineer normally performs dispatching duties for overflows in Aviation sewer facilities, depending on the nature of the problem.

3.2.1.2 Maritime Division

The Maritime Maintenance/Construction Supervisor or Utilities Supervisor normally performs dispatching duties for overflows in Maritime sewer facilities, depending on the nature of the problem.

3.2.1.3 Commercial/Real Estate Division

The Maritime Maintenance/Construction Supervisor or Utilities Supervisor normally performs dispatching duties for overflows in Commercial/Real Estate sewer facilities, depending on the nature of the problem.

3.2.2 Crew Instructions and Work Orders

Response crews should receive instructions regarding appropriate materials, supplies, and equipment needed by the designated dispatcher noted in Section 3.2.1. The dispatcher will inform the response crew of all pertinent information regarding the spill.

Dispatchers shall verify that the entire message has been received and acknowledged by the crews who were dispatched. All standard communications procedures should be followed. All employees being dispatched to the site of a SSO shall proceed immediately to the site of the overflow. Any delays or conflicts in assignments must be immediately reported to the dispatcher for resolution. Work orders are coordinated through the Port's computerized maintenance management system (CMMS) software.

Response crews should report their findings, including possible damage to private and public property, to the dispatcher immediately upon making their investigation. If the

dispatcher has not received findings from the field crew within a reasonable amount of time, he shall contact the response crew to determine the status of the investigation.

The dispatcher shall also refer all pertinent information to the next shift, including any details of the problems described by customers.

3.2.3 Additional Resources

The dispatcher should receive and shall convey to appropriate parties within the Port requests for additional personnel, material, supplies, and equipment from crews working at the site of a SSO. If outside SSO response assistance is necessary, the Port's designated SSO Responder shall be notified by the dispatcher and shall immediately contact the Port's Hazardous Material Contractor.

3.2.4 Preliminary Assessment of Damage to Private and Public Property

The focus of the field response is to resolve the problem in an efficient manner and to protect the public health and welfare. The response crews should use discretion in assisting individual tenants/property owners as reasonably as they can for SSOs in sewers not owned or maintained by the Port. The Port should be aware that it could face increased liability for any further damages inflicted to private property during such assistance. Appropriate still photographs and video footage, if possible, should be taken of the outdoor area of the SSO and impacted area in order to thoroughly document the nature and extent of impacts. Available photographs are to be forwarded to the appropriate department below for filing with the Sanitary Sewer Overflow Field Report:

- **Aviation Sewer System:** Aviation Facilities Maintenance Department
- **Maritime Sewer System:** Harbor Facilities Maintenance Department
- **Commercial/Real Estate Sewer System:** Harbor Facilities Maintenance Department

3.2.5 Field Supervision and Inspection

The supervisor/superintendent appropriate to the spill site location and type may visit the site of the overflow, if necessary, to verify that the provisions of this overflow response plan and other directives are met. He is responsible for confirming that the Sanitary Sewer Overflow Field Report is completed and that the available information is forwarded to the Port's Environmental Health & Safety Specialist for reporting to the SWRCB and other applicable regulatory as established in the GWDRs (see Section 5.0). The Environmental Health & Safety Specialist is also responsible for coordinating with the Port's "Legally Responsible Official" (Water Systems Engineer) and will certify all SSO reports submitted to the SWRCB.

3.2.6 Coordination with Hazardous Material Response

In the event of an SSO, the Environmental Health & Safety Specialist or designated SSO Responder should be notified and consulted and will then determine if the Port's Hazardous Material Contractor should be utilized. This is of particular importance if a suspicious substance (e.g., oil sheen, foamy residue) is found on the ground surface, or should a suspicious odor (e.g., gasoline) not common to the sewer system be detected, the response crew should immediately contact the dispatcher and the SSO Responder for guidance before taking further action.

Should the Port's SSO Responder determine the need to alert the Port's Hazardous Material Contractor, the response crew shall await their arrival. Any vehicle engine, portable pump, or open flame (e.g., cigarette lighter) that can provide the ignition for an explosion or fire should flammable fluids or vapors be present shall be put out and not operated. The response crew should maintain a safe distance and observe caution until assistance arrives. In this instance, the Operations Department should also be notified so that refueling activities in the area can be suspended until the fuel cleanup is completed.

Upon arrival of the Port's Hazardous Material Contractor, the response crew will take direction from the person with the lead authority of that team and from the Port's SSOSpill Responder. Only when that authority determines it is safe and appropriate for the response crew to proceed or assist with SSO response actions can they then proceed with containment (as needed), clean-up activities, and correction. These actions, however, may be performed by the Port's Hazardous Material Contractor, depending on the size and nature of the event.

3.2.7 Crowd Control, Traffic Diversion, and Other Emergency Operations

Should a SSO be of such a size or at such a location as to cause major disruptions to the flow of traffic at any point in the Port, the responding crew shall notify the dispatcher as soon as possible. The dispatcher will then coordinate with the appropriate Port staff to set up a traffic diversion to move motorists away from the SSO location.

Steps should be taken to barricade off the site of a SSO to eliminate the potential of large crowds to inhibit the response crew's ability to effectively work. If necessary, additional assistance may be required (from the City of Oakland Police Department or other appropriate City/Port departments).

3.3 Overflow Correction, Containment, and Clean-Up

SSOs of various volumes occur from time to time, in spite of concerted prevention efforts. Spills may result from blocked sewers, pipe failures, or mechanical malfunctions, among other natural or man-made causes. The Port should be ready to respond upon notification and confirmation of an overflow. This section describes specific actions to be performed by the crews during a SSO.

The objectives of these actions are:

- To protect public health, environment, and property from sewage overflows and restore surrounding area back to normal as soon as possible;
- To establish perimeters and control zones with appropriate traffic cones and barricades, vehicles or use of natural topography (e.g., hills, berms);
- To promptly notify appropriate regulatory agencies, including the SWRCB;
- To contain the SSO to the maximum extent possible including preventing the discharge of sewage into surface waters; and
- To minimize the Port's exposure to any regulatory agency penalties and fines.

An important issue with respect to an emergency response is to make sure that the temporary actions necessary to divert flows and repair the problem do not produce a problem elsewhere in the system. For example, repair of a force main could require the temporary shutdown of the pump station and diversion of the flow at an upstream location. If the closure is not handled properly, sewage system back-ups may create other overflows.

Although the Port is staffed with individuals capable of responding efficiently to overflows, the Port does not currently own the equipment necessary to fully mitigate large SSOs that occur. For this reason, the Port typically contracts with a Hazardous Material Contractor when conditions warrant such assistance.

3.3.1 Responsibilities of Response Crew upon Arrival

It is the responsibility of the first personnel who arrive at the site of a SSO to protect the health and safety of the public by mitigating the impact of the overflow to the extent possible. Should the overflow not be the responsibility of the Port, but there is imminent danger to public health, public or private property, or to the quality of waters of the United States, then prudent emergency action should be taken until the responsible party assumes responsibility and provides actions. Upon arrival at a SSO, the response crew should do the following:

- Isolate and secure all sources of spill materials to mitigate the spill volume, such as securing any bathrooms that may be added to the spill;
- Determine the cause of the overflow, e.g. sewer line blockage, pump station mechanical or electrical failure, sewer line break, etc.;
- Identify and request, if necessary, assistance or additional resources to correct the overflow or to assist in the determination of its cause;
- Determine if private property is impacted;

- Take immediate steps to stop the overflow if possible (e.g., relieve pipeline blockage, manually operate pump station controls, repair pipe, etc.) Extraordinary steps may be considered where overflows from private property threaten public health and safety (e.g., an overflow running off of private property into the public right-of-way);
- Notify the Port's SSO Responder for guidance on how to proceed; and
- Request additional personnel, materials, supplies, or equipment that will expedite and minimize the impact of the overflow.

3.3.2 Initial Measures for Containment

The response crew shall initiate measures to contain the overflowing sewage and recover sewage that has already been discharged. Appropriate steps should be taken to minimize the impact to public health or the environment, including the following:

- Determine the immediate destination of the overflow (e.g. storm drain, street curb gutter, body of water, creek bed, etc.);
- Identify and request the necessary materials and equipment to contain or isolate the overflow, if not readily available; and
- Take immediate steps to contain the overflow (e.g., block or bag storm drains, divert into downstream manhole, etc.)

3.3.3 Additional Measures Under Potentially Prolonged Overflow Conditions

In the event of a prolonged sewer line blockage or a sewer line collapse, a determination should be made to set up a portable by-pass pumping operation around the obstruction. This may require the Port to seek assistance from an outside contractor (e.g., Rain for Rent).

- Appropriate measures shall be taken to determine the proper size and number of pumps required to effectively handle the sewage flow.
- Continuous or periodic monitoring of the by-pass pumping operation shall be implemented as required.
- Regulatory agency issues shall be addressed in conjunction with emergency repairs.

3.3.4 Cleanup

Sewer overflow sites are to be thoroughly cleaned after an overflow. No readily identified residue (e.g., sewage solids, papers, rags, plastics, rubber products) is to remain. Appropriate cleanup actions that shall be addressed, as applicable, are discussed in this section.

In many cases, the Port utilizes the services of a Hazardous Material Contractor for clean up and disinfection. Actions performed by the contractor include:

- Where practical, the area is to be thoroughly flushed and cleaned of any sewage or wash-down water. Solids and debris are to be flushed, swept, raked, picked-up, and transported for proper disposal.
- Where appropriate, the overflow site is to be disinfected and deodorized.
- Where sewage has resulted in ponding, the pond should be pumped dry and the residue disposed of in accordance with applicable regulations and policies.
- If a pond area contains sewage, which cannot be pumped dry, it may be treated with bleach. If sewage has discharged into a body of water that may contain fish or other aquatic life, bleach or other appropriate disinfectant should not be applied and the California Department of Fish and Game should be contacted for specific instructions.
- Use of portable aerators may be required where complete recovery of sewage is not practical and where severe oxygen depletion in existing surface water is expected.

The overflow site is to be secured to prevent contact by members of the public until the site has been thoroughly cleaned. Posting, if required, should be undertaken pursuant to Section 4.1.

3.3.4.1 Water Quality Monitoring

When it is determined to be feasible and safe, the Port shall collect and analyze samples of the receiving water for those SSOs that are 50,000 gallons or greater. Samples taken in the receiving waters at appropriate locations shall be analyzed for ammonia, dissolved oxygen, and an indicator of bacteria such as total coliform, fecal coliform, or enterococcus.

A complete water quality monitoring plan (WQMP) that fully complies with the 2013 State MRP will be developed and approved within ninety (90) days of Commission approval of the July 2015 SSMP revision.

3.3.4.2 Aviation Division

Following initial attempts for overflow correction and containment, Aviation personnel should contact the Port's Spill Responder for guidance on how to proceed. For smaller wastewater spills, Aviation staff may be able to use wash-down water to direct wastewater collected in the spill area back into a sanitary sewer manhole and into the collection system. For larger spills, the Port's Spill Responder typically contacts a Hazardous Material Contractor to clean up and disinfect the affected area.

3.3.4.3 Maritime Division

Following initial attempts for overflow correction and containment, Maritime personnel should contact the Port's SSO Responder for guidance on how to proceed. For spills in the maritime area, the Port's SSO Responder typically contacts a Hazardous Material Contractor to clean up and disinfect the affected area.

3.3.4.4 Commercial/Real Estate Division

Following initial attempts for overflow correction and containment, Maritime personnel should contact the Port's SSO Responder for guidance on how to proceed. For spills in the commercial/real estate area, the Port's Spill Responder typically contacts a Hazardous Material Contractor to clean up and disinfect the affected area.

3.4 Overflow Report

A Sanitary Sewer Overflow Field Report (Appendix B) shall be completed by response crews and designated Port staff whenever there is a sanitary sewer overflow (SSO) on Port property. The appropriate dispatcher shall be promptly notified when the overflow is eliminated. Information regarding the SSO should include the following:

- Indication that the sewage overflow has reached surface waters (i.e., all overflows where sewage was observed running to surface waters, or there was obvious indication (e.g. sewage residue) that sewage flowed to surface waters); or

- Indication that the sewage overflow has not reached surface waters. SSOs in the Port do not typically reach surface waters (e.g., San Francisco Bay). The Port's aviation storm drainage collection system is serviced entirely by retention basins and does not include direct discharges to San Francisco Bay. Common characteristics of an SSO that has not reached surface water include:
  - Sewage overflows to covered storm drains (with no public access) where personnel verify, by inspection, that the entire volume is contained in a sump or impoundment and where complete clean-up occurs leaving no residue.
  - Preplanned or emergency maintenance jobs involving bypass pumping if access by the public to a bypass channel is restricted and subsequent complete clean-up occurs leaving no residue (Any preplanned bypass under these circumstances will not be considered an overflow); and
  - Overflows where observation or on-site evidence clearly indicates all sewage was retained on land and did not reach surface water and where complete cleanup occurs leaving no residue.

- Determination of the start time of the sewer overflow by one of the following methods:
  - Date and time information received and/or reported to have begun and later substantiated by a response crew;

  - Visual observation; or
  - Pump station and lift station flow charts and other recorded data;

- Determination of the stop time of the sewer overflow by one of the following methods:
  - When the blockage is cleared or flow is controlled or contained; or
  - The arrival time of the response crew, if the overflow stopped between the time it was reported and the time of arrival;

- Visual observations;

- An estimation of the rate of sewer overflow in gallons per minute (gpm) by one of the following criteria:
  - Direct observations of the overflow; or
  - Measurement of actual overflow from the sewer main;

- Determination of the volume of the sewer overflow (Appendix C contains guidance for the estimation of SSO volumes and flow rates):
  - When the rate of overflow is known, multiply the duration of the overflow by the overflow rate; or
  - When the rate of overflow is not known, investigate the surrounding area for evidence of ponding or other indications of overflow volume.

- Photographs of the event, when possible.

- Assessment of any damage to the exterior areas of public/private property.

3.4.1 Technical Report

Technical reports are required by the State 2013 MRP for any SSOs that are 50,000 gallons or greater that reach waters. An outline for these technical reports will be included as part of the WQMP previously noted in section 3.3.4.1. The Technical Report shall be certified to the CIWQS system.

3.5 Customer Satisfaction

As a customer service gesture, the dispatcher or response crew confirming the overflow should follow-up in person or by telephone with the citizen(s) or tenant(s) reporting the overflow. The cause of the overflow and its resolution should be disclosed.

4.0 PUBLIC ADVISORY PROCEDURE

This section describes the actions the Port should take to limit public access to areas potentially impacted by unpermitted discharges of pollutants to surface water bodies from the wastewater collection system.

4.1 Temporary Signage

The Port has primary responsibility for determining when to post notices of polluted surface water bodies or ground surfaces that result from uncontrolled wastewater discharges from its facilities. The postings do not necessarily prohibit use of recreational areas, unless posted otherwise, but provide a warning of potential public health risks due to sewage contamination. Sample warning signs for use by the Port are provided in Appendix D.

Figure 3 on page 20 outlines the proposed decision process for personnel to recommend that posting of a confirmed overflow be undertaken or that there is reasonable potential for an overflow to occur (thus the need to post in advance). If posting is deemed necessary, the appropriate local health agency shall be notified.

4.2 Other Public Notification

Should the posting of surface water bodies or ground surfaces subjected to a sewer overflow be deemed necessary by the Aviation or Harbor Facilities Manager, he shall also determine the need for further public notification through the use of pre-scripted notices made available to the printed or electronic news media for immediate publication or airing, or by other measures (e.g., front door hangers). These measures shall be coordinated through the Port's designated Public Information Officer.

5.0 REGULATORY AGENCY NOTIFICATION PLAN

This section summarizes the procedures that Port staff shall follow to provide formal notice to the appropriate regulatory agencies as necessary in the event of an SSO. Agency notifications shall be performed in parallel with other internal notifications. The procedures for providing notification of an SSO to the media are presented in Section 6.0. Internal notification and mobilization of personnel are detailed in Section 3.0.

The regulatory agency that must be notified if an SSO occurs varies depending on the type of discharge. Likewise, the time frame in which the appropriate agencies must be notified depends on the type of discharge. The GWDRs define three categories of main line SSOs, as summarized in Section 1.2 of this document. For the reporting of SSOs, however, there are four main types of SSOs where specific reporting time frames are required, as summarized, in order of severity, below:

1. **Category 1 SSOs that Reach Surface Waters and are 1000 Gallons or Greater.** This SSO type includes those of volume 1000 gallons or greater that result in a

discharge to a drainage channel and/or surface water, or a discharge in a location where it will probably be discharged to a surface water, or discharges to a storm drain pipe that are not captured and returned to the sanitary sewer system such that less than 1000 gallons reaches surface waters.

2. **Category 1 SSOs that are Not 1000 Gallons or Greater, and Category 2 SSOs.** This SSO type includes SSOs that result in a discharge to a drainage channel and/or surface water or discharges to a storm drain pipe that are not fully captured and returned to the sanitary sewer system and are not 1000 gallons or greater (Category 1 SSOS), and SSOs that are 1000 gallons or greater that do not reach surface waters, unless the entire SSO volume discharged to a storm drain system is fully recovered and disposed of properly (Category 2 SSOs).

3. **Category 3 SSOs.** This SSO type includes all other SSOs other than Category 1 or 2 as described above.

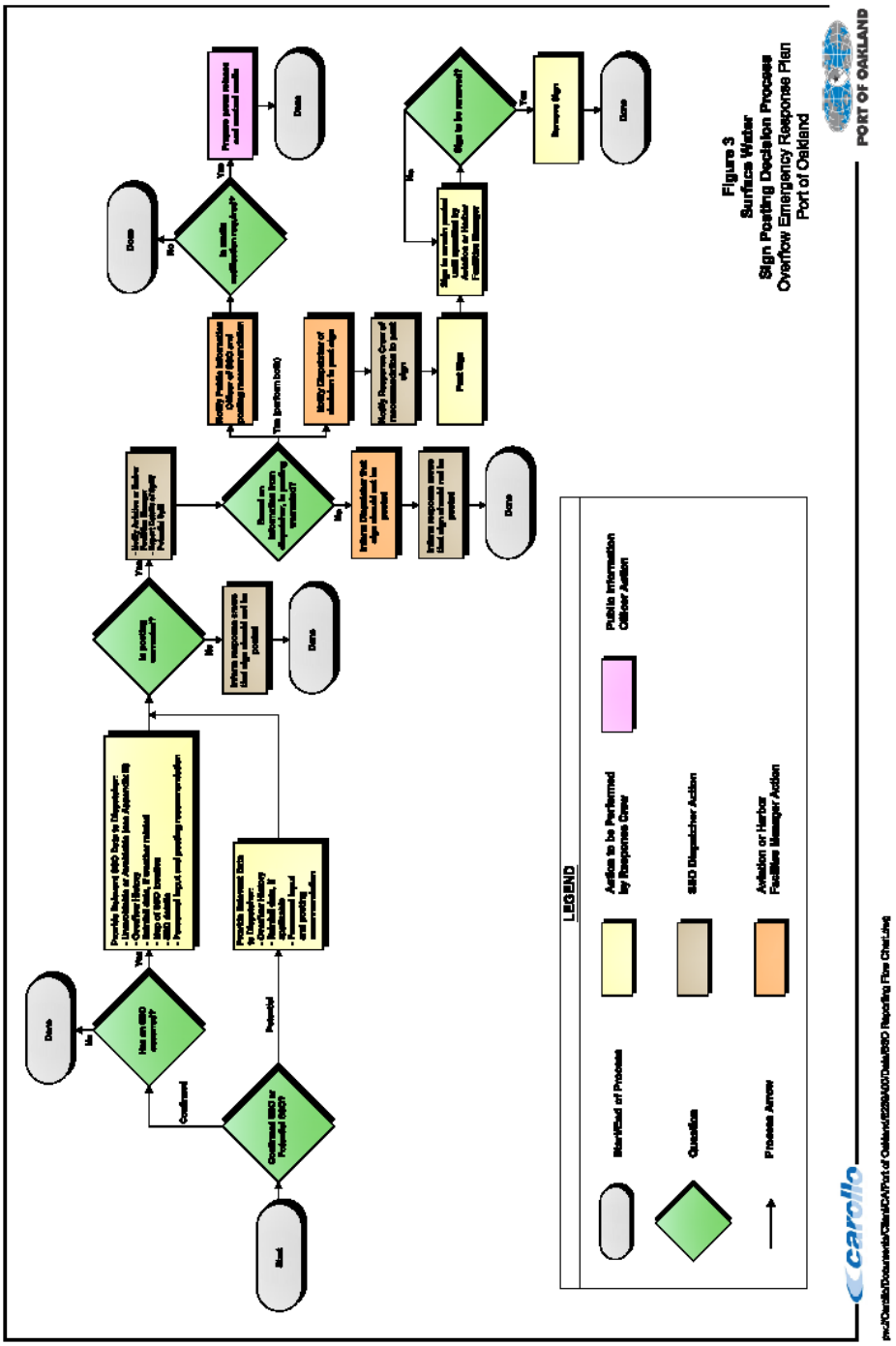
4. **Private Lateral Sewage Discharges.** This SSO type includes discharges that are caused by blockages or other problems within a lateral sewer that is not owned by the Port. Privately owned laterals typically service residential, commercial, and industrial customers and extend from either the sewer main connection or the publicly owned right-of-way to the building connection. Because all of the sanitary sewers in the Port, including service laterals, are owned by the Port, City, or EBMUD, this type of discharge is not applicable to the Port.

Table 1 summarizes the regulatory agency notification plan for each type of discharge. The requirements for which regulatory agencies must be notified and under what conditions are the same regardless of the responsible Port division. Figure 4 summarizes actions that follow Figures 1 and 2, and are required by the State CIWQS for any Port division that has an SSO.

6.0 MEDIA NOTIFICATION PROCEDURE

When an overflow has been confirmed and is a threat to public health, actions should be taken, if necessary, to notify the media in accordance with this section.

Figure 3 SSO Posting Decision Process



NOTE: Due to the highly condensed – and somewhat difficult to read - manner that Microsoft Word uses to display major changes to tables, both versions of Table 3.1 (2010 and 2015) are displayed below for comparison.

2010 Version:

Table 3.1	**Regulatory Agency Notification Plan Sewer System Management Plan Port of Oakland**		
Agency	**Contact Information**	**Action**	**Criteria**
Category 1 Spills That Reach a Drainage Channel or Surface Water			
State Office of Emergency Services	Phone: (800) 852-7550	Contact within 2 Hours	When spill reaches drainage channel or surface water
Alameda County Health Department	Phone: (510) 267-8000	Contact within 2 Hours	When spill reaches drainage channel or surface water
San Francisco Bay Area RWQCB	http://www.wbers.net/ (1)	- Complete Online Report SSO within 2 Hours - Within 24 hours, certify online that State OES and County Health Department were notified.	When spill reaches drainage channel or surface water
SWRCB	https://ciwqs.waterboards.ca.gov/	- Initial CIWQs report within 3 business days - Final CIWQs report within 15 calendar days	Category 1 SSO
National Response Center (United States Coast Guard)	http://www.nrc.uscg.mil/nrchp.html	As soon as possible	Whenever a sewage spill threatens bay water quality

Table 3.1 Regulatory Agency Notification Plan Sewer System Management Plan Port of Oakland			
Agency	**Contact Information**	**Action**	**Criteria**
Category 1 SSOs that Do Not Reach Drainage Channels or Surface Water			
SWRCB	https://ciwqs.waterboards.ca.gov/	- Complete Initial Online SSO Report within 3 business days - Final Online SSO Report within 15 calendar days	Category 1 SSO
State Office of Emergency Services	Phone: (800) 852-7550	As soon as possible	Category 1 SSO (Non Surface Water)
Alameda County Health Department	Phone: (510) 267-8000	As soon as possible	Category 1 SSO (Non Surface Water)
Category 2 SSOs			
SWRCB	https://ciwqs.waterboards.ca.gov/	- Final Online SSO Report within 30 days of the end of the calendar month	Category 2 SSO
Private Lateral Sewage Discharges			
SWRCB	https://ciwqs.waterboards.ca.gov/	- Final Online SSO Report within 30 days of the end of the calendar month	Reporting is **Optional**

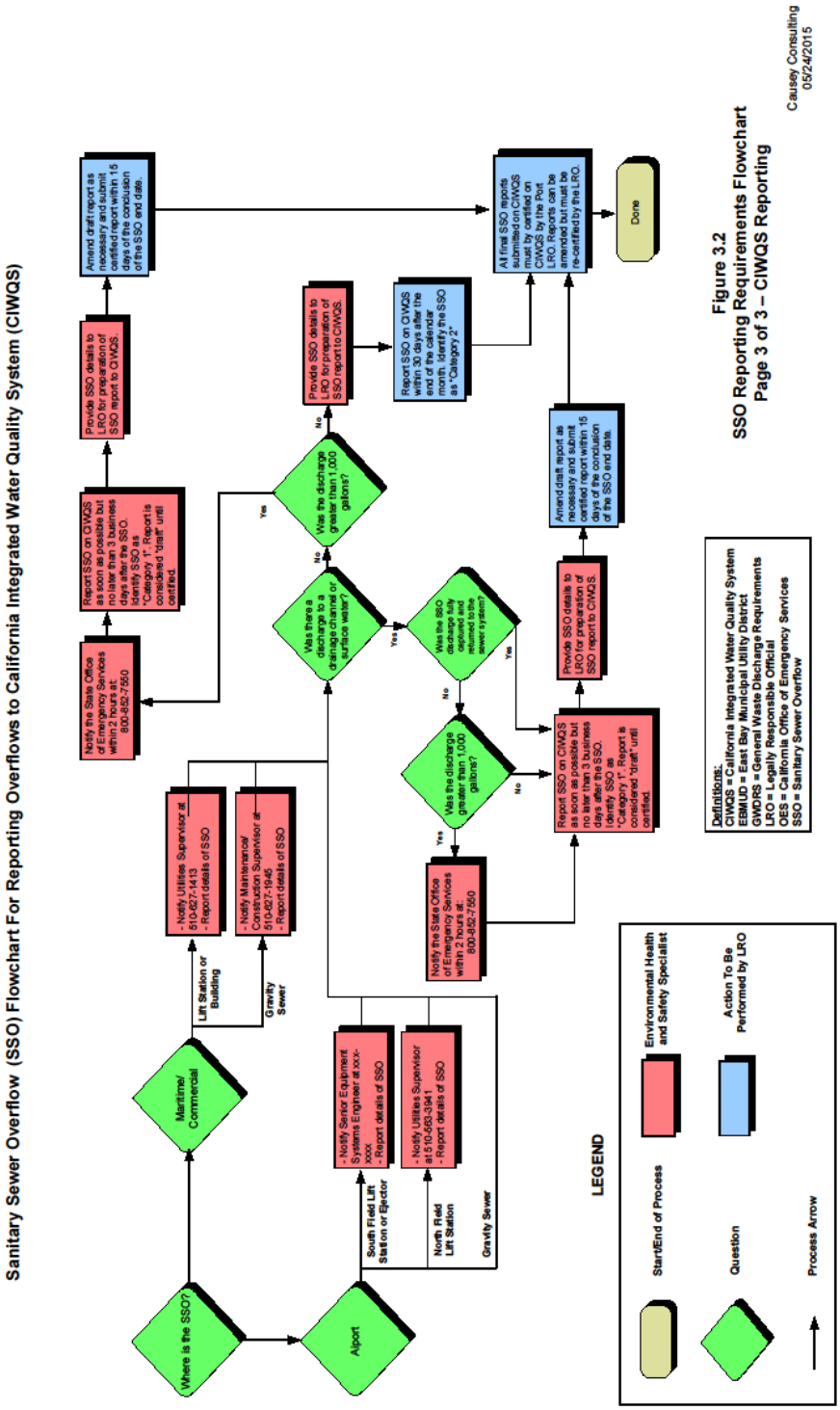
Notes:

1. The RWQCB online reporting system encompasses both the 2 hour notification and the 24 hour notification requirement.

2015 Version:

Table 3.1 Regulatory Agency Notification Port of Oakland SSMP			
Agency	**Contact Information**	**Action**	**Criteria Requires LRO certification**
State Office of Emergency Services	Phone: 800-852-7550	Within 2 hours of becoming aware of SSO obtain notification control number	Discharge > 1000 gallons to Waters or where probably will reach Waters
SWRCB - CIWQS	(http://ciwqs.waterboards.ca.gov/)	Draft report - 3 days Certify w/in 15 days	Categories 1 and 2 SSOs
SWRCB - CIWQS	(http://ciwqs.waterboards.ca.gov/)	Submit certified report w/in 30 calendar days after end of month in which SSO occurred	Category 3 SSO
SWRCB - CIWQS	(http://ciwqs.waterboards.ca.gov/)	Submit certified Technical Report	SSO equal/greater than 50,000 gallons
SWRCB - CIWQS	(http://ciwqs.waterboards.ca.gov/)	Water Quality Sampling	Initiated within 48 hours after initial OES notification
SWRCB - CIWQS	(http://ciwqs.waterboards.ca.gov/)	"No Spill Certification"	Within 30 days following end of month when no spills occur
SWRCB - CIWQS	(http://ciwqs.waterboards.ca.gov/)	Annual Collection System Questionnaire	LRO Certified Every 12 months
SWRCB - CIWQS	(http://ciwqs.waterboards.ca.gov/)	Private Sewer Lateral Discharges (PLSD) - Final SSO Report in CIWQS within 30 days after end of month	Reporting is voluntary

Figure 4 All Facilities SSO CIWQS Action Flow Chart



6.1 Aviation Division

For confirmed overflows in the aviation sewer system requiring media notification, the following steps should be taken:

- Response crew verifies overflow and reports back to the aviation dispatcher, who informs the Aviation Facilities Manager.
- The Aviation Facilities Manager confirms with his superiors and contacts the Port's Public Information Officer.
- Calls received by the dispatcher from the media at any time are to be referred to the Port's Public Information Officer.
- Only specified personnel shall conduct interviews with the media.

6.2 Maritime Division

For confirmed overflows in the maritime sewer system requiring media notification, the following steps should be taken:

- Response crew verifies overflow and reports back to the maritime dispatcher, who informs the Harbor Facilities Manager.
- The Harbor Facilities Manager confirms with his superiors and contacts the Port's Public Information Officer.
- Calls received by the dispatcher from the media at any time are to be referred to the Port's Public Information Officer.
- Only specified personnel shall conduct interviews with the media.

6.3 Commercial/Real Estate Division

For confirmed overflows in the commercial/real estate sewer system requiring media notification, the following steps should be taken:

- Response crew verifies overflow and reports back to the maritime dispatcher, who informs the Harbor Facilities Manager.
- The Harbor Facilities Manager confirms with his superiors and contacts the Port's Public Information Officer.
- Calls received by the dispatcher from the media at any time are to be referred to the Port's Public Information Officer.

- Only specified personnel shall conduct interviews with the media.

7.0 DISTRIBUTION AND MAINTENANCE OF OERP

This plan was prepared in conjunction with and is an important element of the Port-Wide SSMP. As such, the OERP should be periodically reviewed and modified as necessary to reflect operational and policy changes. Audits of the plan should also be performed in conjunction with the larger SSMP program audits, as outlined in Chapter 11 of the Port SSMP.

7.1 Submittal and Availability of OERP

Copies of the OERP and any amendments should be distributed to all of the departments, divisions, and personnel that are heavily involved with the SSMP or OERP programs. All other personnel who may become incidentally involved in responding to overflows should be familiar with the OERP. A program to annually train such personnel on the provisions of this plan should also be established by the Port as part of the anticipated 2016 SSMP audit.

7.2 Review and Update of OERP

The Port is ultimately responsible for keeping the OERP up to date. The OERP should be reviewed at a predefined time interval for outdated material and should be updated whenever:

- Specified by the Executive Director or his designated representative;
- The SSMP plan audit indicates that material needs to be revised or added;
- Responsibilities of personnel involved in SSO response, mitigation or reporting change for various reasons; or
- Governing laws, rules or regulations change.

APPENDIX A - KEY PERSONNEL

PORT SSMP KEY PERSONNEL CONTACT INFORMATION
Port-Wide Sewer System Management Plan
Port of Oakland

Position	Name	Phone
Executive		
Executive Director	Danny Wan	(510) 627-1212
Port Attorney	Michele Heffes	(510) 627-1348
Chief Audit Officer (Acting)	Arnel Atienza	(510) 627-1257
Chief Operating Officer	Kristi McKenney	(510) 627-1178
Chief Financial Officer (Acting)	Julie Lam	(510) 627-1138
Aviation		
Director of Aviation	Bryant L. Francis	(510) 563-6421
Assistant Director Aviation (Acting)	Craig Simon	(510) 563-6425
Aviation Planning and Development Manager	Joan Zatopek	(510) 563-6530
Aviation Facilities Maintenance Manager (vacant)		
Superintendent Equipment Systems Engineer	Terry (T-C) Padilla	(510) 563-3939
Utilities Supervisor	Michael Henning	(510) 563-3942
Maintenance/Construction Supervisor	DeJon Iglehart	(510) 563-3947
Facilities Support Supervisor	Vanessa Valderrama	(510) 563-3977
Commercial/Real Estate		
Director of Commercial Real Estate	Pam Kershaw	(510) 627-1168
Commercial Real Estate Manager	Dorin Tuitin	(925) 352-4846
Maritime		
Director of Maritime	Bryan Brandes	(510) 627-1243
Chief Wharfinger	Eric Napralla	(510) 627-1403
Wharfingers	Ralph Reynoso Richard Taylor Mark Simpson Kevin Wong	(510) 384-3163 (925) 451-6119 (925) 627-1407 (925) 639-5637
Administrative and Financial Services Manager	Delphine Prevost	(510) 627-1141
Harbor Facilities Maintenance Manager	Bill Morrison	(510) 773-9981
Utilities Supervisor	Ernest Richmond	(510) 773-9964
Facilities Support Supervisor	Eric Fan	(510) 627-1298
Chief Operating Office (Environmental Program &Planning, Utility, Engineering)		
Director of Environmental Programs and Planning	Richard Sinkoff	(510) 627-1182
Utilities Administration Manager	Jared Carpenter	(510) 627-1167
Port Principal Engineer - Aviation	Robert Andrews	(510) 627-1273

PORT SSMP KEY PERSONNEL CONTACT INFORMATION
Port-Wide Sewer System Management Plan
Port of Oakland

Position	Name	Phone
Port Principal Engineer - Maritime	Thanh Vuong	(510) 627-1266
Port Principal Engineer - Engineering Services	Steve Low	(510) 627-1890
Water Systems Engineer	Liem Nguyen	(510) 627-1636
Human Resources		
Environmental Health & Safety Specialist	Desmond DeMoss	(510) 773-9991

APPENDIX B - SANITARY SEWER OVERFLOW FIELD REPORT

PORT OF OAKLAND

SANITARY SEWER OVERFLOW FIELD REPORT

FOR DISPATCH USE:

DATE: _____ CALL RECEIVED: _____ AM/PM

RECEIVED BY: _____ CALLER'S NAME: _____

CALLER'S PHONE NUMBER: _____

CALLER'S ADDRESS: _____

LOCATION OF OVERFLOW: _____ CROSS ST: _____

TIME & NAMES OF CREW MEMBERS DISPATCHED: _____

DESCRIPTION OF COMPLAINT: _____

FIELD REPORT (FOR RESPONSE CREW USE):

TIME ARRIVED AT SITE: _____ CREW: _____

TIME OVERFLOW STARTED: _____ TIME OVERFLOW STOPPED: _____

OVERFLOW DURATION: _____ MIN. OVERFLOW FLOW: _____ GAL/MIN

UPSTREAM MH#: _____ DOWNSTREAM MH#: _____

SIZE OF LINE: _____ LENGTH OF LINE: _____

FINDINGS: _____

COMPLETE REMAINDER OF FORM IF AN OVERFLOW HAS OCCURRED:

DESCRIBE CAUSE OF OVERFLOW:

_____

_____

DESCRIBE CLEANUP METHOD AND HOW OVERFLOW VOLUME WAS DETERMINED:

RECEIVING WATERS: YES ☐ NO ☐ LOCATION:

TYPE OF PROBLEM:

PICTURES TAKEN: YES ☐ NO ☐

SAMPLES TAKEN BY: LOCATION OF SAMPLES:

DESCRIBE PROPERTY DAMAGE AND AFFECTED AREA:

SIGN POSTED: YES ☐ NO ☐ BARRICADED: YES ☐ NO ☐

NEIGHBORS NOTIFIED: YES ☐ NO ☐

REGULATORY AGENCIES NOTIFIED:

OES	YES ☐	NO ☐	DATE/TIME	SPILL #
RWQCB	YES ☐	NO ☐	DATE/TIME	
COUNTY HEALTH	YES ☐	NO ☐	DATE/TIME	
OTHER	YES ☐	NO ☐	DATE/TIME	

CONTACTS/DETAILS:

FOLLOWUP MEASURES:

WORK ORDER NO: _____

FREQUENCY OF EXISTING PM PROGRAM: _____

LAST DATE PM WAS PERFORMED: _____

RECOMENDATIONS ON HOW TO PREVENT FUTURE PROBLEMS:

_____

_____

REPORT COMPLETED BY: _____ DATE: _____

SKETCH OF AREA: (Include manholes, intersections, location of stoppage, etc.)

ATTACH PHOTOS AS AVAILABLE

APPENDIX C - METHODS TO ESTIMATE SSO FLOW RATES AND VOLUMES

METHODS FOR ESTIMATING SPILL VOLUME

A variety of approaches exist for estimating the volume of a sanitary sewer spill. This appendix documents the three methods that are most often employed. The person preparing the estimate should use the method most appropriate to the sewer overflow in question and use the best information available.

Method 1: Eyeball Estimate

The volume of small spills can be estimated using an “eyeball estimate”. To use this method imagine the amount of water that would spill from a bucket or a barrel. A bucket contains 5 gallons and a barrel contains 50 gallons. If the spill is larger than 50 gallons, try to break the standing water into barrels and then multiply by 50 gallons. This method is useful for contained spills up to approximately 200 gallons.

Method 2: Measured Volume

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

Step 1 Sketch the shape of the contained sewage (see Figure 1).

Step 2 Measure or pace off the dimensions.

Step 3 Measure the depth at several locations and select an average.

Step 4 Convert the dimensions, including depth, to feet.

Step 5 Calculate the area in square feet using the following formulas:

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

Circle:Area = diameter (feet) x diameter (feet) x 3.14

Triangle:Area = base (feet) x height (feet) x 0.5

Step 6 Multiply the area (square feet) times the depth (in feet) to obtain the volume in cubic feet.

Step 7 Multiply the volume in cubic feet by 7.5 to convert it to gallons

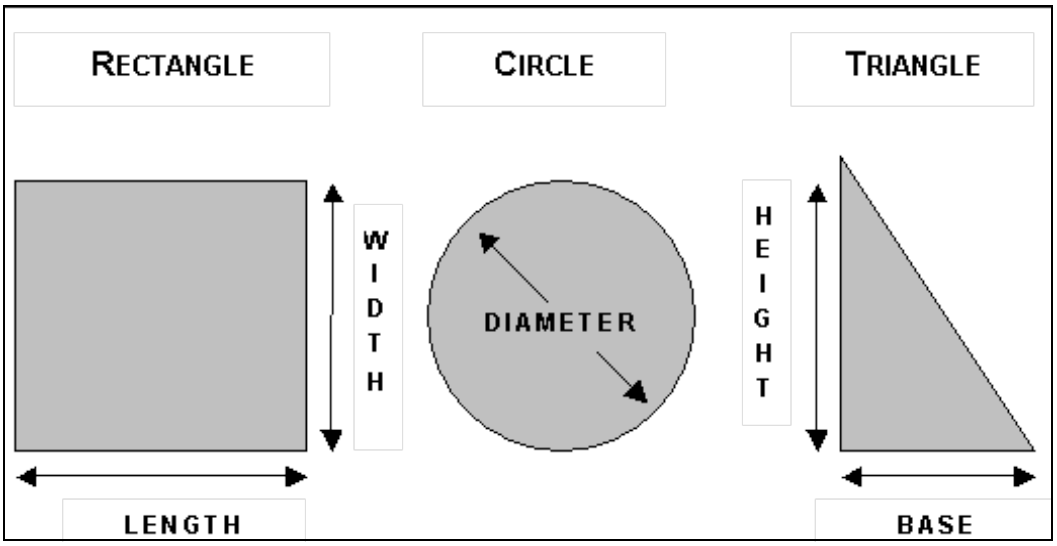


Figure 1: Common Shapes and Dimensions

Method 3: Duration and Flowrate

Calculating the volume of larger spills, where it is difficult or impossible to measure the area and depth, requires a different approach. In this method, the separate estimates are made of the duration of the spill and the flowrate. The methods of estimating duration and flowrate are:

Duration: The duration is the elapsed time from the time the spill started to the time that the flow was restored.

Start time: The start time is sometimes difficult to establish. Here are some approaches:

- Local residents can be used to establish start time. Inquire as to their observations. Spills that occur in rights-of-way are usually observed and reported promptly. Spills that occur out of the public view can go on longer. Sometimes observations like odors or sounds (e.g. water running in a normally dry creek bed) can be used to estimate the start time.

- Changes in flow on a downstream flowmeter can be used to establish the start time. Typically, the daily flow peaks are “cut off” or flattened by the loss of flow. This can be identified by comparing hourly flow data during the spill event with flow data from prior days.

- Conditions at the spill site change over time. Initially there will be limited deposits of toilet paper and other sewage solids. After a few days to a week, the sewage solids form a light-colored residue. After a few weeks to a month, the sewage solids turn dark. The quantity of toilet paper and other materials of sewage origin increase over time. These observations can be used to estimate the start time in the absence of

other information. Taking photographs to document the observations can be helpful if questions arise later in the process.

- It is important to remember that spills may not be continuous. Blockages are not usually complete (some flow continues). In this case, the spill would occur during the peak flow periods (typically 10:00 to 12:00 and 13:00 to 16:00 each day). Spills that occur due to peak flows in excess of capacity will occur only during, and for a short period after, heavy rainfall.

End time: The end time is usually much easier to establish. Field crews on-site observe the "blow down" that occurs when the blockage has been removed. The "blow down" can also be observed in downstream flowmeters.

Flow Rate: The flowrate is the average flow that left the sewer system during the time of the spill. There are three common ways to estimate the flowrate:

- The San Diego Manhole Flowrate Chart: This chart, included as Appendix VII-G, shows sewage flowing from manhole covers at a variety of flowrates. The observations of the field crew can be used to select the appropriate flowrate from the chart. If possible, photographs are useful in documenting basis for the flowrate estimate.

- Flowmeter: Changes in flows in downstream flowmeters can be used to estimate the flowrate during the spill.

- Counting Connections: Once the location of the spill is known, the number of upstream connections can be determined from the sewer maps. Multiply the number of connections by 200 to 250 gallons per day per connection or 8 to 10 gallons per hour per connection.

  For example: 22 upstream connections x 9 gallons per hour per connection

  = 198 gallons per hour / 60 minutes per hour

  = 3.3 gallons per minute

Spill Volume: Once duration and flowrate have been estimated, the volume of the spill is the product of the duration in hours or days and the flowrate in gallons per hour or gallons per day.

For example:

Spill start time = 11:00

Spill end time = 14:00

Spill duration = 3 hours

3.3 gallons per minute X 3 hours X 60 minutes per hour = 594 gallons

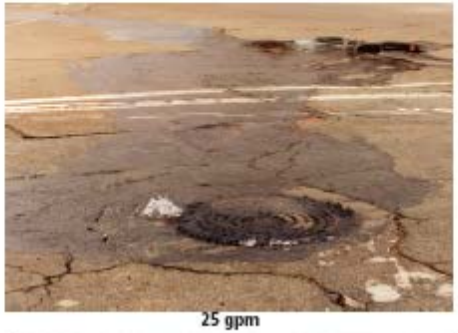
City of San Diego
Metropolitan Wastewater Department

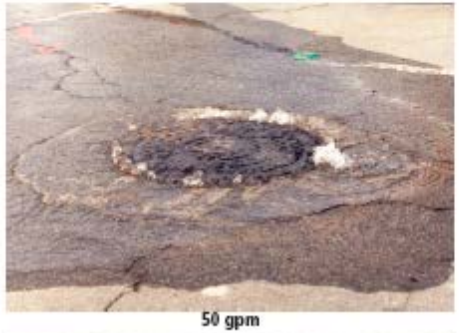
Reference Sheet for Estimating Sewer Spills from Overflowing Sewer Manholes

All estimates are calculated in gallons per minute (gpm)

Wastewater Collection Division
(619) 654-4160


5 gpm


25 gpm


50 gpm


100 gpm


150 gpm


200 gpm


225 gpm


250 gpm


275 gpm

All photos were taken during a demonstration using metered water from a hydrant in cooperation with the City of San Diego's Water Department.

rev. 4/99

APPENDIX D - SANITARY SEWER OVERFLOW WARNING SIGNS

KEEP OUT

SEWAGE
CONTAMINATED
WATER

EXPOSURE
MAY CAUSE ILLNESS

FOR MORE INFORMATION, CONTACT
THE PORT OF OAKLAND

(510) 563-3361

PORT OF OAKLAND

KEEP OUT

SANITARY SEWER OVERFLOW

EXPOSURE MAY CAUSE ILLNESS

FOR MORE INFORMATION, CONTACT THE PORT OF OAKLAND

(510) 563-3361

PORT OF OAKLAND

pw://Carollo/Documents/Client/CA/Port of Oakland/8239A00/Deliverables/OERPAppB

APPENDIX E - SUGGESTED CRITERIA FOR DEMONSTRATING THAT A SSO WAS UNAVOIDABLE

SSOs can be demonstrated as unavoidable by showing the discharge meets each of the following criteria:

- The discharge resulted from a temporary, exceptional incident that was either:
    a) Necessary to prevent loss of life, personal injury, or severe property damage; or
    b) Beyond the reasonable control of the operator. Incidents beyond the reasonable control of the operator include:
        i. Exceptional acts of nature;
        ii. Third party actions that could not be reasonably prevented, including vandalism that could not be avoided by reasonable measures;
        iii. Blockages that could not be prevented by reasonable measures; and
        iv. Unforeseeable sudden structural, mechanical, or electrical failure that could not be avoided by reasonable measures.
- The discharge had no feasible alternative;
- The discharge was not caused by any of the following:
    a) Operational error;
    b) Improperly designed or constructed collection facilities;
    c) Inadequate collection system facilities or components;
    d) The lack of appropriate preventative maintenance; or
    e) Careless or improper oversight;
- Steps to stop the discharge, address the source of the problem, and mitigate potential impacts from the discharge were taken as soon as possible after becoming aware of the release.

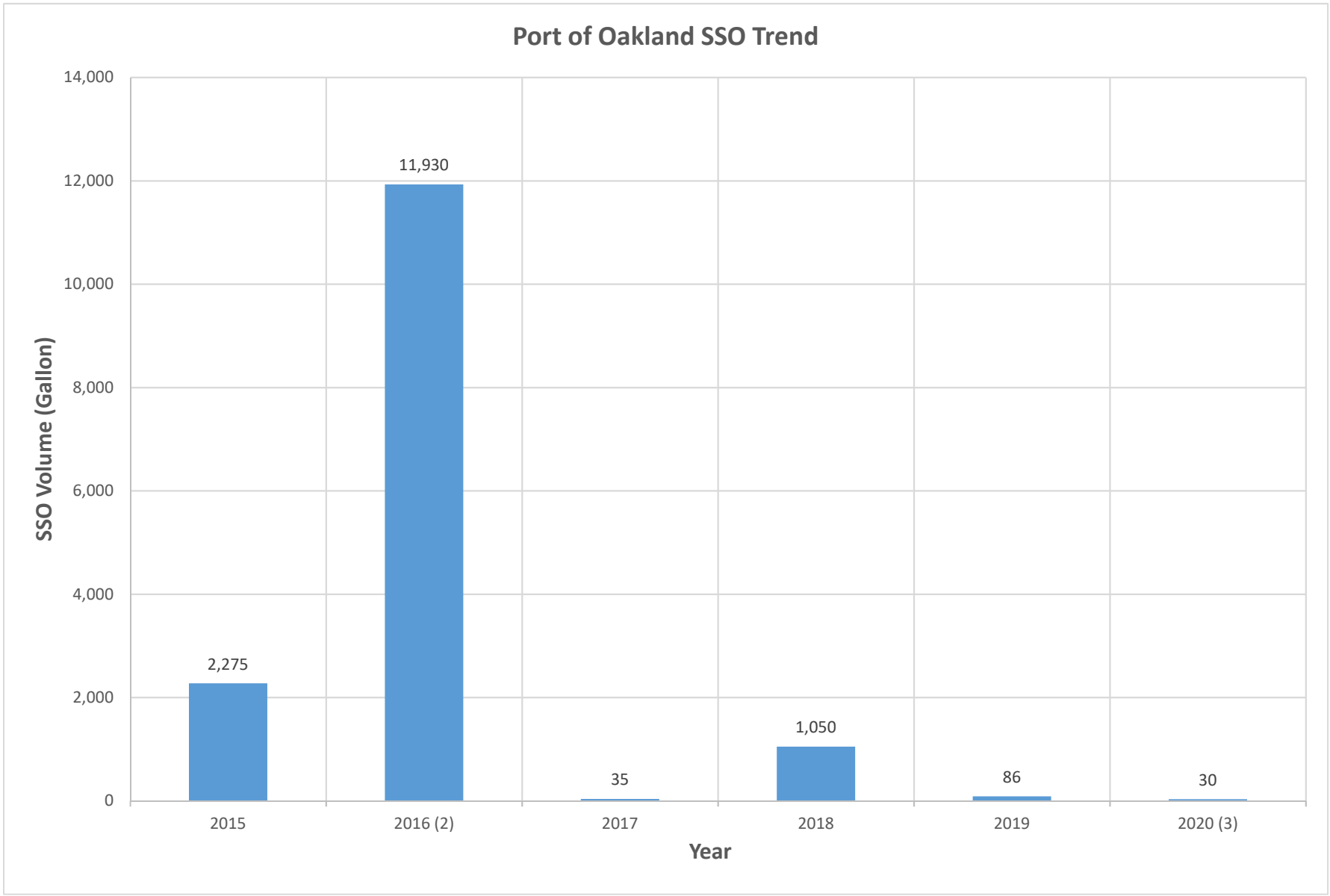
APPENDIX 6

Sanitary Sewer Overflow Event Log

Port-Wide SSMP SSO Trend Tracking Table							
SSO Statistic [1]	**Year**						**Totals**
	2015	**2016 [2]**	**2017**	**2018**	**2019**	**2020 [3]**	
Total Number of SSO's	3	5	2	3	3	1	17
Category 1	0	1	0	1	1	0	3
Category 2	2	3	0	0	0	0	5
Category 3	1	1	2	2	2	1	9
Greater than 1000 gals	1	2	0	0	0	0	3
Less than 1000 gals	2	3	2	3	3	1	14
Total Volume of SSO's (gals)	**2,275**	**11,930**	**35**	**1,050**	**86**	**30**	**15,406**
Volume recovered	40	10	0	0	45	0	95
Volume to surface water	0	30	0	75	1	0	106
Percent to surface water	0.0%	0.3%	0.0%	7.1%	1.2%	0.0%	0.7%
Number of SSO's By Cause							
Roots	0	0	0	0	0	0	0
Grease Deposition (FOG)	0	0	0	0	0	0	0
Infiltration & Inflow	0	0	0	0	0	0	0
Lift Station Failure	1	3	2	1	0	0	7
Capacity Deficiency	0	0	0	0	0	1	1
Vandalism	0	0	0	0	0	0	0
Debris	0	0	0	1	0	0	1
Other Structural	0	2	0	1	3	0	6
Contractors	2	0	0	0	0	0	2
Number of SSO's By Location							
Aviation	1	2	2	3	0	0	8
Maritime	2	3	0	0	3	1	9
Commercial Real Estate	0	0	0	0	0	0	0
Number of Locations with repeated SSOs	1	1	1	1	0	0	4

Notes:

1. Source of SSO data is the public SSO database, CIWQS. Information displayed is current as of July 2020.
2. The total SSO volumes in 2016 was an anomaly and included three SSO events that occurred at Lift Station LS 18 in the former Oakland Army Base Area. These SSOs were caused by mechanical and power failures during the City's redevelopment of its portion of the former Oakland Army Base. The Port reported these events on behalf of the CIty Redevelopment Agency.
3. As of 6/30/2020


Port of Oakland SSO Trend
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
SSO Volume (Gallon)
2,275
11,930
35
1,050
86
30
2015
2016 (2)
2017
2018
2019
2020 (3)
Year

APPENDIX 7

Board Resolution 10-58 & 15-073

5/18/10
Item No.: O-1
JS/lhr

Cc: L. Nguyen
W. Lau

BOARD OF PORT COMMISSIONERS
CITY OF OAKLAND

RESOLUTION NO. 10-58

RESOLUTION APPROVING AND ADOPTING THE PORT OF OAKLAND SEWER SYSTEM MANAGEMENT PLAN (SSMP) AS REQUIRED BY THE STATE WATER RESOURCES CONTROL BOARD ORDER NO. 2006-0003.

WHEREAS on May 2, 2006 the State Water Resources Control Board ("State Water Board") adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Resources Control Board Order No. 2006-0003 ("Sanitary Sewer Order"); and

WHEREAS the Port of Oakland owns, operates and maintains approximately 40 miles of pipe which collect and convey sewage to the City of Oakland wastewater collection system and to EBMUD Water Treatment Plant; and

WHEREAS on December 4, 2007, by Resolution No. 07324, the Board approved the Sewer System Management Plan ("SSMP") Development Plan and Schedule. The first two (2) elements of the SSMP was developed; and

WHEREAS on April 7, 2009, by Resolution No. 07048, the Board approved staff to retain Carollo Engineers to complete developing the remaining nine (9) elements of the SSMP; and

RESOLVED the Board hereby approves and adopts the Sewer System Management Plan ("SSMP"), as required by the State Water Resources Control Board Order No. 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems as that report is fully set forth in Agenda Report Item 0-1 dated May 18, 2010; and be it

FURTHER RESOLVED that the Board hereby finds and determines that this project has been determined to be categorically exempt from requirements of the California Environmental Quality Act (CEQA) and the Port CEQA Guidelines pursuant to Guidelines Section 15301, Existing Facilities. CEQA does not apply to the operation repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination; and be it

FURTHER RESOLVED that this resolution is not evidence of and does not create or constitute (a) a contract, or the grant of any right, entitlement or property interest, or (b) any obligation or liability on the part of the Board or any officer or employee of the Board. This resolution approves and authorizes the execution of an agreement in accordance with the terms of this resolution. Unless and until a separate written agreement is duly executed on behalf of the Board as authorized by this resolution, is signed as approved as to form and legality by the Port Attorney, and is delivered to the other contracting parties, there shall be no valid or effective agreement.

At the regular meeting held on May 18, 2010

Passed by the following vote:

Ayes: Commissioners Gordon, Head, Katzoff, Lighty and President Uno – 5
Excused: Commissioners Calloway and Gonzales - 2
Noes: 0

7/9/15
Item No.: 5.1
JS/lhr

BOARD OF PORT COMMISSIONERS
CITY OF OAKLAND

RESOLUTION NO. 15-073

APPROVAL AND ADOPTION OF AN UPDATE TO THE PORT OF OAKLAND'S SEWER SYSTEM MANAGEMENT PLAN ("SSMP").

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

WHEREAS, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly-owned treatment facility in the State of California are required to comply with the WDR;

WHEREAS, the Port of Oakland owns, operates and maintains approximately 35 miles of sewer mains and laterals, which collect and convey sewage to the City of Oakland wastewater collection system and to the East Bay Municipal Utility District ("EBMUD") Water Treatment Plant, and therefore is required by the WDR to develop and implement a SSMP;

WHEREAS, on May 18, 2010, by Resolution No. 10-58, the Board of Port Commissioners ("Board") approved the Port SSMP;

WHEREAS, the WDR requires the SSMP to be updated every five years, submitted to the governing board for approval at a public meeting and recertified when significant updates are made to the SSMP; and

WHEREAS, the State Water Board amended the Monitoring and Reporting Plan requirements ("MRP requirements") of the WDR effective September 9, 2013 (WQ 2013-0058-EXEC), which modify the monitoring and reporting requirements of sewer overflows; and

WHEREAS, in order to conform the SSMP with the current MRP requirements, to update the sanitary sewer reporting process and to expand the designations of Legally Responsible Officials ("LRO") to ensure continuous monitoring of the sanitary sewer system at the Port, certain amendments to the SSMP are necessary at this time.

RESOLVED, that the Board hereby approves and adopts the Updated 2015 SSMP as that report is fully set forth in Agenda Report Item 5.1, dated July 9, 2015 and attachments thereto (the "2015 SSMP"); and

FURTHER RESOLVED, that the Board hereby authorizes the Executive Director to fully implement the 2015 SSMP, such implementation to include but not be limited to:

1. Designating certain position classifications as LROs and Data Submitters for purposes of reporting and certifying all reports submitted to the State Board pursuant to the WDR and the 2015 SSMP; and

2. Establishing a Sanitary Sewer Task Force for purposes of coordinating all requirements of the WDR across all revenue divisions of the Port to assure conformance and consistency with the policies and procedures required to maintain the Port in full compliance with the WDR.

FURTHER RESOLVED, that the Board hereby finds and determines that this project has been determined to be exempt from review under California Environmental Quality Act ("CEQA") pursuant to Section 15061(b)(3). Updating the SSMP will not result in a physical change in the environment. Continuing administrative or maintenance activities, personnel-related actions, general policy and procedure making, such as the proposed administrative and procedural changes to implementation of the SSMP, are not projects under CEQA pursuant to Section 15378(b)(2) of the CEQA Guidelines. To the extent that any minor upgrade projects may be undertaken pursuant to the Updated SSMP, these projects would be covered under existing services contracts that have been subject to previous CEQA review; and be it

FURTHER RESOLVED, that this resolution is not evidence of and does not create or constitute (a) a contract, or the grant of any right, entitlement or property interest, or (b) any obligation or liability on the part of the Board or any officer or employee of the agreement in accordance with the terms of this resolution.

At the regular meeting held on July 9, 2015

Passed by the following vote:

Ayes: Commissioners Butner, Head, Hamlin, Parker and
President Yee – 5
Excused: Commissioner Colbruno – 1
Noes: 0

APPENDIX 8

SSMP Update Change Log

Port of Oakland Sanitary Sewer Management Plan ("SSMP") Change Log		
Date	**SSMP Element**	**Description**
07/2015	Regulatory Requirements	Updated regulatory requirement per State Water Control Board Order No. WQ 2013-0058-EXEC
	Sanitary Sewer Overflow Emergency Response Plan	Updated emergency response requirements per State Water Control Board Order No. WQ 2013-0058-EXEC
07/2020	All Elements	• Updated and reorganized content of all elements
	Appendix 1 & 2	• Included Port of Oakland Property Map • Updated Port-Wide Sanitary Sewer System Map
	Appendix 3	• Updated Key Personnel Contact List & Organization Chart
	Appendix 4	• Added new Port PSL Ordinance
	Appendix 6	• Updated SSO events since 2015
	Appendix 7	• Included Board Resolutions adopted 2010 SSMP and 2015 SSMP