California State University East Bay

Sanitary Sewer Management Plan

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Table of Contents

| Section One | 1 |
|---|----|
| Goals | 1 |
| Section Two | 2 |
| Legal Authority | 2 |
| Section Three | 3 |
| Organization for Plan, Implementation and Reporting | 3 |
| Section Four | 4 |
| Operation and Maintenance Program | 4 |
| Section Five | 8 |
| Design and Performance | |
| Section Six | 9 |
| Overflow Emergency Response Plan | 9 |
| Section Seven | 14 |
| Fats, Oils, and Grease (FOG) Control Program | 14 |
| Section Eight | 16 |
| System Evaluations and Capacity Assurance Plan | |
| Section Nine | 19 |
| Monitoring, Measurements, and Program Modifications | |
| Section Ten | 21 |
| SSMP Audits | 21 |
| Section Eleven | 22 |
| Communication Program | |
| Attachment 1 | 23 |
| Reporting Requirements | 23 |

Section One

Goals

California State University Eastbay (CSUEB) is required under the Waste Discharge Requirement (WDR) Order No. 2006-0003-DWQ, adopted by the State Water Resources Control Board (SWRCB) on May 2, 2006 to develop and implement a Sanitary Sewer Management Plan (SSMP) and follow monitoring and reporting requirements as outlined in WQ 2013-0058-EXEC. The SSMP describes how the CSUEB will effectively manage its waste water collection system.

Effective management of a wastewater collection system includes targeted goals to maintain and improve functionality of the system:

The goals of this plan are the following:

- 1. To effectively manage, operate, and maintain all parts of the wastewater collection system
- 2. Minimize the frequency of Sanitary Sewer Overflows (SSOs)
- 3. Provide notification and reports to required regulatory agencies in a timely manner
- 4. Control the release of Fats, Oils, and Greases (FOG) from CSUEB facilities

Section Two

Legal Authority

Ultimate legal authority for the California State University, Eastbay SSMP rests with the Board of Trustees for the California State University per Education Code Section 66606. However, per Executive Order No. 847 – *Policy Statement on Facility Maintenance*, The campus president is assigned the responsibility to ensure that appropriate resources are directed toward meeting the requirement of proper operations and maintenance of the campus physical plant. This includes implementation of the SSMP.

All wastewater generators and sources are University-controlled. As such, there are no additional ordinances, Memorandums of Understanding or service agreements. Policies and procedures for the SSMP are jointly developed, implemented and enforced by the University's Departments of Facilities Operations and Planning and Environmental Health and Safety.

Section Three

Organization for Plan, Implementation and Reporting

3.1 Assistant Vice President of Facility Operations and Planning

Responsible for the overall long-term planning and oversight of Campus maintenance, minor and major capital improvements and construction related to the SSMP. Works with staff to identify and allocate present and future funding requirements as it relates to this SSMP. Responsible for ensuring Enterprise Service employees and contractors comply with the requirements of this SSMP.

3.2 Director of Facilities Planning, Design, and Construction (PDC)

Responsible for the overall long-term planning and oversight of minor and major capital improvements and construction related to the SSMP.

3.3 Director for Facilities Management

Responsible for the development, implementation and oversight of the SSMP. Develops implementation schedule, identifies future needs with input from the Directors of Facilities Planning and EH&S and communicates these to management. Additionally, is identified as one of the reporting backups.

3.4 Director of EH&S

Develops written plan, communicates needs of program to management, and insures employees are properly trained. Completes the monthly discharge and certification of nondischarge reporting as well as notifying appropriate agencies of SSOs.

3.5 Maintenance Manager

Responsible for overseeing the day-to-day implementation of the SSMP. Implements all operations and maintenance aspects of the program and acts as one of the reporting backups.

3.6 Plumbers

Critical front line group that is likely to be the initial individual to identify a system irregularity. They will attend and apply skills required to properly and safely operate and maintain the sanitary sewer system and maintain compliance with the requirements of this plan and other regulations. The Plumbers will be the trades group to respond. Supervising Plumber is responsible for ensuring field staff properly follow and implement the SSMP. Grounds and Custodial workers may be asked to assist in a support role.

Section Four

Operation and Maintenance Program

To reduce and prevent SSOs the SSMP establishes measures and activities to facilitate the proper management, operation, and maintenance of all parts of the sanitary sewer system. Measures and activities include maintaining system maps, scheduling routine maintenance, identifying, and addressing system deficiencies, providing public education, and describing fiscal resources and training.

4.1 Regulatory Requirements for Operations and Maintenance Program

The WDRs require that the SSMP contain descriptive measures of CSUEB's Operations and Maintenance (O&M) Program that are implemented by campus staff to facilitate proper and efficient management and maintenance of the sanitary sewer system and the affected appurtenances. The WDRs require that the SSMP include a description of each of the following components as they apply to CSUEB's sanitary sewer system:

- a. Maintenance of up-to-date sanitary sewer system maps showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities;
- b. 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 Preventive Maintenance Program should have a system to document scheduled and conducted activities, such as work orders;
- c. Development of 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 repair contractors to be appropriately trained; and
- e. Development of equipment and replacement part inventories, including identification of critical replacement parts.

4.2 Discussion of Regulatory O&M Components

To address the components listed in Section 5.1 and as required by the WDRs, the following subsections provide a summary of the applicable O&M procedures currently implemented.

4.2.1 Sanitary Sewer System Mapping

The location of CSUEBs' wastewater collection system pipes and associated appurtenances are maintained by the Planning, Design, and Construction department and documented in AutoCAD. The information contained in the AutoCAD files includes pipeline location and sizes and manhole and

cleanout locations. Additionally, pipe material and length, and manhole and cleanout identification numbers, and lateral locations and length are also documented. The Planning, Design, and Construction Department also maintains all as-built drawings. The following table outlines the required and recommended information for the drawings.

| Facility type | Required Basic Information | Additional Map Information |
|------------------------|--|--|
| Manholes | ID number or other unique identifier Location, with reference to streets and property lines Depth | GPS coordinates Date built Rim elevation Invert elevation Size Material Type Worker safety information |
| Pipes | ID number or other unique identifier Location, with reference to streets and property lines Size Direction of flow Length Material type Plan or as-built ID number | Date built Slope Pipe invert elevations |
| Pump Stations | ID number Location | Any additional information normally available on the GIS or drawings. |
| Grease interceptors | | ID numberLocation |

4.2.2 CSUEB's Preventative Maintenance Program

Generally, the operation and maintenance activities pertaining to the campus' wastewater collection system is the responsibility of the Facility Operations Department. The preventative maintenance program primarily includes scheduled maintenance of sewer mains, high frequency maintenance locations (HFMLs), and the inspection of wastewater facilities as required. All preventative work, as well as repair work is documented via electronic work orders on Facility Operations computer maintenance management software (CMMS), TMA.

System Cleaning

Generally, the sewer mains are cleaned as determined necessary by the Facility Operations staff. HFMLs are cleaned using a hydro jet or snake in selected targeted areas based on staff's general knowledge of the system. Additionally, the discharge lines originating at grease interceptors are jet cleaned annually.

Root Control

CSUEB conducts treatment only on an as needed basis. However, in the event that more extensive root treatment is required, Facility Operations has the authority to execute a contract with a contractor for performance of specific related services.

4.2.3 Inspection and Condition Assessment Program

Regular and systematic inspection and assessment of sanitary sewer system facilities provides a means to monitor the condition of the facilities, the effectiveness of the maintenance operations, and a basis for identifying and scheduling capital improvements. As well, the overall assessment can be used to determine the funding required to repair, rehabilitate, and replace an aging collection system and to prioritize the allocation of funds and optimize the expenditure and efforts to operate a sewer system. The following is a summary of CSUEB's current inspection efforts of the campus wastewater collection system.

Pipelines: Facility Operations staff does not currently perform the routine inspection of the sewer system mains. However, the Facility Operations Department maintains an open Purchase Order to facilitate retaining contractor services in the event the inspection of specific pipelines is required. Facility Operations Department has the capability to perform CCTV inspection of the campus wastewater collection system.

Manholes: Facility Operations staff currently conducts the random visual inspection of the sewer system manholes or as required by the Planning, Design, and Construction Department in preparation for an upcoming and/or potential project. The routine inspection and assessment process helps in prioritizing projects as the condition of the pipe is typically the primary factor. Facility Operations is considering developing and implementing a video inspection program that is performed on a regular basis and that is appropriate for the size of the system to ensure proper system operation and identify potential maintenance problems such as root intrusion, inflow and infiltration, breaks, and/or joint displacement.

4.2.4 Repair & Rehabilitation Program

The California State University Eastbay rehabilitation and replacement program is based on the age and condition of the portion of the system of concern. These factors as well as other considerations such as risk, past blockage or SSOs and level of use all determine the priority placed on the scheduling of necessary work. The regular inspections, jetting and video documentation referenced in the previous section are the primary methods of identification.

When rehabilitation or replacement work is identified and the appropriate schedule is determined funding is identified. The timing of the repair ranges from immediate need associated to a failure or eminent failure to the need for routine replacement up to several years into the future. Funding will be identified from numerous sources based on the necessary scheduling. Emergency repairs are addressed through existing operating budgets out contingency funds based on the size, while larger capital projects are normally funded through the Chancellor's

4.2.5 Capital Improvement Program (CIP) Development Planning

A well planned short and long range program for the wastewater collection system allows CSUEB to plan, design, and construct sewer infrastructure projects in an organized manner that best serves its stakeholders. In January 2008, CSUEB completed the University Facilities Master Plan to evaluate the existing utilities currently serving the existing CSUEB campus and evaluate various alternatives for improvements. The evaluation revealed that the wastewater collection system is generally adequate in size to support the present needs of the campus. Additionally, the existing system possesses significant available capacity and should be able to accommodate planned future expansion.

CSUEB Short Term Planning

CSUEB continues to manage and maintain the existing infrastructure. CSUEB's short-range plan includes responding to the immediate needs of the wastewater collection system on an as needed basis. As improvements are identified, the Facility Operations Department initiates a project which includes developing a scope and implementing the necessary actions to address the repair, rehabilitation, and/or replacement of the facilities.

CSUEB Long Term Planning

Several factors determine the priority of projects identified during the assessment process, including condition, goals to prevent sanitary sewer overflows, providing sufficient system capacity, reducing infiltration and inflow in pipes located below the water table, or reducing maintenance efforts by improving the pipe condition. Other considerations include coordinating surface and utility improvements that may be impacted by improvements. Integrating the results of the inspection and assessment efforts, with capacity related efforts, CSUEB will ensure a proactive and comprehensive long-range planning effort.

Prioritizing projects for its wastewater collection system relies on several factors including:

- Severity and extent of the conditional defects
- Estimated remaining useful life of the facilities
- Maintenance records (condition findings) and SSO occurrences
- Identified, major expansions and/or improvements

Using this data, CSUEB can include condition related projects onto its current CIPs and include projected costs and dates for the start and end of construction. As projects are identified, Facility Operations staff should develop and track a list of projects and review the list on a regular basis to revise the priorities and update estimated costs based on new and updated information. This would ensure the necessary projects are completed in a timely manner, thereby reducing the potential occurrence of an SSO.

4.2.6 Training

It is the responsibility of Environmental Health & Safety and Facilities Management to ensure training for all personnel who may be called upon to respond to a SSO, including Police Services, Facilities Management and EH&S staff and management. Initial training sessions will be conducted and as needed thereafter. Staff will be informed of changes, following the annual update of this Plan. Facilities Management is responsible for training their employees on to properly operate the associated

equipment. These training records will be maintained by Facilities. All other records will be maintained by their departments and EHS. Training may include classroom and exercises, on and offsite.

The scope of the training shall include:

- 1. Familiarization with this Plan and the terms used;
- 2. Use of personal protective equipment (PPE);
- 3. Location of and use of equipment and materials;
- 4. Familiarization with potential spill locations;
- 5. Proper portable pump capacity selection and the setup of temporary suction and discharge piping. (Facilities Employes only)
- 6. Environmental, health and safety training as it relates to this work. This may include but is not limited to confined space, blood borne pathogens, and lock-out/tag-out.

4.2.7 Equipment and Replacement Part Inventories

The Facility Operations Department maintains an inventory of regularly used replacement parts and equipment on site. For implementation of repairs that extend beyond Facility Operations' internal resource capabilities, the department maintains an open purchase order with several local companies that maintain a supply of the necessary items they stock.

4.2.8 Contractors

The University Representative or Project Manager is responsible for overseeing the Contractor's work and verifying they are following local, state, and federal ordinances as they relate to the work. These may include, but are not limited to storm water protection, confined spaces, and fall protection. The University Representative or Project Manager will coordinate the work with University staff as applicable.

Section Five

Design and Performance

5.1 Regulatory Requirements for Design and Performance

The WDRs require that the SSMP address the following:

- 1. Design and construction standards and specifications for the installation of new sanitary sewer system, pump stations, and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and
- 2. 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 Standards for Installation, Rehabilitation and Repair

The design standards will conform with the applicable Civil and Plumbing Codes that are in effect during the period of time that the new construction or repair as well as local municipal codes. Work must be performed in accordance with applicable federal, state, and local codes, laws, and ordinances.

The Office of the Chancellor, Capital Planning, Design and Construction has outlined the requirements for contractors in the document *Contract General Conditions for Design-Bid-Build (Major Capital Outlay) Projects*.

Design of wastewater facilities that are considered non-standard, such as pump or lift stations, not included in building standards require prior approval from appropriate CSUEB staff before design begins.

5.3 Inspection and Testing Standards

All construction contracts have a quality control provision for inspection and testing of the construction project. Inspection and testing of new or rehabilitated facilities ensures that the established standards are being implemented in the field. Acceptance testing for gravity sewers can include: low pressure air test or water to identify leakage, mandrel test to identify deflection of flexible pipe, water or vacuum test of manholes to identify leakage, and television inspection to identify grade variations or or other construction defect.

Section Six

Overflow Emergency Response Plan

6.1 Overview

This section describes the personnel tasks, equipment and planned response to a SSO. The response shall be directed toward:

- Control or limitation of the volume of wastewater discharged, terminating the discharge if possible.
- Contain and capture the spill or sewer overflow to the maximum extent possible including preventing the discharge of sewage into surface water.
- Establish perimeters and control zones with appropriate positioning of traffic cones and barricades, service vehicles, or use of natural topography (e.g., hills, berms, embankments) and mounded soil and sandbags.
- Promptly notify regulatory agencies' communication centers of preliminary spill information and potential impacts.
- Protect public health, environment and property from sewage spills and restore the surrounding area as soon as possible.
- Minimize the exposure to any regulatory agency penalties and fines, and other legal actions.

6.2 Responsibilities of Primary Responders

Police Services

Respond to calls and alarms related to sanitary sewer overflows, assess and secure the scene, contact Facilities Management and Environmental Health & Safety personnel.

- 1. Receive notification or observe spill.
- 2. Dispatch personnel to the scene.
- 3. If a breach has occurred, the responding patrol officer will take the following actions:
 - a. Report back his/her observations to dispatch.
 - b. Provide traffic and crowd control.
 - c. Call for additional support if needed to prevent unauthorized access into the impacted zone.
 - d. Simultaneously, Dispatch shall initiate 24 hour emergency callouts to Facilities Management and Environmental Health and Safety personnel.

- e. If the spill is too large for University personnel to control in a timely manner, dispatch shall initiate emergency callouts to the appropriate Service Contacts (listed below).
- f. If appropriate, initiate and complete evacuation of University buildings;
- g. Take further actions as conditions require.

Facilities Management

Facilities Management shall implement remedial actions, to the extent they may be applicable to the discharge, as described in this Section under "Spill Abatement Procedures," including the following:

- 1. Interception and rerouting of wastewater flows;
- 2. Vacuum truck recovery of sanitary sewer overflows and wash down water;
- 3. Cleanup of debris at the overflow site.

Environmental Health & Safety

The Environmental Health & Safety shall be responsible to:

- 1. Report to regulatory authorities and other entities as described.
- 2. Conduct sampling to determine the nature and impact of the SSO; and
- 3. Conduct public notification to protect the University staff and students from exposure to the SSO.

6.3 Equipment

The University stocks and maintains the following equipment that can be used for cleaning up spills:

| No. | Equipment | Customary Storage Location |
|-----|-------------------------|-------------------------------|
| | Plumber's truck | Corporation Yard-Plumbing |
| | Vacuator | Corporation Yard-Plumbing |
| 8 | Portable gas pumps | Corporation yard-Irrigation |
| 2 | Portable electric pump | Corporation Yard-Plumbing |
| 6 | Portable generator | Corporation Yard-Electricians |
| 1 | All-terrain vehicle | Corporation Yard-Grounds |
| 1 | Tractor with blade | Corporation Yard-Grounds |
| 1 | Dump Truck | Corporation Yard |
| 1 | Backhoe/loader | Corporation Yard |
| n/a | Sandbags | Landscape material storage |
| n/a | Biodegradable detergent | Housekeeping warehouse |

University Equipment and Supplies Available For Use In Cleaning Up Spills

| n/a | Wash-down hoses | Corporation Yard, Boiler Plant |
|-----|--|--------------------------------|
| 1 | Gas power-washer/sewer-rodder | Corporation Yard |
| n/a | Various fittings/pipes repair unions | Plumbing Shop |
| n/a | Personal Protective Equipment; tyvek suits, boots, gloves, face shields, eye protection, respirators | Facilities Equipment Storage |

n/a – not applicable

6.4 Spill Abatement Procedures

The first responding personnel will take the following actions:

- 1. Don the necessary personal protective equipment (PPE);
- 2. Install storm drain inlet covers over all impacted and threatened storm drain inlets. A combination of storm drain covers and sand bags will be maintained to protect the necessary drain inlets. Specific drain inlets will be visually identified and verified by campus site plans available at facilities Management Office and on management laptop.
- 3. Determine the source and cause of the spill;
- 4. Take immediate steps to stop the spill or overflow (e.g. relieve pipeline blockage, manually operate controls, repair pipe, open valves, etc). Extra care should be taken in securing the work site immediately adjacent to property lines and/or drainage ways.
- 5. If pump-around operation is required, monitor the pumping operation.

Management leading the response will take the following actions, as appropriate for the particular SSO:

- 1. Contact the contracted sewer cleanup company to respond immediately with appropriate equipment and materials if needed.
- 2. Assess or delegate assessment of any stormwater system impact.
- 3. Work with County and State Emergency Reponse personnel to determine decontamination steps, any area of public notifications, and environmental sampling.
- 4. In the event of a sewer line blockage or collapse, determine whether a portable pumparound operation to direct flows around the defective or damaged piping is needed. If needed, take the necessary steps to obtain the personnel and equipment for the pumparound operation.
- 5. Determine if non-University property has been impacted. If non-University property is affected notify the property owner, resident or business by direct contact. If direct contact cannot be made, leave a message at the residence or business to contact the University. Include property owner contact information on the report of the spill.

When cleaning up a spill or overflow site the following procedures shall be observed:

- Sewer overflow sites including contaminated soil, stream banks, and shorelines of other types of bodies of water, shall be thoroughly cleaned after an overflow. Solids and other debris shall be swept, raked, picked-up and transported to a proper disposal area. No readily identifiable residues (e.g., fecal matter, rags, papers, or plastics) shall remain.
- Where practical, the area shall be thoroughly flushed and the wash-down water shall be contained and properly disposed of into the sewer. Heavy flushing shall be avoided when containment of washdown water is impractical or impossible.
- The overflow site shall be secured to prevent contact by the public until the site has been thoroughly cleaned.
- In restricted conditions, the overflow site shall be disinfected and deodorized following cleanup of the site. Disinfection and deodorization will be conducted at the direction of the Alameda County Department of Health Services or the Regional Water Quality Control Board. Disinfection shall be restricted to overflows near public access areas, and should only be used if there will be no release of chemicals to surface water. The disinfectant and any wash water shall be collected and returned to the sewer.
- Where sewage has resulted in ponding, the pond shall be pumped, if practical, into tanker trucks or the University collection system.

6.5 Notification and Reporting

EHS will complete all notifications, certifications, and reporting requirements as outlined in the STATE OF CALIFORNIA WATER RESOURCES CONTROL BOARD ORDER NO. WQ 2013-0058-EXEC AMENDING MONITORING AND REPORTING PROGRAM FOR STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS. The General Order has established reporting requirements for Category 1, Category 2, and Category 3 SSOs. See Attachment 1.

6.6 Monthly Reporting

If there are no SSOs during the calendar month, EH&S will provide, within 30 days after the end of each calendar month, a certification to the Online SSO System that there were no SSOs for the designated month.

Table 6.1 University, Regulatory and Contractor Contacts

a. California State University Eastbay Contacts

| Department | Location/Position/Name | Number |
|---------------------------------------|---------------------------|--------------------------------------|
| University Police Department (UPD) | Emergency | 911 (internal phone) 510-885-3791 |
| Facilities Operation | Office Call UPD | 510-885-4444 510-885-3791 |
| Environmental Health & Safety | Director EH&S Call UPD | 510-885-2395 510-885-3791 |

b. Public Agency Contacts – Emergency Assistance

| Emergency/CA Highway Patrol Hazmat Unit | 9-911 |
|---|------------------------|
| City of Hayward Fire Department/Hazardous Materials | Dispatch: 9-911 |
| City of Hayward Water Pollution Source Control | Office: (510) 881-7900 |

c. Public Agency Contact Information

| California Emergency Management Agency (EMA) | Dispatch: (800) 852-7550 |
|--|-------------------------------------|
| Alameda County Notification The Alameda County Public Works Agency, Water Resources Director of Public Works Attn: Spill notification 399 Elmhurst Street Hayward, CA 94544 | (510) 670-5543 |
| Regional Water Quality Control Board (RWQCB) Region 2 Spill Notification Hotline- staffed during business hours and checked regularly during non-business hours. RWQCB 1515 Clay Street, Suite 1400 Oakland, CA 94612 www.waterboards.ca.gov/sanfranciscobay | Hotline: 510-622-5633 |
| Water Pollution Control Facility - Hayward | Emergency Number: (510) 293-5398 |
| California Department of Fish and Game (DFG) NORCOM Dispatch Center (24 hr): | (916) 358-1300 |
| U.S. Environmental Protection Agency (Region 9) 24/7 environmental emergency number: | 800-300-2193 |

d. Service Contacts

| Belfor Property Restoration | 866-359-7543 |
|-----------------------------|--------------|
|-----------------------------|--------------|

Section Seven

Fats, Oils, and Grease (FOG) Control Program

Fat, oil and grease (FOG) are a major cause of preventable sanitary sewer blockages and overflows that can cause health hazards, damage utilities, and threaten the environment.

Campus food service establishments generate FOG through normal kitchen activities. Fat, oil and grease are common and can be found in items such as meat, food scraps, cooking oils, shortening, lards, dairy products, salad dressings, and butter/margarine and are commonly washed into the plumbing system through the sink during clean-up in the kitchen.

FOG is an issue, because it doesn't dissolve in water. When it enters the plumbing that discharges directly into the collections system, it can decrease pipe capacity when it cools down by coating the inside of drain pipes, causing slow drainage, and eventually block pipes both within Food Service Establishments' internal plumbing and the campus wastewater mains. In extreme cases, sewage can backup into buildings or be discharged into the environment.

7.1 FOG Source Control Program Overview

In 2006, the California State Water Quality Board finalized their statewide approach to reducing sanitary sewer overflows and passed Order No. 2006-003, the Statewide General Waste Discharge Requirement (WDR) for Wastewater Collection Agencies. This WDR requires that all owners/operators of sanitary sewer collection systems develop a Sanitary Sewer Management Plan (SSMP). A FOG Control Program is one of the elements that is now mandated in the State of California to be incorporated within the SSMP. The FOG Control Program is a stand alone program and lists location and capacity of the grease traps and interceptors.

7.2 FOG Source Control Program Objectives

The FOG Source Control Program objectives include:

• Reducing the amount of FOG originating from Food Service Establishments from entering the campus sewer system.

• Protecting the environment by eliminating FOG related collection system backups and overflows.

• Eliminating storm water pollution sources associated with unauthorized activities such as washing kitchen mats and restaurant equipment and other maintenance activities in outdoor areas that discharge to the Storm Water Collection System.

• Continuing to comply with applicable City of Hayward, the State of California, and other regulatory requirements.

7.3 Grease Removal Devices

Campus Food Service Establishments have grease removal devices, commonly referred to as "grease traps" or "grease interceptors." Both devices are primary grease removal devices that are designed and work in the same way, by separating and retaining free-floating fat, oil and grease (FOG). The difference between the two types of grease removal devices is basically the size and physical location of the unit. Grease interceptors are larger units that are typically located in-ground and outside of the building's exterior. Grease traps are much smaller units, typically located under kitchen sinks, but can be installed outside. Bulk kitchen grease is transferred directly to "tallow bins," that are subsequently removed by a third party for recycling.

7.4 Grease Removal Device Sizing

During new construction, sizing and installations is determined by the Planning, Design & Construction Department .

7.5 FOG Elimination & Reduction

Training

Campus Food Services are contracted and trained through Campus Food Sevice vendor. Campus Food Service workers are trained in managing fats, oils, and grease from food service operations. All kitchen staff, from student workers to head chefs and administrators, receive this training prior to performing any tasks. The Food Service vendors conduct the training for their personnel.

Procedures

Fatty substances are scraped from dishes into solid waste bins before they are placed in the dishwasher. Cooking oil is transferred directly to tallow bins.

Maintenance

The required maintenance frequency for grease interceptors and traps depends greatly on the amount of FOG a facility generates as well as any best management practices (BMPs) that the establishment implements to reduce the FOG discharged into its sanitary sewer system and manufacturer's recommendation. In many cases, BMP implementation will realize financial benefit through reduced service frequency maintenance. Refer to the Best Management Practices (BMP's) document for examples of kitchen and maintenance procedures that will limit the build up of FOG in the entire system.

Section Eight

System Evaluations and Capacity Assurance Plan

8.1 Regulatory Requirements for System Evaluation and Capacity Assurance

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

- a. Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The valuation 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 or 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 longterm CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding; and
- d. **Schedule:** The Enrollee shall develop a schedule of completion dates for all portions for the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D.14 of the WDRs.

8.2 Discussion on System Evaluation and Capacity Assurance Plan

CSUEB's most recent efforts in performing an evaluation of its sanitary sewer system are documented in the CSUEB Utility Infrastructure Master Plan. The Master Plan was prepared in September 2009 and includes an evaluation of the utilities currently servicing the existing CSUEB campus and evaluates specific recommended alternatives for improvements necessary to the infrastructure to support proposed new buildings, major renovations, and building replacements that are included in the University Facilities Master Plan. The following subsections provide a brief summary of the modeled system, flow estimates, and evaluation criteria used in CSUEB's sewer system capacity evaluation to address the components listed in Section 8.1 and as required by the WDRs.

8.2.1 Evaluation

The capacity assessment completed as part of the Utility Infrastructure Master Plan was based on estimating sewage generation and flows in the wastewater lines. The following is excerpted from the CSUEB Master Plan 2009. The campus sanitary sewer system discharges to the City of Hayward's system via an 8-inch diameter sewer line along Carlos Bee Boulevard. There are four main branches discharging into that sanitary sewer:

- An 8-inch diameter sanitary sewer running from the Theater to Carlos Bee Boulevard
- A 15-inch to 18-inch diameter sanitary sewer running from Pioneer Heights southwest of West Loop Road to Carlos Bee Boulevard
- An 8-inch to 12-inch diameter sanitary sewer running from the Science Building to the West Loop Road sanitary sewer near the Tennis Courts
- A 6-inch to 8-inch diameter sanitary sewer running from the Art and Education Building to the Science

All of the sanitary sewers are gravity flow, except near the Field House where a lift station is located. Existing sanitary sewer flows can be estimated based on water demand. Assuming that 0% of irrigation water flows into the sanitary sewer, and assuming that 100% of water demand at student housing and academic buildings flows into the sanitary sewer, then existing average sanitary sewer flows are approximately 143,000 gpd. Much of the sanitary sewer system piping is clay and was constructed in the 1960s. There have been some backup problems near Robinson Hall and near the Student Services Hub. (*The Student Health Services has been replaced with the Recreational Center*) An infiltration / inflow study has not been conducted but going to low flow fixtures could increase plugging in the sanitary sewers.

8.2.2 Design Criteria, Future Development, and Capacity Enhancement

Future buildings may be constructed on top of existing sanitary sewers, requiring those sewers to be relocated. These pipelines include:

- A 12-inch to 15-inch sanitary sewer running between Meiklejohn Hall and the Stadium. It may be possible to leave this sewer in place, depending upon the configuration of the proposed housing in this area.
- A 12-inch sanitary sewer running between the Science Building and the Student Health Center.

At build-out, average sanitary sewer flows would increase to 406,000 gpd and maximum sanitary sewer flows would increase to 572,000 gpd if no efficiency measures are taken and if no buildings are retrofitted. Implementation of retrofits and efficiencies would reduce these numbers significantly. This maximum flow rate equates to about 397 gpm. Most of the increased flows will come from new student housing. The sanitary sewers in these areas will therefore need to be replaced (see Figure 53 of the Master Plan). Specifically:

- The existing 18-inch diameter sanitary sewer from Pioneer Heights to Parking Lot B should be replaced with a 24-inch diameter sanitary sewer.
- A pump station and force main will be required to transport sanitary sewage from the housing proposed for the Tennis Courts area to the sanitary sewer along West Loop Road.
- The sanitary sewer from Parking Lot B to the Stadium should be replaced to accommodate new buildings. This sanitary sewer should also be upsized to 24-inch diameter to handle the increased flows from new and existing student housing areas.
- The sanitary sewer from the Stadium should be replaced with an 18-inch diameter sanitary sewer to handle the increased flows from the campus. It should be noted that this diameter is smaller than the pipelines upstream because the pipe slope here is fairly steep (i.e., greater than 0.5 foot per foot).

There is limited information available on the existing inverts, so conservative slopes were assumed. It may be possible to down size some of these new pipelines if the slopes available are greater than assumed.

8.2.3 Schedule

CSUEB's Utility Infrastructure Master Plan identifies the wastewater collection system projects necessary to address projected demands. These projects will be designed and implemented as parts of the specific projects. At this time there is no schedule.

Section Nine

Monitoring, Measurements, and Program Modifications

This chapter of the SSMP discusses the parameters that CSUEB will utilize to track and monitor the progress of implementing elements of the SSMP, the effectiveness of the SSMP, and how CSUEB intends to update and revise the SSMP to keep it current.

9.1 Regulatory Requirements for Monitoring, Measurement, and Program Modifications The WDRs require CSUEB to:

- a. Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
- b. Monitor and implement 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 SSO trends, including: frequency, location, and volume.

9.2 Discussion of Monitoring, Measurement, and Program Modifications

To date, CSUEB has managed and maintained information pertaining to the wastewater infrastructure by recording preventive maintenance activities using the computer maintenance management system (CMMS), TMS. Reoccurring work orders are automatically generated based on a predetermined and assigned frequency which facilitates the scheduling of staff and equipment for performing the routine maintenance activities and documenting the materials used and/or expenditures made. The information is recorded and used for tracking and reporting of staff time and system expenditures. CSUEB tracks performance measures with the use of TMSi Service including, but not limited to, the pipelines cleaned, cause(s) and location of stoppages, and the scheduled maintenance of high frequency maintenance locations (HFMLs). CSUEB will continue to monitor the performance measures it currently tracks. To address the components listed in Section 10.1 and as required by the WDRs, the following subsections provide a summary of the procedures to be implemented to properly monitor program progress and implement necessary modifications.

Maintain Information Pertaining to SSMP Activities

CSUEB has designated the Director of Environmental Health and Safety as the individual responsible for continually monitoring the SSMP provisions and the Director of Facility Operations ensures that the system is maintained in conformance with the document. As improvements or modifications are identified, CSUEB will implement the necessary adjustments to the program at the earliest practical time.

Monitor and Measure SSMP Elements

As the SSMP elements are implemented and evolve, and the collection system is rehabilitated and/or expanded due to implementation of CIP projects, CSUEB staff will modify the elements. The Director of Facility Operations should identify and recommend updates to this SSMP as part of CSUEB's regular performance measurement assessments. The following performance parameters may be utilized as performance indicators to evaluate CSUSM's system:

1. Pipe age

- 2. O&M cost/year
- 3. O&M staff required
- 4. Percent of system maintained, repaired, and/or replaced each year
- 5. System cleaning cycle frequency
- 6. I&I monitoring
- 7. Planning goals status

Assessment of Preventive Maintenance Program

On a regular basis, at least once every two (2) years, CSUEB will evaluate the effectiveness of its preventative maintenance program elements and staffing levels. Recommendations for appropriate adjustments should be developed. Implementation of any changes should be based on the urgency of the need, coordination with other program elements, and management approvals.

Update Program Elements

The EHS Department must review this SSMP on a regular basis and update the document with any significant changes. The SSMP must be reviewed, updated, and re-certified by the governing board or designee at least once every five (5) years. CSUEB will make the SSMP accessible to the public on it's website.

Identify and Illustrate SSO Trends

CSUEB's Facility Operations maintains information as to the emergency calls received reporting potential and/or actual SSOs. The information is documented and contained within the CMMS, TMAi. CSUEB also submits SSO information on the CIWQS website, which is accessible to the public. CSUEB will continue to document SSO trends. Additional information to be included in the documentation process is the frequency and approximate volume of the SSO. Overall, CSUEB is efficiently and effectively implementing the measures to properly document and report any SSOs as required by the WDRs. See Section Six - Overflow Emergency Response Plan.

9.3 SSMP Modifications

Environmental Health and Safety will ensure that the SSMP is updated periodically to include current information, and modify the programs as necessary to ensure program effectiveness and continual compliance with the WDRs. As modifications to elements of this SSMP are deemed necessary, CSUEB staff will implement them at the earliest practical time. However, changes will be officially made to this SSMP during the annual or bi-annual update to the document. A comprehensive SSMP update and recertification will occur every five (5) years or as necessary and will include any significant program changes. The LRO will be responsible for certifying the SSMP via CIWQS.

Section Ten

SSMP Audits

This chapter discusses the SSMP Auditing Program.

10.1 Regulatory Requirements for SSMP Program Audits

The WDRs require that the agency conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur very two (2) years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the agency's compliance with the SSMP requirements identified, including identification of any deficiencies in the SSMP and the steps taken to correct them.

10.2 Discussion of SSMP Program Audits

CSUEB must complete bi-annual audits of its SSMP. Any modifications identified while monitoring the implementation of this SSMP will be officially noted during the SSMP bi-annual audit to ensure this SSMP is up-to-date. The audit may be completed internally, and CSUEB has the option of having the audit performed by an appropriate third party auditor or a neighboring and similar campus. The audit may include, but not be limited to:

- Reviewing the progress made on the development of the SSMP goals
- Reviewing the status of the SSMP programs implemented
- Identifying the improvements necessary to various SSMP programs
- Describing system improvements within the two (2) year audit period
- Describing system improvements planned for the upcoming two (2) years
- Reviewing data related to SSO occurrences

Upon completion of the audit, CSUEB must retain the audit report on file.

Section Eleven

Communication Program

The primary objective of the Communication Program is to increase public awareness of sanitary sewer system issues, to promote a sense of stewardship for the campus' system and facilitate its efforts towards the effective and efficient management, operation, and maintenance of the sanitary sewer system. This chapter of the SSMP discusses CSUEB's efforts to educate and inform the staff and stakeholders regarding the proper use of the sanitary sewer system.

11.1 Regulatory Requirements for Public Education and Outreach

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

11.2 Discussion of the Communication Program

The Environmental Health and Safety Department communicates to the campus community regarding the development, implementation, and performance of the SSMP. The plan is posted on the CSUEB website for the campus community to review and comment. Additionally, the department will provide interested parties with status updates on the implementation of the components of the SSMP and will also consider comments made by interested parties.

Attachment 1

Reporting Requirements

STATE OF CALIFORNIA WATER RESOURCES CONTROL BOARD ORDER NO. WQ 2013-0058-EXEC: AMENDING MONITORING AND REPORTING PROGRAM FOR STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

STATE OF CALIFORNIA WATER RESOURCES CONTROL BOARD ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM FOR STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

The State of California, Water Resources Control Board (hereafter State Water Board) finds:

- 1. The State Water Board is authorized to prescribe statewide general Waste Discharge Requirements (WDRs) for categories of discharges that involve the same or similar operations and the same or similar types of waste pursuant to Water Code section 13263(i).
- 2. Water Code section 13193 *et seq.* requires the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) to gather Sanitary Sewer Overflow (SSO) information and make this information available to the public, including but not limited to, SSO cause, estimated volume, location, date, time, duration, whether or not the SSO reached or may have reached waters of the state, response and corrective action taken, and an enrollee's contact information for each SSO event. An enrollee is defined as the public entity having legal authority over the operation and maintenance of, or capital improvements to, a sanitary sewer system greater than one mile in length.
- 3. Water Code section 13271, *et seq*. requires notification to the California Office of Emergency Services (Cal OES), formerly the California Emergency Management Agency, for certain unauthorized discharges, including SSOs.
- 4. On May 2, 2006, the State Water Board adopted Order 2006-0003-DWQ, "Statewide Waste Discharge Requirements for Sanitary Sewer Systems"¹ (hereafter SSS WDRs) to comply with Water Code section 13193 and to establish the framework for the statewide SSO Reduction Program.
- 5. Subsection G.2 of the SSS WDRs and the Monitoring and Reporting Program (MRP) provide that the Executive Director may modify the terms of the MRP at any time.
- 6. On February 20, 2008, the State Water Board Executive Director adopted a revised MRP for the SSS WDRs to rectify early notification deficiencies and ensure that first responders are notified in a timely manner of SSOs discharged into waters of the state.
- 7. When notified of an SSO that reaches a drainage channel or surface water of the state, Cal OES, pursuant to Water Code section 13271(a)(3), forwards the SSO notification information² to local government agencies and first responders including local public health officials and the applicable Regional Water Board. Receipt of notifications for a single SSO event from both the SSO reporter

¹ Available for download at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_guality/2006/wgo/wgo2006_0003.pdf

² Cal OES Hazardous Materials Spill Reports available Online at: <u>http://w3.calema.ca.gov/operational/malhaz.nsf/\$defaultview</u> and <u>http://w3.calema.ca.gov/operational/malhaz.nsf</u>

and Cal OES is duplicative. To address this, the SSO notification requirements added by the February 20, 2008 MRP revision are being removed in this MRP revision.

- 8. In the February 28, 2008 Memorandum of Agreement between the State Water Board and the California Water and Environment Association (CWEA), the State Water Board committed to redesigning the CIWQS³ Online SSO Database to allow "event" based SSO reporting versus the original "location" based reporting. Revisions to this MRP and accompanying changes to the CIWQS Online SSO Database will implement this change by allowing for multiple SSO appearance points to be associated with each SSO event caused by a single asset failure.
- 9. Based on stakeholder input and Water Board staff experience implementing the SSO Reduction Program, SSO categories have been revised in this MRP. In the prior version of the MRP, SSOs have been categorized as Category 1 or Category 2. This MRP implements changes to SSO categories by adding a Category 3 SSO type. This change will improve data management to further assist Water Board staff with evaluation of high threat and low threat SSOs by placing them in unique categories (i.e., Category 1 and Category 3, respectively). This change will also assist enrollees in identifying SSOs that require Cal OES notification.
- 10. Based on over six years of implementation of the SSS WDRs, the State Water Board concludes that the February 20, 2008 MRP must be updated to better advance the SSO Reduction Program⁴ objectives, assess compliance, and enforce the requirements of the SSS WDRs.

IT IS HEREBY ORDERED THAT:

Pursuant to the authority delegated by Water Code section 13267(f), Resolution 2002-0104, and Order 2006-0003-DWQ, the MRP for the SSS WDRs (Order 2006-0003-DWQ) is hereby amended as shown in Attachment A and shall be effective on September 9, 2013.

8/6/13

Date

Executive Director

³ California Integrated Water Quality System (CIWQS) publicly available at http://www.waterboards.ca.gov/ciwqs/publicreports.shtml

⁴ Statewide Sanitary Sewer Overflow Reduction Program information is available at: <u>http://www.waterboards.ca.gov/water_issues/programs/sso/</u>

ATTACHMENT A

STATE WATER RESOURCES CONTROL BOARD ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM FOR STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

This Monitoring and Reporting Program (MRP) establishes monitoring, record keeping, reporting and public notification requirements for Order 2006-0003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems" (SSS WDRs). This MRP shall be effective from September 9, 2013 until it is rescinded. The Executive Director may make revisions to this MRP at any time. These revisions may include a reduction or increase in the monitoring and reporting requirements. All site specific records and data developed pursuant to the SSS WDRs and this MRP shall be complete, accurate, and justified by evidence maintained by the enrollee. Failure to comply with this MRP may subject an enrollee to civil liabilities of up to \$5,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. The State Water Resources Control Board (State Water Board) reserves the right to take any further enforcement action authorized by law.

A. <u>SUMMARY OF MRP REQUIREMENTS</u>

| 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 <u>any volume</u> 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 <u>1,000 gallons or greater</u> resulting from an enrollee's sanitary sewer system failure or flow condition that <u>do not</u> 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 <u>voluntarily</u> reported to the California Integrated Water Quality System (CIWQS) Online SSO Database. |

Table 1 – Spill Categories and Definitions

| ELEMENT | REQUIREMENT | METHOD |
|---|---|---|
| NOTIFICATION (see section B of MRP) | Within two hours of becoming aware of any Category 1 SSO greater than or equal to <u>1,000 gallons discharged to surface water or</u> <u>spilled in a location where it probably will be</u> <u>discharged to surface water</u>, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number. | Call Cal OES at: (800) 852-7550 |
| REPORTING (see section C of MRP) | Category 1 SSO: Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. Category 2 SSO: Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date. Category 3 SSO: Submit certified report within 30 calendar days of the end of month in which SSO the occurred. SSO Technical Report: Submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. "No Spill" Certification: Certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred. Collection System Questionnaire: Update and certify every 12 months. | Enter data into the CIWQS Online SSO Database (<u>http://ciwqs.waterboards.ca.gov/</u>), certified by enrollee's Legally Responsible Official(s). |
| WATER QUALITY MONITORING (see section D of MRP) | • Conduct water quality sampling <u>within 48 hours</u> after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters. | Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters. |
| RECORD KEEPING (see section E of MRP) | SSO event records. Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters. Collection system telemetry records if relied upon to document and/or estimate SSO Volume. | Self-maintained records shall be available during inspections or upon request. |

B. NOTIFICATION REQUIREMENTS

Although Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) staff do not have duties as first responders, this MRP is an appropriate mechanism to ensure that the agencies that have first responder duties are notified in a timely manner in order to protect public health and beneficial uses.

- For any Category 1 SSO greater than or equal to 1,000 gallons that results in a discharge to a surface water or spilled in a location where it probably will be discharged to surface water, either directly or by way of a drainage channel or MS4, the enrollee shall, as soon as possible, <u>but not later than two (2) hours</u> after (A) the enrollee has knowledge of the discharge, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, notify the Cal OES and obtain a notification control number.
- 2. To satisfy notification requirements for each applicable SSO, the enrollee shall provide the information requested by Cal OES before receiving a control number. Spill information requested by Cal OES may include:
 - i. Name of person notifying Cal OES and direct return phone number.
 - ii. Estimated SSO volume discharged (gallons).
 - iii. If ongoing, estimated SSO discharge rate (gallons per minute).
 - iv. SSO Incident Description:
 - a. Brief narrative.
 - b. On-scene point of contact for additional information (name and cell phone number).
 - c. Date and time enrollee became aware of the SSO.
 - d. Name of sanitary sewer system agency causing the SSO.
 - e. SSO cause (if known).
 - v. Indication of whether the SSO has been contained.
 - vi. Indication of whether surface water is impacted.
 - vii. Name of surface water impacted by the SSO, if applicable.
 - viii. Indication of whether a drinking water supply is or may be impacted by the SSO.
 - ix. Any other known SSO impacts.
 - x. SSO incident location (address, city, state, and zip code).
- 3. Following the initial notification to Cal OES and until such time that an enrollee certifies the SSO report in the CIWQS Online SSO Database, the enrollee shall provide updates to Cal OES regarding substantial changes to the estimated volume of untreated or partially treated sewage discharged and any substantial change(s) to known impact(s).
- 4. PLSDs: The enrollee is strongly encouraged to notify Cal OES of discharges greater than or equal to 1,000 gallons of untreated or partially treated wastewater that result or may result in a discharge to surface water resulting from failures or flow conditions <u>within a privately owned</u> <u>sewer lateral</u> or from other <u>private</u> sewer asset(s) if the enrollee becomes aware of the PLSD.

C. <u>REPORTING REQUIREMENTS</u>

- 1. **CIWQS Online SSO Database Account:** All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS. These accounts allow controlled and secure entry into the CIWQS Online SSO Database.
- 2. **SSO Mandatory Reporting Information:** For reporting purposes, if one SSO event results in multiple appearance points in a sewer system asset, the enrollee shall complete one SSO report in the CIWQS Online SSO Database which includes the GPS coordinates for the location of the SSO appearance point closest to the failure point, blockage or location of the flow condition that caused the SSO, and provide descriptions of the locations of all other discharge points associated with the SSO event.

3. SSO Categories

- i. **Category 1** Discharges of untreated or partially treated wastewater of <u>any volume</u> resulting from an 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).
- ii. Category 2 Discharges of untreated or partially treated wastewater <u>greater than or</u> <u>equal to 1,000 gallons</u> 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.
- iii. **Category 3** All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.

4. Sanitary Sewer Overflow Reporting to CIWQS - Timeframes

- i. **Category 1 and Category 2 SSOs** All SSOs that meet the above criteria for Category 1 or Category 2 SSOs shall be reported to the CIWQS Online SSO Database:
 - a. Draft reports for Category 1 and Category 2 SSOs shall be submitted to the CIWQS Online SSO Database <u>within three (3) business days</u> of the enrollee becoming aware of the SSO. Minimum information that shall be reported in a draft Category 1 SSO report shall include all information identified in section 8.i.a. below. Minimum information that shall be reported in a Category 2 SSO draft report shall include all information identified in section 8.i.c below.
 - b. A final Category 1 or Category 2 SSO report shall be certified through the CIWQS Online SSO Database <u>within 15 calendar days</u> of the end date of the SSO. Minimum information that shall be certified in the final Category 1 SSO report shall include all information identified in section 8.i.b below. Minimum information that shall be certified in a final Category 2 SSO report shall include all information identified in section 8.i.d below.

- ii. Category 3 SSOs All SSOs that meet the above criteria for Category 3 SSOs shall be reported to the CIWQS Online SSO Database and certified within 30 calendar days after the end of the calendar month in which the SSO occurs (e.g., all Category 3 SSOs occurring in the month of February shall be entered into the database and certified by March 30). Minimum information that shall be certified in a final Category 3 SSO report shall include all information identified in section 8.i.e below.
- iii. "No Spill" Certification If there are no SSOs during the calendar month, the enrollee shall either 1) certify, within 30 calendar days after the end of each calendar month, a "No Spill" certification statement in the CIWQS Online SSO Database certifying that there were no SSOs for the designated month, or 2) certify, quarterly within 30 calendar days after the end of each quarter, "No Spill" certification statements in the CIWQS Online SSO Database certifying that there were no SSOs for each quarter, "No Spill" certification statements in the CIWQS Online SSO Database certifying that there were no SSOs for each month in the quarter being reported on. For quarterly reporting, the quarters are Q1 January/ February/ March, Q2 April/May/June, Q3 July/August/September, and Q4 October/November/December.

If there are no SSOs during a calendar month but the enrollee reported a PLSD, the enrollee shall still certify a "No Spill" certification statement for that month.

iv. Amended SSO Reports – The enrollee may update or add additional information to a certified SSO report within 120 calendar days after the SSO end date by amending the report or by adding an attachment to the SSO report in the CIWQS Online SSO Database. SSO reports certified in the CIWQS Online SSO Database prior to the adoption date of this MRP may only be amended up to 120 days after the effective date of this MRP. After 120 days, the enrollee may contact the SSO Program Manager to request to amend an SSO report if the enrollee also submits justification for why the additional information was not available prior to the end of the 120 days.

5. SSO Technical Report

The enrollee shall submit an SSO Technical Report in the CIWQS Online SSO Database within 45 calendar days of the SSO end date for any SSO in which 50,000 gallons or greater are spilled to surface waters. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

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

ii. Enrollee's Response to SSO:

- a. Chronological narrative description of all actions taken by enrollee to terminate the spill.
- b. Explanation of how the SSMP Overflow Emergency Response plan was implemented to respond to and mitigate the SSO.

c. Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

iii. Water Quality Monitoring:

- a. Description of all water quality sampling activities conducted including analytical results and evaluation of the results.
- b. Detailed location map illustrating all water quality sampling points.

6. <u>PLSDs</u>

Discharges of untreated or partially treated wastewater resulting from blockages or other problems <u>within a privately owned sewer lateral</u> connected to the enrollee's sanitary sewer system or from other private sanitary sewer system assets may be <u>voluntarily</u> reported to the CIWQS Online SSO Database.

- i. The enrollee is also encouraged to provide notification to Cal OES per section B above when a PLSD greater than or equal to 1,000 gallons has or may result in a discharge to surface water. For any PLSD greater than or equal to 1,000 gallons regardless of the spill destination, the enrollee is also encouraged to file a spill report as required by Health and Safety Code section 5410 et. seq. and Water Code section 13271, or notify the responsible party that notification and reporting should be completed as specified above and required by State law.
- ii. If a PLSD is recorded in the CIWQS Online SSO Database, the enrollee must identify the sewage discharge as occurring and caused by a private sanitary sewer system asset and should identify a responsible party (other than the enrollee), if known. Certification of PLSD reports by enrollees is not required.

7. CIWQS Online SSO Database Unavailability

In the event that the CIWQS Online SSO Database is not available, the enrollee must fax or e-mail all required information to the appropriate Regional Water Board office in accordance with the time schedules identified herein. In such event, the enrollee must also enter all required information into the CIWQS Online SSO Database when the database becomes available.

8. Mandatory Information to be Included in CIWQS Online SSO Reporting

All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS which can be reached at <u>CIWQS@waterboards.ca.gov</u> or by calling (866) 792-4977, M-F, 8 A.M. to 5 P.M. These accounts will allow controlled and secure entry into the CIWQS Online SSO Database. Additionally, within thirty (30) days of initial enrollment and prior to recording SSOs into the CIWQS Online SSO Database, all enrollees must complete a Collection System Questionnaire (Questionnaire). The Questionnaire shall be updated at least once every 12 months.

i. SSO Reports

At a minimum, the following mandatory information shall be reported prior to finalizing and certifying an SSO report for each category of SSO:

- a. <u>**Draft Category 1 SSOs</u>**: At a minimum, the following mandatory information shall be reported for a draft Category 1 SSO report:</u>
 - 1. SSO Contact Information: Name and telephone number of enrollee contact person who can answer specific questions about the SSO being reported.
 - 2. SSO Location Name.
 - 3. Location of the overflow event (SSO) by entering GPS coordinates. If a single overflow event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the SSO appearance point explanation field.
 - 4. Whether or not the SSO reached surface water, a drainage channel, or entered and was discharged from a drainage structure.
 - 5. Whether or not the SSO reached a municipal separate storm drain system.
 - 6. Whether or not the total SSO volume that reached a municipal separate storm drain system was fully recovered.
 - 7. Estimate of the SSO volume, inclusive of all discharge point(s).
 - 8. Estimate of the SSO volume that reached surface water, a drainage channel, or was not recovered from a storm drain.
 - 9. Estimate of the SSO volume recovered (if applicable).
 - 10. Number of SSO appearance point(s).
 - 11. Description and location of SSO appearance point(s). If a single sanitary sewer system failure results in multiple SSO appearance points, each appearance point must be described.
 - 12. SSO start date and time.
 - 13. Date and time the enrollee was notified of, or self-discovered, the SSO.
 - 14. Estimated operator arrival time.
 - 15. For spills greater than or equal to 1,000 gallons, the date and time Cal OES was called.
 - 16. For spills greater than or equal to 1,000 gallons, the Cal OES control number.
- b. <u>Certified Category 1 SSOs</u>: At a minimum, the following mandatory information shall be reported for a certified Category 1 SSO report, in addition to all fields in section 8.i.a :
 - 1. Description of SSO destination(s).
 - 2. SSO end date and time.
 - 3. SSO causes (mainline blockage, roots, etc.).
 - 4. SSO failure point (main, lateral, etc.).
 - 5. Whether or not the spill was associated with a storm event.
 - 6. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the overflow; and a schedule of major milestones for those steps.
 - 7. Description of spill response activities.
 - 8. Spill response completion date.
 - 9. Whether or not there is an ongoing investigation, the reasons for the investigation and the expected date of completion.

- 10. Whether or not a beach closure occurred or may have occurred as a result of the SSO.
- 11. Whether or not health warnings were posted as a result of the SSO.
- 12. Name of beach(es) closed and/or impacted. If no beach was impacted, NA shall be selected.
- 13. Name of surface water(s) impacted.
- 14. If water quality samples were collected, identify parameters the water quality samples were analyzed for. If no samples were taken, NA shall be selected.
- 15. If water quality samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA shall be selected.
- 16. Description of methodology(ies) and type of data relied upon for estimations of the SSO volume discharged and recovered.
- 17. SSO Certification: Upon SSO Certification, the CIWQS Online SSO Database will issue a final SSO identification (ID) number.
- c. <u>**Draft Category 2 SSOs</u>**: At a minimum, the following mandatory information shall be reported for a draft Category 2 SSO report:</u>
 - 1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO.
- d. <u>Certified Category 2 SSOs</u>: At a minimum, the following mandatory information shall be reported for a certified Category 2 SSO report:
 - 1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-9, and 17 in section 8.i.b above for Certified Category 1 SSO.
- e. <u>Certified Category 3 SSOs</u>: At a minimum, the following mandatory information shall be reported for a certified Category 3 SSO report:
 - 1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-5, and 17 in section 8.i.b above for Certified Category 1 SSO.

ii. Reporting SSOs to Other Regulatory Agencies

These reporting requirements do not preclude an enrollee from reporting SSOs to other regulatory agencies pursuant to state law. In addition, these reporting requirements do not replace other Regional Water Board notification and reporting requirements for SSOs.

iii. Collection System Questionnaire

The required Questionnaire (see subsection G of the SSS WDRs) provides the Water Boards with site-specific information related to the enrollee's sanitary sewer system. The enrollee shall complete and certify the Questionnaire at least every 12 months to facilitate program implementation, compliance assessment, and enforcement response.

iv. SSMP Availability

The enrollee shall provide the publicly available internet web site address to the CIWQS Online SSO Database where a downloadable copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP is posted. If all of the SSMP documentation listed in this subsection is not publicly available on the Internet, the enrollee shall comply with the following procedure: a. Submit an <u>electronic</u> copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP to the State Water Board, within 30 days of that approval and within 30 days of any subsequent SSMP re-certifications, to the following mailing address:

State Water Resources Control Board Division of Water Quality <u>Attn:</u> SSO Program Manager 1001 I Street, 15th Floor, Sacramento, CA 95814

D. WATER QUALITY MONITORING REQUIREMENTS:

To comply with subsection D.7(v) of the SSS WDRs, the enrollee shall develop and implement an SSO Water Quality Monitoring Program to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled to surface waters. The SSO Water Quality Monitoring Program, shall, at a minimum:

- 1. Contain protocols for water quality monitoring.
- 2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.).
- 3. Require water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.
- 4. Require monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.
- 5. Within 48 hours of the enrollee becoming aware of the SSO, require water quality sampling for, at a minimum, the following constituents:
 - i. Ammonia
 - ii. Appropriate Bacterial indicator(s) per the applicable Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.

E. <u>RECORD KEEPING REQUIREMENTS:</u>

The following records shall be maintained by the enrollee for a minimum of five (5) years and shall be made available for review by the Water Boards during an onsite inspection or through an information request:

- 1. General Records: The enrollee shall maintain records to document compliance with all provisions of the SSS WDRs and this MRP for each sanitary sewer system owned including any required records generated by an enrollee's sanitary sewer system contractor(s).
- 2. SSO Records: The enrollee shall maintain records for each SSO event, including but not limited to:
 - i. Complaint records documenting how the enrollee responded to all notifications of possible or actual SSOs, both during and after business hours, including complaints that do not

result in SSOs. Each complaint record shall, at a minimum, include the following information:

- a. Date, time, and method of notification.
- b. Date and time the complainant or informant first noticed the SSO.
- c. Narrative description of the complaint, including any information the caller can provide regarding whether or not the complainant or informant reporting the potential SSO knows if the SSO has reached surface waters, drainage channels or storm drains.
- d. Follow-up return contact information for complainant or informant for each complaint received, if not reported anonymously.
- e. Final resolution of the complaint.
- ii. Records documenting steps and/or remedial actions undertaken by enrollee, using all available information, to comply with section D.7 of the SSS WDRs.
- iii. Records documenting how all estimate(s) of volume(s) discharged and, if applicable, volume(s) recovered were calculated.
- 3. Records documenting all changes made to the SSMP since its last certification indicating when a subsection(s) of the SSMP was changed and/or updated and who authorized the change or update. These records shall be attached to the SSMP.
- 4. Electronic monitoring records relied upon for documenting SSO events and/or estimating the SSO volume discharged, including, but not limited to records from:
 - i. Supervisory Control and Data Acquisition (SCADA) systems
 - ii. Alarm system(s)
 - iii. Flow monitoring device(s) or other instrument(s) used to estimate wastewater levels, flow rates and/or volumes.

F. <u>CERTIFICATION</u>

- 1. All information required to be reported into the CIWQS Online SSO Database shall be certified by a person designated as described in subsection J of the SSS WDRs. This designated person is also known as a Legally Responsible Official (LRO). An enrollee may have more than one LRO.
- 2. Any designated person (i.e. an LRO) shall be registered with the State Water Board to certify reports in accordance with the CIWQS protocols for reporting.
- 3. Data Submitter (DS): Any enrollee employee or contractor may enter draft data into the CIWQS Online SSO Database on behalf of the enrollee if authorized by the LRO and registered with the State Water Board. However, only LROs may certify reports in CIWQS.
- 4. The enrollee shall maintain continuous coverage by an LRO. Any change of a registered LRO or DS (e.g., retired staff), including deactivation or a change to the LRO's or DS's contact information, shall be submitted by the enrollee to the State Water Board within 30 days of the change by calling (866) 792-4977 or e-mailing <u>help@ciwqs.waterboards.ca.gov</u>.

Monitoring and Reporting Program Order No. WQ 2013-0058-EXEC Statewide Waste Discharge Requirements for Sanitary Sewer Systems

 A registered designated person (i.e., an LRO) shall certify all required reports under penalty of perjury laws of the state as stated in the CIWQS Online SSO Database at the time of certification.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of an order amended by the Executive Director of the State Water Resources Control Board.

Date

Townsend Je

Zerk to the Board