

# **Sewer System Management Plan (SSMP) 2009**

**Eastern Municipal Water District**



**EASTERN MUNICIPAL  
WATER DISTRICT**

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## 1.0 SSMP Goals

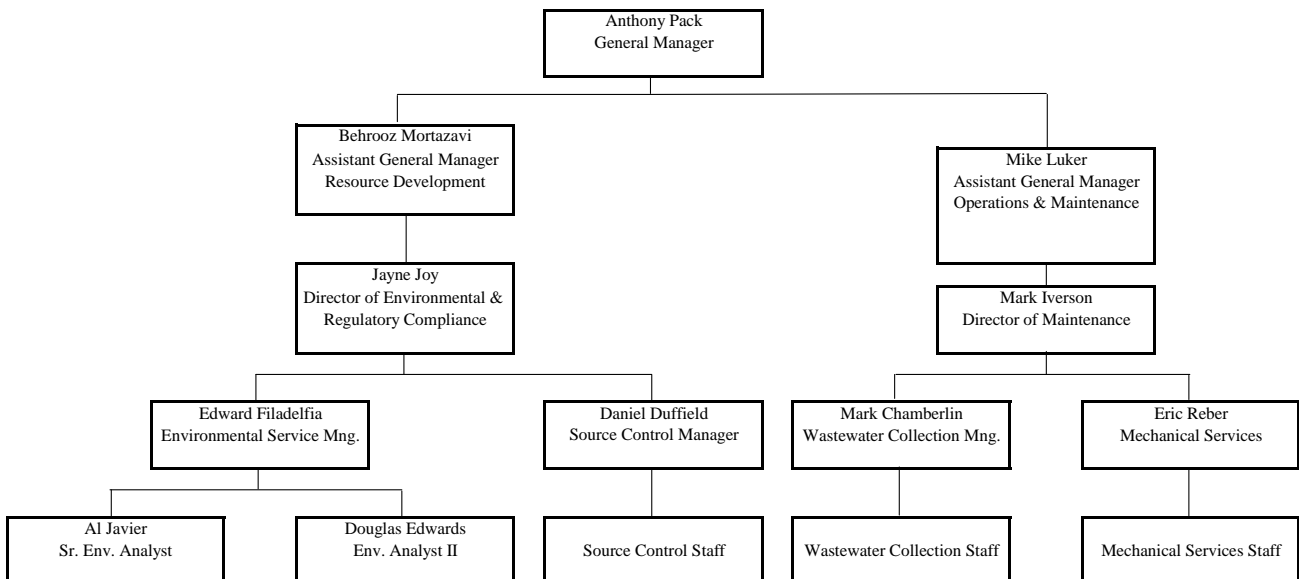
**Goal 1A:** Sewer System Management Plan identifies the administrative and maintenance positions responsible for implementing measures in the Wastewater Collection System Management Plan program, including lines of authority by organization chart or similar document.

*Goal 1A is fully illustrated in the SSMP Organizational Chart in Section 2 of this SSMPt. The chart identifies lines of authority for EMWD staff that are directly responsible for successful implementation of this plan.*

**Goal 1B:** Sewer System Management Plan identifies the chain of communication for reporting overflows, from receipt of a complaint or other information, including the person responsible for reporting overflows to the Regional Water Quality Control Board, Riverside County Health Departments and the State Office of Emergency Services (OES).

*Goal 1B is accomplished through two SOPs. One SOP titled, "Sanitary Sewer Overflows (SSOs)" is focused on environmental and regulatory compliance. The second SOP titled, "Sanitary Sewer Overflow Response Plan" is developed by EMWD Operations and details the plan for operational response to overflows. Combined, these guidance documents identify the lines of authority and chains of communication for reporting SSOs along with operational response procedures.*

## 2.0 Organizational Structure



EMWD maintains online organizational charts which clearly demonstrate lines of authority, employee names, and titles for departments within its organization. Access to this organization chart is available to all employees through the districts intranet. The departments and divisions responsible for execution of this SSMP are as follows:

- Executive (802)
- Operation & Maintenance Administration (810)
- Maintenance Services (850)
- Wastewater Collection (853)
- Mechanical Services (854)
- Resource Development (820)
- Environmental & Regulatory Compliance (880)
- Source Control (882)
- Engineering Administration (830)
- Engineering (831)

All of the above departments and divisions organization charts can be accessed through a Hyperion reporting tool available to all EMWD employees via the districts intranet.

### **3.0 Legal Authority**

EMWD Legal Authority addresses those mandatory SSMP provisions outlined in Section D, 13 (iii) Legal Authority of SWRCB Order No. 2006-0003. EMWD demonstrate, through sanitary sewer system use ordinances, service agreements and legally binding procedures and possesses the necessary legal authority to:

- Prevent illicit discharges into its sanitary sewer system.
- Require that sewers and connections be properly designed and constructed.
- Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the District.
- Limit the discharge of Fats, Oils, and Grease (FOG) and other debris that may cause blockages.
- Enforce any violation of its sewer ordinances.

The District is regulated by several agencies including the Environmental Protection Agency, State Water Quality Control Board, Santa Ana Regional Water Quality Control Board, and San Diego Regional Water Quality Control Board pursuant to the provisions of Federal and State Law including but not limited to:

- Federal Water Pollution Control Act, commonly known as the Clean Water Act (33 U.S.C. Section 1251)
- California Porter Cologne Water Quality Act (California Water Code section 13000)
- California Health & Safety Code sections 25100 to 25250
- Resource Conservation and Recovery Act of 1976 (42 U.S.C. Section 6901)

Further more, California Government Code, Sections 54739-54740 grant the EMWD the authority to regulate and/or prohibit, by the adoption of an ordinance, and by issuance of control mechanisms,

the discharge of any waste, directly or indirectly, to the District sewerage facilities. This authority includes the right to establish limits, conditions, and prohibitions; to establish flow rates or prohibit flows discharged to the District sewerage facilities; to require the development of compliance schedules for the installation of equipment systems and materials by all users; and to take all actions necessary to enforce its authority, whether within or outside the District boundaries, including those users that are tributary to the District or within areas for which the District has contracted to provide sewerage services.

Through the following Ordinances and Resolutions adopted by the Board of Directors, Satellite Community Sewer Use Agreements, internally developed plans and requirements, the District possesses the necessary legal authority required by Section D, 13 (iii) Legal Authority of SWRCB Order No. 2006-0003:

### **3.1 Document Locations**

- EMWD Ordinance No. 59.5 Regulations for Waste Discharge and Sewer Use. A copy of this ordinance can be found at [www.emwd.org/new\\_biz/pdf\\_forms/ord\\_595-806.pdf](http://www.emwd.org/new_biz/pdf_forms/ord_595-806.pdf)
- EMWD Resolution 1643 Regulates house hold connection and copy of this document can be found at <J:\ENVIRONMENTAL\Waste Water Program\SSMP\Final Docs\Res 1643>
- EMWD Connection agreements- Currently EMWD library maintains 294 agreement copies. The master list highlighting the library location of each connection agreement can be found <J:\ENVIRONMENTAL\Waste Water Program\SSMP\Final Docs>

## **4.0 Operation & Maintenance Program**

The District's Operating and Maintenance Program addresses those mandatory SSMP provisions outlined in Section D, 13 (iv) Operation and Maintenance Program of SWRCB Order No. 2006-0003.

EMWD Operation and Maintenance Program encompass the following components:

- An up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water conveyance facilities. This information managed and accessed by EMWD through Smallworld GIF application.
- Routine preventive operation and maintenance activities by staff, 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 includes a system to document scheduled and conducted activities, such as work orders.
- 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 includes regular visual inspections of manholes and sewer pipes. Video inspections are performed on an as needed basis. Sewer pipes that are identified to have structural deficiencies are prioritized by maintenance management and are addressed either by an emergency or high priority project or will be incorporated into the districts 5 year Capital Improvement Plan (CIP).
- Capital improvement plan that addresses
  - Proper management and protection of the infrastructure assets.

- Time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan.
- Training for Wastewater Collection staff is scheduled and tracked. Training for staff holding CWEA certification is budgeted annually.
- EMWD utilizes an on site warehouse where equipment and replacement part inventories are maintained.

#### **4.1 Document Locations**

- Sanitary Sewer Response Plan SOP, a copy of this document can be found posted on EMWD Pipeline under the division web page Wastewater Collections
- Sanitary Sewer Operation and Maintenance Plan SOP a copy of this document can be found posted on EMWD Pipeline under the division web page
- 2008 to 2012 Capital Improvement 5 year plan a copy of this documents can be found at [J:\ENVIRONMENTAL\Waste Water Program\SSMP\Final Docs\WWMPU\\_5yrCIPTM\\_Apr2008.pdf](J:\ENVIRONMENTAL\Waste Water Program\SSMP\Final Docs\WWMPU_5yrCIPTM_Apr2008.pdf)

## **5.0 Overflow Emergency Response Plan**

The EMWD Sanitary Sewer Overflow Response Plans and reporting procedure addresses those mandatory SSMP provisions outlined in Section D, 13 (vi) Overflow Emergency Response Plan of SWRCB Order No. 2006-0003. The District has implemented an overflow emergency response plan that identifies measures to protect public health and the environment, thereby satisfying Section D, 13 (vi) Overflow Emergency Response Plan of SWRCB Order No. 2006-0003 by including:

- Proper notification procedures so that primary responders and regulatory agencies are informed of all SSOs in a timely manner;
- A program to ensure an appropriate response to all overflows;
- Procedures which ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.)
- Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
- Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities;
- A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs

#### **5.1 Document Locations**

- Copy of SSORP can be found on EMWD intranet pipeline under Wastewater Collections division webpage.
- Sanitary Sewer Overflow Response Plan for Lift Stations copy of this documents can be found at <J:\ENVIRONMENTAL\Waste Water Program\SSMP\Final>

[Docs\SWRRESP.doc](#) and [J:\ENVIRONMENTAL\Waste Water Program\SSMP\Final Docs\Lift Station Alarms.xls](#)

- Sanitary Sewer Overflow Reporting SOP, a copy of this document can be found posted on EMWD Pipeline under the Department web page Environmental & Regulatory Compliance.

## 6.0 FOG Control Program

The District's FOG Procedures, carried out by the Source Control Division, fulfill the required SSMP provisions outlined in Section D, 13 (vii) FOG Control Program of SWRCB Order No. 2006-0003.

EMWD's Source Control Program includes an extensive and proactive FOG reduction element that controls the amount of Fats, Oils, and Grease discharged to the sanitary sewer system, by including:

- A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area, and a list of disposal facilities.
- Legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockage caused by FOG.
- Requirements to install grease removal devices, design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements.
- Authority to inspect grease producing facilities, enforcement authorities, and sufficient staff to inspect and enforce the FOG procedures.
- Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified.
- Implementation public education outreach program that promotes the proper disposal of FOG.

### 6.1 Document Locations

A copy of the FOG procedure can be found [J:\ENVIRONMENTAL\Waste Water Program\SSMP\FOG SOP.doc](#)

## 7.0 Design & Performance Provisions

*(RP: Engineering – Jalal Ahmadpour)*

The District's Design and Performance Provisions addresses those mandatory SSMP provisions outlined in Section D, 13 (v) Design and Performance Provisions of SWRCB Order No. 2006-0003. EMWD Design and Performance Provisions encompass the following components:

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

### 7.1 Document Locations

- EMWD Sewer Guidelines for Sewer System Plans: [http://www.emwd.org/do\\_biz/eng-specs/STD\\_SPECS\\_SEC4.pdf](http://www.emwd.org/do_biz/eng-specs/STD_SPECS_SEC4.pdf)
- EMWD Sewer Standard Drawings: [http://www.emwd.org/do\\_biz/eng-specs/STD\\_SPECS\\_SEC5.pdf](http://www.emwd.org/do_biz/eng-specs/STD_SPECS_SEC5.pdf)
- EMWD Engineering Standard Detailed Provision Sections: [http://www.emwd.org/do\\_biz/engineering-provisions.html](http://www.emwd.org/do_biz/engineering-provisions.html)

## **8.0 System Evaluation & Capacity Assurance Plan**

*(RP: Engineering – Jalal Ahmadpour)*

- Evaluate those portions of the system that are experiencing capacity related overflows.
- Establish steps to eliminate capacity related overflows including I&I program, and short & long term CIP for capacity issues.

### 8.1 Document Locations

Waste Water Facility (Collection System CIP) and I&I planning maps:

<http://pipeline/intranet/index.cfm?frpath=departments/home.cfm?MenuID=5132>

## **9.0 Monitoring, Measurement, and Program Modifications**

*(RP: ERC, Engineering, Collections)*

- Maintain records, monitor and assess the effectiveness of the program and update as necessary.

## **10.0 SSMP Program Audits**

*(RP: ERC –)*

- Conduct periodic audits of the SSMP at least every two years.

## **11.0 Communication Program**

*(RP: ERC & Public Affairs)*

- Communications with the Public: Develop a public communication program with customers and potential customers that include the opportunity to provide input during development, implementation and performance of the SSMP.
- Communication with Satellite Agencies: If there is a satellite agency connected to the collection system, develop a plan of regular communication with the agency.

## **12.0 SSMP Finalization and Certification**

*(RP: ERC – Jayne Joy)*

- Finalize (Certify and Board Approve) the SSMP document after all elements have been developed and implemented.