UNIVERSITY OF CALIFORNIA, MERCED

SEWER SYSTEM MANAGEMENT PLAN

June 2019

TABLE OF CONTENTS

1.0 GOAL 1-1
1.1 REGULATORY BACKGROUND 1-1
1.2 PURPOSE AND GOALS OF THE SSMP 1-1

2.0 ORGANIZATION 2-1
2.1 ADMINISTRATION AND MAINTENANCE ORGANIZATION 2-1
2.2 MONITORING SYSTEM AND REPORTING SSOs 2-1
2.3 FACILITY DESCRIPTION 2-2
2.4 SANITARY SEWER SYSTEM DESCRIPTION 2-5

3.0 LEGAL AUTHORITY 3-1

4.0 OPERATION AND MAINTENANCE PROGRAM 4-1

5.0 DESIGN AND PERFORMANCE PROVISIONS 5-1
5.1 STANDARDS FOR INSTALLATION, REHABILIATION AND REPAIR 5-1
5.2 STANDARDS FOR INSPECTION AND TESTING OF NEW AND REHABILITATED FACILITIES 5-1

6.0 OVERFLOW EMERGENCY RESPONSE PLAN 6-1
6.1 OBJECTIVE AND PURPOSE 6-1
6.2 OVERFLOW EMERGENCY RESPONSE PLAN UPDATE 6-1

7.0 FOG CONTROL PROGRAM 7-1
7.1 CURRENT INFRASTRUCTURE 7-1
7.2 ELEMENTS OF FOG CONTROL PROGRAM 7-1

8.0 SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN 8-1
8.1 SYSTEM EVALUATION AND CAPACITY ENHANCEMENT MEASURES 8-1
8.2 SCHEDULE 8-1

9.0 MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS 9-1

10.0 SSMP PROGRAM AUDITS 10-2

11.0 COMMUNICATION PROGRAM 11-1
11.1 COMMUNICATING PLAN INFORMATION AND UPDATES 11-1

APPENDICES

A WASTE DISCHARGE REQUIREMENTS (WDR) ORDER NO. 2006-0003-DWQ
B BEST MANAGEMENT PRACTICES FOR FATS, OILS AND GREASE FACT SHEET
C UCM PROPERTY BOUNDARY AND SANITARY SEWER SYSTEM MAP
D UCM OVERFLOW EMERGENCY RESPONSE PLAN

LIST OF FIGURES

NO LIST OF FIGURES ENTRIES FOUND.

LIST OF TABLES

2-1 Grease Interceptors 2-4

4-1 Operation and Maintenance Program 4-2

7-1 FOG Control Program 7-2

1. Introduction

1.1 REGULATORY BACKGROUND

This Sewer System Management Plan (SSMP) is a required document under the Waste Discharge Requirements (WDR) Order No. R3-2006-0003-DWQ, adopted by the State Water Resources Control Board (SWRCB) on May 2, 2006 and amended August 6, 2013 (Order No. WQ 2013-0058-EXEC). The WDR stipulates that the permittees, including the University of California, Merced (UCM), shall develop and implement a Management Plan to reduce Sanitary Sewer Overflows (SSOs). Additionally, the Management Plan provides measures to ensure efficient and effective response to sanitary sewer overflows and to implement source control measures to minimize the introduction of fats, oils, and grease or that may cause blockage in sanitary sewerage.

The SWRCB developed this WDR to promote uniformity in the management of California's wastewater collection systems and reduce SSOs. The SWRCB found that districts that have implemented SSMPs like this have been effective not only in improving spill reporting, but also in mitigating SSO impacts. Data also supported the conclusion that better collection system management will benefit water quality and prolong the life of sanitary sewer systems.

The SWRCB may regulate sanitary sewer overflows based on authority in the Federal Clean Water Act (EPA 2002) and the Porter-Cologne Water Quality Control Act, Section 13263 (California Water Code of Regulation 2006).

1.2 PURPOSE OF THE SSMP

The purpose of this plan is to ensure compliance with WDR Order No. R3-2006-0003-DWQ as amended 8/6/2013 (included in **Appendix A**). The WDR requires regulated enrollees to prepare and implement a SSMP to:

- Provide a plan and schedule to operate and maintain the sanitary sewer system at their regulated location
- Prevent infiltration/inflow (I/I) into the sanitary sewerage from non-sanitary sources
- Prevent sanitary sewer overflows (SSOs) into the environment
- Report and mitigate any SSOs that may occur

1.3 SCOPE OF THE SSMP

The scope of this SSMP includes the management and maintenance of the sanitary sewer system (i.e., sewerage, lift stations, and connections to greywater and blackwater sanitary sewer sources (e.g., sinks, water closets and floor drains across the University campus) at the UCM. This management and maintenance include scheduled inspection and maintenance of the sewerage, lift stations and sources and the response, mitigation and reporting of any potential SSOs at the University.

2.0 Organization

2.1 Roles and Responsibilities

Facilities Management (FM): Provides oversight and management of the operation and maintenance of the UCM sanitary sewer system including monitoring and measurement of sanitary discharge, repair and upkeep of sewerage and lift stations, and response to any reported SSOs.

Environmental, Health and Safety (EH&S): Provides compliance support to the University FM and POPD Departments operational to ensure compliance with regulatory requirements and record keeping and reporting obligations associated with sanitary waste and sewerage system management in accordance with the UCM SSMP.

Campus Dining: Provides Campus management of the maintenance, monitoring and compliant operation and subsequent disposal of fats, oil and grease captured within grease traps and grease interceptors located at UCM dining facilities.

Physical Operations Planning and Design (POP&D): Provides oversight and management of the design and construction of new sanitary sewerage additions, rehabilitations, or modifications to the existing sanitary sewer system at the UCM.

2.2 Compliance Monitoring

UCM utilizes closed circuit television cameras (CCTV) to inspect and monitor the conditional status of the sanitary sewer system. Monitoring is conducted annually on the existing systems. Any additions go the sanitary sewerage are monitored by CCTV to ensure the sewerage lines are intact and there are no cracks in the sewerage lines prior to bringing the new additions online.

UCM monitors and measures flow in the system with a flow meter and totalizer installed inline near the point of discharge. Data from the flow meter along with the totalizer can detect line blockages or losses over time. SSOs can be detected through video monitoring and data analysis. Any SSO discharged to the surface, e.g., a line blockage that backs up within a building, can be detected by building maintenance personnel or others who can subsequently contact UCM FM and EH&S Departments for cleanup and repair along with restoration and notification of the CA SWRCB regarding the quantity of the SS release, the location, a determination of whether the sewage released impacted stormwater receiving streams and the status and closure of the cleanup actions.

University personnel may report SSOs to the following:

- Status Line: (866) 993-0969
- UCM Police Department 24-hour Hotline: (209) 228-2677 (CAT-COPS) or 911
- EH&S Director Malachy Donohue: (209) 228-4234 or (209) 201-9820
- UCM FM Hot Line: (209) 228-2986 or after hours (209) 228-4218

The flowchart for the UCM response to the notification of an SSO event is outlined and delineated in **Figure 2.2**. Emergency response procedures for SSOs are described in **Appendix E, SSO Emergency Response Plan**.

2.3 Facility Description

The UCM campus is located at 5200 N. Lake Road in Merced, CA and was constructed on the site of a former golf course. Some of the sewerage at the University is original form the former golf course although the vast majority of the sewerage as well as the lift station is new construction completed by UCM during construction in 2004 and 2005. The UCM is undergoing campus expansion which will essentially double the size of the University by the end of the calendar year 2020.

The University is one of ten University of California campuses governed by the Regents of the University of California and, as of January 2019, has slightly more than 11,000 students, faculty and staff. The University campus proper served by the Campus sanitary sewer system is shown on the plan view drawing provided in **Appendix D**.

The average annual rainfall for the Merced area is approximately 13 inches. (https://www.usclimatedata.com/climate/merced/california/united-states/usca0695)

Figure 2.1 Administrative Responsibilities Associated with the UCM Sanitary Sewer System

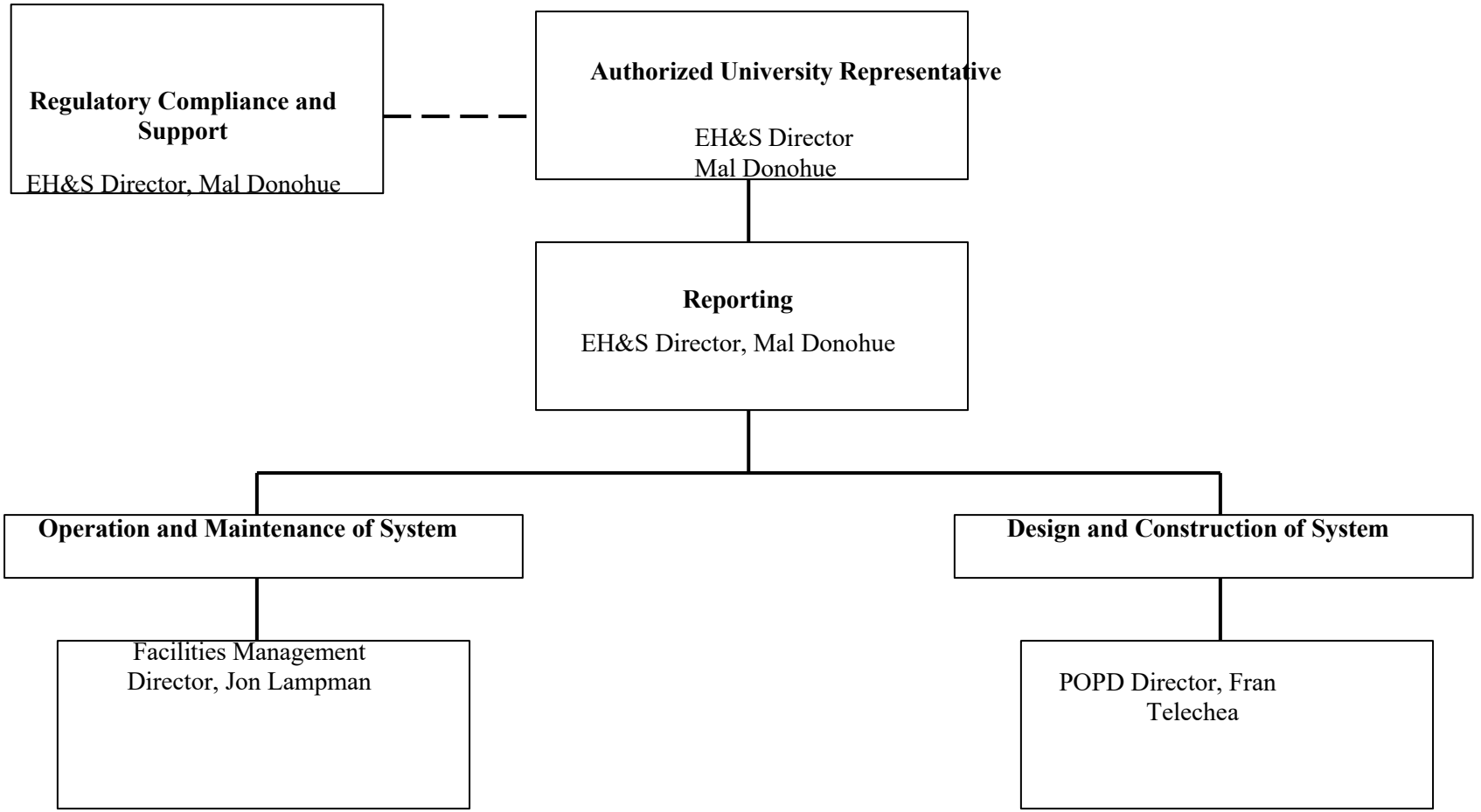
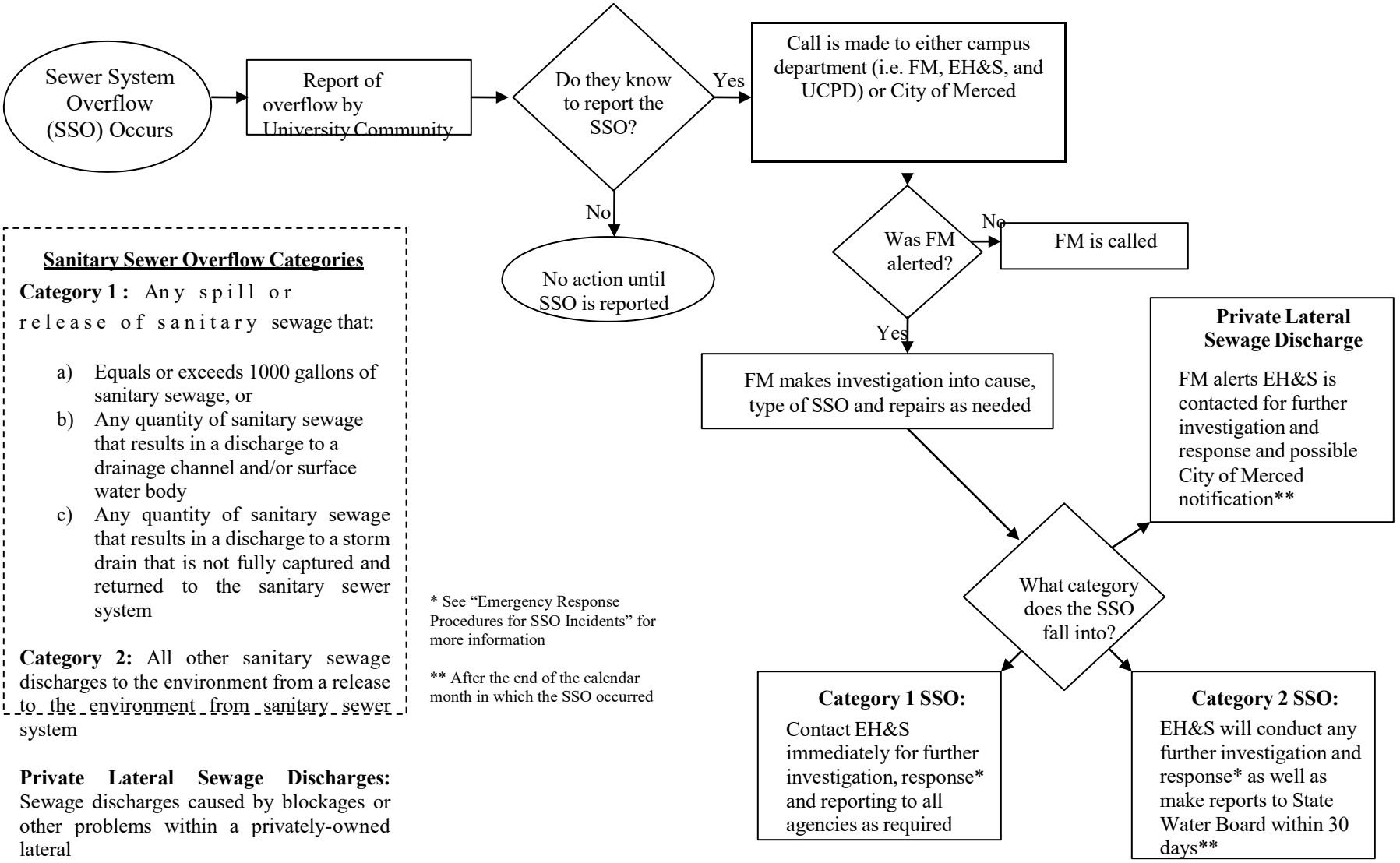


Figure 2.2 Chain of Communication for Sanitary Sewer Overflows, UCM Sanitary Sewer System



Sanitary Sewer Overflow Categories

Category 1 : Any spill or release of sanitary sewage that:

a) Equals or exceeds 1000 gallons of sanitary sewage, or
b) Any quantity of sanitary sewage that results in a discharge to a drainage channel and/or surface water body
c) Any quantity of sanitary sewage that results in a discharge to a storm drain that is not fully captured and returned to the sanitary sewer system

Category 2: All other sanitary sewage discharges to the environment from a release to the environment from sanitary sewer system

Private Lateral Sewage Discharges: Sewage discharges caused by blockages or other problems within a privately-owned lateral

* See "Emergency Response Procedures for SSO Incidents" for more information

** After the end of the calendar month in which the SSO occurred

SANITARY SEWER SYSTEM DESCRIPTION

The Campus sanitary sewer system connects with the City of Merced wastewater collection and treatment system by way of a sanitary sewer line in Bellevue Road that connects to the City of Merced's sewer system at an existing 27-inch trunk line on G Street near Merced College**.** The sanitary sewerage pipeline that runs parallel to Bellevue Road in a utility corridor right of way (ROW), is sized to serve the full development of the campus. The existing 27-inch City of Merced trunk sewer line that runs along a utility ROW along G Street to the City of Merced WWTP has the capacity to serve a campus with up to 10,000 FTE students and associated faculty and staff.

The UCM sanitary sewerage was installed in conjunction with exiting sewerage that served the former golf course facility. The UCM campus expansion, i.e., the Project 2020 public, private partnership (PPP) has essentially doubled the capacity of the sanitary sewerage at the UCM. The UCM campus and the areas served by the UCM sanitary sewer system are shown on the plan view drawing included in Appendix D.

The sanitary sewer system at UCM has been in use since approximately 2000 and is comprised of more than 3.5 miles of gravity sewers (GS) along with force mains (FMs) for the transport of sanitary sewage where deep excavation is not feasible. The piping consists of a combination of RCP (reinforced concrete pipe), clay pipe and plastic pipe. Sanitary sewage is collected from campus buildings that house administration, classroom, research, residential and dining hall facilities. The system ultimately feeds to the City of Merced's wastewater treatment plant (WWTP).

There are lift stations in the UCM sanitary sewer system including lift station and force main designed to lift sanitary waste against a gravity head from the south part of the UCM campus to the trunk sewer line that runs off campus and ultimately to the City of Merced WWTP

There are twelve grease interceptors located on the UCM main campus. UCM currently does not have any grease traps. **Table 2-1** summarizes the grease interceptor sizes, locations and the departments that are responsible for their maintenance.

Table 2-1
Grease Interceptors

The UC Merced Table of Grease Interceptors for SS System				
Number	**Year Installed**	**Location**	**Purpose**	**Size (gal.)**
1	2005	Yablokoff Wallace Dining Center	Food preparation and dining facility	3000
2	2005	UCM Dining	Food preparation and dining facility	1500
3	2018	New UCM Dining Facility	Food preparation and dining facility	3000

4	2018	UCM Quadrangle Food Truck Dining Area	Food Truck parking and utility hook up for mobile food services	750
5	2019	New UCM Dining Facility Loading Dock Area	Loading area for delivery trucks to New UCM Dining Facility and Lab Building 3a shared dock space	1200
6	2019	UCM Greenhouse trash collection and storage area	Operation and storage of trash roll-off containers to serve UCM Greenhouse facility	500
7	2019	UCM Kitchen Conference Center	Food preparation and dining facility	750
8	2019	UCM ALO (3h) trash collection and storage area	Operation and storage of trash roll-off containers to serve UCM ALO Facility	500
9	2019	UCM future retail space	Food preparation and dining facility	1500
10	2019	UCM Board Room Kitchen on Level 2	Food preparation and dining facility	2
11	2019	UCM Wellness Center trash collection and storage area	Operation and storage of trash roll-off containers to serve UCM Wellness Center Facility	500
12	2019	UCM combined trash collection yard	Operation and storage of trash roll-off containers to serve UCM Combined Trash Collection Facility	1000

3.1 LEGAL AUTHORITY

The Reagents of the University of California is a Constitutional Corporation, organized under Article IX, Section 9 of the California Constitution, with full authority over governance and management of the University operations. Under this authority, the University of California has legal authority to:

- Control infiltration and connections from inflow sources, including satellite systems
- Require that sewerage and sewer connections meet design and construction standards
- Ensure proper installation, testing, and inspection of new and rehabilitated sewers (such as new or rehabilitated collector sewers and new or rehabilitated laterals).
- Limit fats oil and grease (FOG) that may exceed allowable concentrations as delineated in the City of Merced Sanitary Sewer Ordinance and may cause blockages within the collection system
- Prevent illicit discharges into its system (e.g., stormwater interconnections or improper disposal into the sanitary sewer system)
- Enable and ensure access for UCM maintenance, inspection, and/or repairs of all portions of the system operated and maintained by the UCM.
- Implement the national pretreatment program authorities specified under 40 CFR 403.8(f)(1).

4.0 OPERATION AND MAINTENANCE PROGRAM

In order to reduce, prevent and eliminate to the extent practicable any SSOs at the UCM, this SSMP establishes operational and maintenance requirements along with delineating roles and responsibilities in order to facilitate the successful management, operation, and maintenance of all parts of the UCM sanitary sewer system. Operational and maintenance activities include:

- Updating and maintaining the sanitary sewer system maps
- Scheduling and implementing routine SS system maintenance
- Identifying and addressing SS system deficiencies discovered during routine maintenance and,
- Providing public education, fiscal resources and training

Currently, the UCM SS system does not have any hydraulic deficiencies. The UCM, during routine maintenance, shall determine any areas of the sanitary sewer system that may potentially have deficiencies and address the engineered solution necessary to repair or revitalize the system.

Table 4-1 presents the required operation and maintenance elements for the SSMP. The table identifies each element and the roles and responsibilities assigned to UCM personnel responsible for each element.

Table 4-1
Operation and Maintenance Program

UCM Operation and Maintenance Program	Responsible Party	Point of Contact	Telephone Number
A. Operations and Maintenance			
"Provide adequate operations and maintenance of facilities and equipment." Operation and maintenance of the sanitary sewer is the responsibility of the UCM Facilities Management. This includes maintaining all lines, force mains, and alarm systems. The department is also the first responder to sanitary sewer overflows.	FM	Jonathan Lampman	(209) 228-2970
B. Update Maps			
"Maintain an up-to-date map of the collection system showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and storm water conveyance systems." The maps of the sanitary sewer system are either in AutoCAD, PDF or hard copy format. • Sanitary sewer maps are in the Water Operations Department in the Central Plant either on the Water Operations server or in the Facilities Building B Mapping Room.	FM	Jonathan Lampman	(209) 228-2970
C. Maintain Information for Establishing Priorities			
"Maintain relevant information to establish and prioritize appropriate SSMP activities such as the elimination of overflows and identify and illustrate trends in overflows." The Water Operations Department is responsible for maintaining records regarding SSOs. All records are on the Water Operations Department software database with hard copies on file. Overflows of any amount of wastewater are reported to EH&S. FM tracks overflows and assesses the frequency and volume of overflows and works with EH&S to reduce and prevent SSOs.	FM	Jonathan Lampman	(209) 228-2970

Table 4-1, page 1 of 7

Table 4-1 (Continued)
Operation and Maintenance Program

UCM Operation and Maintenance Program	Responsible Party	POC	Telephone Number
D. Preventative Maintenance			
"Routine preventative maintenance O&M activities by staff and contractors."	FM	Jonathan Lampman	(209) 228-2970
UCM has measures in place to keep the system in good repair and prevent excessive infiltration/inflow, service interruptions, and system failures. This is done through scheduled regular maintenance and cleaning of the collection system, which is summarized below.			
Routine Inspections:			
• Inspections of the sewer system is done quarterly, which include the manholes, sewer cleanouts and the flow meter.			
Routine Maintenance:			
• Routine maintenance is performed every six months by an outside contractor. The current contractor is Applegate Teeples. The maintenance work performed consists of hydro flushing all mains and laterals, insuring there are no clogs / backups, vacuuming out all major debris, CCTV all mains and laterals to ensure no lines have failed or backed-up.	Applegate Teeples	Manager on Duty	(209) 581-0480
• Maintenance of sewer flow meter is done in house and re-calibrated once a year.	Applegate Teeples	Manager on Duty	(209) 581-0480

Table 4-1 (Continued)
Operation and Maintenance Program

UCM Operation and Maintenance Program	Responsible Party	POC	Telephone Number
E. Scheduled Inspections and Condition Assessment			
"Identify and prioritize structural deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency."	FM	Jonathan Lampman	(209) 228-7877

Long term planning:

- UCM is continually monitoring the infrastructure of the campus, including sanitary sewerage. The sanitary sewer system was evaluated, and long-term planning recommendations made by Stantec Engineering in 2010, presented in *University of California, Merced, Utility Infrastructure Assessment, Sanitary Sewer Study*. Long term actions to be implemented as needed:
- Reverse grade and root intrusion corrections as needed
- Manhole replacement as needed
- Identification and replacement of laterals as needed

Short term actions:

Short term actions are taken on an as-needed-basis depending on information gathered during inspections. Facilities Management will work with Physical Planning, Construction & Design and EH&S as necessary to develop short-term project scope and subsequently implement the project design; all the engineering design and subsequent construction will be documented in the design and construction record.

- Grease interceptor installation

Table 4-1 (Continued)
Operation and Maintenance Program

UCM Operation and Maintenance Program	Responsible Party	POC	Telephone Number
F. Training			
"Provide training on a regular basis for staff collection system operations, maintenance and monitoring and determine if contractor staff are properly trained."	EH&S *and* FM	Mal Donohue Jonathan Lampman	(209) 228-4234 (209) 228-7877

Compliance, operations and maintenance training are conducted by both EH&S and FM.

EH&S:

- Provides regular exposure control training for Facilities Management staff.
- All EH&S training is documented through the UC Learning Center.

Facilities Management:

- Provides regular technical training for FM staff responding to sewer spills; most training is on the job and is not officially documented.
- Provides technical training when new systems are installed to operators of system. Training on new systems is documented.
- Responsible for overseeing operations of contractors. UCM utilizes a service agreement contract for outside contractors to perform maintenance on the sewer system. The service agreement contract stipulates that contractor's staff must be properly trained; this is documented through the language in the contract.
  - Training is provided to staff in-house. Staff attends training yearly with CWRA, AWWA, and CDPH.
  - Those who hold a waste water collections certification must receive training yearly to retain certifications.

G. Equipment			
"Provide equipment and replacement parts inventories, including identification of critical replacement parts."	FM	Jonathan Lampman	(209) 228-7877
A stock parts and equipment, including emergency pumps, lights, and generators is maintained. Repairs that require equipment or materials beyond existing capabilities are executed by an outside contractor via a service agreement contract. Currently, a service agreement is maintained with Applegate Teeples. Replacement parts are kept in a warehouse on site located at Facilities Building A.	Applegate Teeples	Manager on Duty	(209) 581-0480

Table 4-1, page 4 of 7

Table 4-1 (Continued)
Operation and Maintenance Program

UCM Operation and Maintenance Program	Responsible Party	POC	Telephone Number
H. Public Education Outreach Program			
"Establish an implementation plan and schedule for public education outreach program that promotes the proper disposal of grease and fats."	EH&S	Mal Donohue	(209) 228-4234
Since the sewer system at UCM is not a public system, the university has direct control over any facility that disposes of grease and fats into the sanitary sewer. Policies adopted in this plan, specifically in **Section 7, Source Control Program**, are adopted by all entities on campus. The additional items below comprise the outreach program to the campus community. The following measures are adopted in order to foster the successful implementation of the SSMP and disposal of grease and fats by organizations on campus: • A copy of the UCM SSMP will be posted on the UCM EH&S website (http://ehs.ucmerced.edu/). • Signs listing the best management practices for working with fats, oils and grease will be posted in the work areas of employees who use the grease traps or interceptors on campus. A copy of these signs is also posted on the UCM EH&S website. • Inspections for proper disposal of grease and fats as well as regular maintenance on grease interceptors will be included in routine inspections by the Environmental Health and Safety team. These inspections are documented by EH&S and maintained in electronic format on the EH&S server.			

Table 4-1, page 5 of 7

Table 4-1 (Continued)
Operation and Maintenance Program

UCM Operation and Maintenance Program	Responsible Party	POC	Telephone Number
I. Private Property Overflow Plan			
All UCM's sanitary sewer system is located on campus property.	EH&S	Mal Donohue	(209) 228-4234

Table 4-1, page 6 of 7

Table 4-1 (Continued)
Operation and Maintenance Program

UCM Operation and Maintenance Program	Responsible Party	POC	Telephone Number
L. Staffing for System Operations			
"Describe staffing available to ensure system operation including developing, implementing and revising the SSMP." The responsibility for system operation is Central plant/ water operations departments and is summarized in Figure 2-1, Administrative Responsibilities for UCM Sanitary Sewer System. There are qualified Facilities Management staff members that operate the sanitary sewer system, and qualified Facilities Management staff members which assist in the operation of the sewer system inside University buildings. Staff is available 24 hours a day, 365 days to operate the system. The SSMP revision and implementation will be accomplished by Environmental Health & Safety, in cooperation with Facilities Management. Together, these departments ensure the operation of the sanitary sewer system.	EH&S	Mal Donohue	(209) 228-4234

Table 4-1, page 7 of 7

5.0 DESIGN AND PERFORMANCE PROVISIONS

The UCM has established a Mechanical, Electrical, Plumbing (MEP) Specification for all new construction at the University. Design standards for sanitary sewer installation, rehabilitation and repair are included in this specification.

The master MEP specification is available from the Physical Planning, Design & Construction (PPD&C) Group within the Facilities Management Department. PPD&C is responsible for ensuring these design standards are implemented at the University. There are two categories of design and performance provisions specified in WDR No. R3-2004-0130, discussed below.

5.1 STANDARDS FOR INSTALLATION, REHABILIATION AND REPAIR

The UCM MEP specification outlines construction design specifications for installing new sanitary sewer systems and for the rehabilitation and repair of existing sanitary sewer systems. Design criteria include specifications for items such as sewerage pipe materials, minimum sizes, minimum depth of cover, materials strength, minimum slope allowances, backfill, structural standards, and other design elements. Any new construction, rehabilitation or repair of the sanitary sewer system will adhere to these design specifications. At UCM, it is required that all developers and design consultants, at a minimum, meet UCM reference standards in the design and construction of new or renovated sanitary sewerage construction projects. These specifications are amended and updated as necessary.

The UCM's Technical Advisory Committee (TAC) is charged with review and evaluation of technical specifications and supporting references for accuracy and completeness. The TAC meets on a regular basis to provide technical specification review and revision as necessary.

5.2 STANDARDS FOR INSPECTION AND TESTING OF NEW AND REHABILITATED FACILITIES

Inspection and testing of new or rehabilitated facilities ensures that the UCM construction design standards are being implemented during construction or renovation. The UCM has compliance standards for all new construction; testing is performed based upon the requirements of the UCM and references incorporated including the 2019 California Plumbing Code (CPC). The UCM has in-house International Code Council (ICC) & Division of State Architects (DSA) inspectors who perform code compliance inspections and corrective action follow up as part of the quality assurance and quality control program for work performance. Performance testing of constructed gravity sewers at the UCM can include low pressure air testing or hydraulic testing in order to identify line leakage, mandrel testing to identify deflection of flexible pipe, hydraulic or vacuum testing of manholes to identify leakage, and closed-circuit television (CCTV) inspection of sewerage to identify grade variations or other construction defects.

The UCM requires performance bonds on any new construction projects exceeding $25,000 in value. In addition, a principle construction inspector is assigned to each project to ensure compliance with applicable code and design requirements in conformance with UCM design and construction standards and regulatory obligations.

6.0 OVERFLOW EMERGENCY RESPONSE PLAN

6.1 OBJECTIVE AND PURPOSE

The UCM Overflow Emergency Response Plan entitled, "Sewer Spill Response Procedures for Releases or Threatened Releases to Campus Storm Drains or Waterways", is attached as **Appendix D** to this Sanitary Sewer Management Plan; this plan establishes guidelines and performance measures to protect public health and the environment in the event of a sanitary sewer overflow.

In the case of an overflow, UCM shall dispatch the appropriate personnel to investigate problem, identify the cause and provide appropriate maintenance and repair service to minimize the effects of the overflow to public health and the environment. Specifically, the water quality component of surface waters. The Overflow Emergency Response Plan further specifies the required notification and reporting obligations required by regulation.

All Facilities Management Department utility personnel are required to read and comply with the Overflow Emergency Response Plan and implementing procedures. Training is made available for all utility personnel on the Overflow Emergency Response Plan. This plan is posted on the UCM EH&S website to allow easy access for all UCM utility personnel and the campus community in the event of an emergency.

6.2 OVERFLOW EMERGENCY RESPONSE PLAN UPDATE

The Overflow Emergency Response Plan is reviewed on a regular basis by the UCM EH&S and FM Department Directors and revisions are made as necessary. In addition, interim changes may be incorporated into the document by the Directors as necessary.

7.0 FOG CONTROL PROGRAM

The fats, oil and grease (FOG) control program at the UCM was developed as part of the UCM SSMP and builds upon on-going FOG Best Management Practices that UCM has in place (**Appendix B**). The purpose of this program is to reduce and eliminate to the extent practical, the quantity of fats, oils and grease discharged to the wastewater collection system from food preparation and dining facilities at the UCM.

7.1 UCM INFRASTRUCTURE

There are twelve grease interceptors on the UCM campus; the locations of these grease interceptors are listed in Table 2-1.

7.2 ELEMENTS OF FOG CONTROL PROGRAM

The elements of the UCM FOG control program include prevention, engineered design removal of FOG from the sanitary waste streams using grease interceptors, preventive maintenance for grease interceptors, and preventive maintenance as well as timely response to reports of sanitary sewer system blockages as part of the UCM BMPs for managing FOG and compliance with sanitary waste discharge. The details are provided in Table 7-1.

Table 7-1
FOG Control Program

FOG Control Measures	Responsible Party	POC	Telephone Number
A. Identification of Grease Blockages and Maintenance Requirements			
Grease blockages are identified through routine inspections of the UCM sanitary sewer system. The inspections are conducted as part of the regular scheduled maintenance and cleaning of the system, which is outlined in Table 4-1, Measures and Activities, Parts D and E. system maintenance includes both preventive maintenance and maintenance of parts of the system determined to need cleaning during routine inspections. Preventive maintenance procedures are outlined in Table 4-1, Part D.	FM	Jon Lampman	(209) 228-7877
B. Installation of New Grease Traps or Interceptors			
Installation of a new grease trap or interceptor may be recommended based on inspection and maintenance of the system. Installations of new grease traps or interceptors will conform to Campus design specifications. Design plans for new grease traps and interceptors will be reviewed by Physical Plant – Campus Services and EH&S.	EH&S	Mal Donohue	(209) 228-4234
C. Best Management Practices (BMP)			
BMPs are in place to prevent the introduction of grease and fats into the sanitary sewer. Training occurs upon hiring by the kitchen manager. The purpose is to protect Storm Drains near Kitchen areas that could be impacted by overflow.	EH&S	Mal Donohue	(209) 228-4234
• Kitchen staff is trained upon hiring on BMPs to ensure that they are implemented. This needs to be documented			
• Kitchen staff is trained upon hiring on bulk grease practices. Bulk grease is not washed into the sanitary sewer. Additionally, grease in pans is not washed down the drain. This needs to be documented	Dining Services	Martin Reed	(209) 500-9269
• Excess grease that is generated from grilling or frying is collected in a dedicated container. The grease is disposed of by a grease hauler.			

Table 7-1 (Continued)
FOG Control Program

Source Control Measures	Responsible Party	POC	Telephone Number
C. Best Management Practices (continued)			
• Grease interceptors are cleaned once per three-month period, at a minimum, by an approved grease hauler.	Dining Services	Martin Reed	(209) 500-9269
• If a grease interceptor is not working properly, FM is contacted.			
D. Record Keeping			
Invoice records for pumping of grease interceptors are kept by the Dining Services. They are reviewed to ensure the contractor is maintaining the inspection schedule and pumping out the grease interceptors when necessary.	Dining Services	Martin Reed	(209) 500-9269
E. Inspection			
Each restaurant is responsible for routine inspections to ensure proper maintenance of the grease traps. Grease traps are also inspected by EH&S on an annual basis, at minimum.	Dining Services	Martin Reed	(209) 500-9269
	EH&S	Mal Donohue	(209) 228-4234

Table 8-1, page 2 of 2

8.0 SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

The UCM is not experiencing hydraulic deficiencies in the operation of the SS system. The UCM has an occasional sanitary sewer overflow (SSO) event related to a line blockage but not due to deficiency in the hydraulic capacity. Therefore, a capacity assurance plan and a capital improvement plan are not required at this time. The UCM development design plans include ensuring adequate SS system sizing to assure system capacity.

8.1 SYSTEM EVALUATION AND CAPACITY ENHANCEMENT MEASURES

UCM FM monitors the operating conditions of utilities infrastructure on campus and implements a preventive maintenance program, including sewer cleaning and inspections for sanitary sewers on an annual basis to ensure the SS system is operating efficiently and in compliance with environmental health obligations. The sanitary sewer system was evaluated, and long-term planning recommendations made by, *Sanitary Sewer System Study, Final Report* (Stantec Engineering in 2010); these recommendations were incorporated in the design elements and construction of new sanitary sewerage installed as part of the University expansion under the PPP Project 2020 which will double the footprint of the UCM by the end of CY 2020.

Facilities Management and Environmental Health & Safety are involved in plan review for budgetary and capital projects at UCM involving infrastructure upgrades as part of design and construction projects. During plan review, EH&S and FM provide design review and comment to assure that sanitary sewer design and construction meet specification compliance obligations and construction best practices.

8.2 SCHEDULE

UCM Building Inspectors monitor the code compliance with sanitary sewer system design and construction; UCM Building Inspectors along with FM and EH&S will provide construction and compliance support to address any rehabilitation or replacement of sewerage as needed.

9.0 MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS

The UCM EH&S in conjunction with FM shall monitor and measure the effectiveness and implementation of the UCM SSMP in accordance with the defined roles and responsibilities outlined and delineated in Section 4, Operation and Maintenance, Table 4.1, Operation and Maintenance Program.

10.0 SSMP PROGRAM AUDITS

As part of this SSMP, the UCM EH&S along with FM shall conduct periodic internal audits, appropriate to address both the SS system operational maintenance, additions or repairs to the system and response to any reported SSOs. This system monitoring, and maintenance shall measure the operational and compliance effectiveness of the UCM SSMP. This measurement shall demonstrate UCM's compliance with this SSMP's requirements identified in subsection D (13) of the CA Division of Water Quality WDR Order 2006- 0003-DWQ, including the identification of any deficiencies within the SSMP and any actions necessary to correct the same.

11.0 COMMUNICATION PROGRAM

11.1 COMMUNICATING PLAN INFORMATION AND UPDATES

The UCM EH&S Director will provide any necessary communication with the U C M campus community regarding the development, implementation, and performance of the SSMP. The UCM SSMP will be posted on the UCM EH&S website for access. The SSMP will be reviewed and updated as needed but at a minimum of every five years.

APPENDIX A:

WASTE DISCHARGE REQUIREMENTS (WDR) ORDER NO. 2006-0003-DWQ

STATE WATER RESOURCES CONTROL BOARD
ORDER NO. 2006-0003-DWQ

STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

The State Water Resources Control Board, hereinafter referred to as "State Water Board", finds that:

1. All federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California are required to comply with the terms of this Order. Such entities are hereinafter referred to as "Enrollees".

2. Sanitary sewer overflows (SSOs) are overflows from sanitary sewer systems of domestic wastewater, as well as industrial and commercial wastewater, depending on the pattern of land uses in the area served by the sanitary sewer system. SSOs often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease and other pollutants. SSOs may cause a public nuisance, particularly when raw untreated wastewater is discharged to areas with high public exposure, such as streets or surface waters used for drinking, fishing, or body contact recreation. SSOs may pollute surface or ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters.

3. Sanitary sewer systems experience periodic failures resulting in discharges that may affect waters of the state. There are many factors (including factors related to geology, design, construction methods and materials, age of the system, population growth, and system operation and maintenance), which affect the likelihood of an SSO. A proactive approach that requires Enrollees to ensure a system-wide operation, maintenance, and management plan is in place will reduce the number and frequency of SSOs within the state. This approach will in turn decrease the risk to human health and the environment caused by SSOs.

4. Major causes of SSOs include: grease blockages, root blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, excessive storm or ground water inflow/infiltration, debris blockages, sanitary sewer system age and construction material failures, lack of proper operation and maintenance, insufficient capacity and contractor-caused damages. Many SSOs are preventable with adequate and appropriate facilities, source control measures and operation and maintenance of the sanitary sewer system.

SEWER SYSTEM MANAGEMENT PLANS

5. To facilitate proper funding and management of sanitary sewer systems, each Enrollee must develop and implement a system-specific Sewer System Management Plan (SSMP). To be effective, SSMPs must include provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and cost benefit analysis. Additionally, an SSMP must contain a spill response plan that establishes standard procedures for immediate response to an SSO in a manner designed to minimize water quality impacts and potential nuisance conditions.

6. Many local public agencies in California have already developed SSMPs and implemented measures to reduce SSOs. These entities can build upon their existing efforts to establish a comprehensive SSMP consistent with this Order. Others, however, still require technical assistance and, in some cases, funding to improve sanitary sewer system operation and maintenance to reduce SSOs.

7. SSMP certification by technically qualified and experienced persons can provide a useful and cost-effective means for ensuring that SSMPs are developed and implemented appropriately.

8. It is the State Water Board's intent to gather additional information on the causes and sources of SSOs to augment existing information and to determine the full extent of SSOs and consequent public health and/or environmental impacts occurring in the State.

9. Both uniform SSO reporting and a centralized statewide electronic database are needed to collect information to allow the State Water Board and Regional Water Quality Control Boards (Regional Water Boards) to effectively analyze the extent of SSOs statewide and their potential impacts on beneficial uses and public health. The monitoring and reporting program required by this Order and the attached Monitoring and Reporting Program No. 2006-0003-DWQ, are necessary to assure compliance with these waste discharge requirements (WDRs).

10. Information regarding SSOs must be provided to Regional Water Boards and other regulatory agencies in a timely manner and be made available to the public in a complete, concise, and timely fashion.

11. Some Regional Water Boards have issued WDRs or WDRs that serve as National Pollution Discharge Elimination System (NPDES) permits to sanitary sewer system owners/operators within their jurisdictions. This Order establishes minimum requirements to prevent SSOs. Although it is the State Water Board's intent that this Order be the primary regulatory mechanism for sanitary sewer systems statewide, Regional Water Boards may issue more stringent or more

prescriptive WDRs for sanitary sewer systems. Upon issuance or reissuance of a Regional Water Board's WDRs for a system subject to this Order, the Regional Water Board shall coordinate its requirements with stated requirements within this Order, to identify requirements that are more stringent, to remove requirements that are less stringent than this Order, and to provide consistency in reporting.

REGULATORY CONSIDERATIONS

12. California Water Code section 13263 provides that the State Water Board may prescribe general WDRs for a category of discharges if the State Water Board finds or determines that:

    - The discharges are produced by the same or similar operations;
    - The discharges involve the same or similar types of waste;
    - The discharges require the same or similar treatment standards; and
    - The discharges are more appropriately regulated under general discharge requirements than individual discharge requirements.

    This Order establishes requirements for a class of operations, facilities, and discharges that are similar throughout the state.

13. The issuance of general WDRs to the Enrollees will:
    a) Reduce the administrative burden of issuing individual WDRs to each Enrollee;
    b) Provide for a unified statewide approach for the reporting and database tracking of SSOs;
    c) Establish consistent and uniform requirements for SSMP development and implementation;
    d) Provide statewide consistency in reporting; and
    e) Facilitate consistent enforcement for violations.

14. The beneficial uses of surface waters that can be impaired by SSOs include, but are not limited to, aquatic life, drinking water supply, body contact and non-contact recreation, and aesthetics. The beneficial uses of ground water that can be impaired include, but are not limited to, drinking water and agricultural supply. Surface and ground waters throughout the state support these uses to varying degrees.

15. The implementation of requirements set forth in this Order will ensure the reasonable protection of past, present, and probable future beneficial uses of water and the prevention of nuisance. The requirements implement the water quality control plans (Basin Plans) for each region and take into account the environmental characteristics of hydrographic units within the state. Additionally, the State Water Board has considered water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect

water quality in the area, costs associated with compliance with these requirements, the need for developing housing within California, and the need to develop and use recycled water.

16. The Federal Clean Water Act largely prohibits any discharge of pollutants from a point source to waters of the United States except as authorized under an NPDES permit. In general, any point source discharge of sewage effluent to waters of the United States must comply with technology-based, secondary treatment standards, at a minimum, and any more stringent requirements necessary to meet applicable water quality standards and other requirements. Hence, the unpermitted discharge of wastewater from a sanitary sewer system to waters of the United States is illegal under the Clean Water Act. In addition, many Basin Plans adopted by the Regional Water Boards contain discharge prohibitions that apply to the discharge of untreated or partially treated wastewater. Finally, the California Water Code generally prohibits the discharge of waste to land prior to the filing of any required report of waste discharge and the subsequent issuance of either WDRs or a waiver of WDRs.

17. California Water Code section 13263 requires a water board to, after any necessary hearing, prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge. The requirements shall, among other things, take into consideration the need to prevent nuisance.

18. California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all the following requirements:
    a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, to interfere with the comfortable enjoyment of life or property.
    b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
    c. Occurs during, or as a result of, the treatment or disposal of wastes.

19. This Order is consistent with State Water Board Resolution No. 68-16 (Statement of Policy with Respect to Maintaining High Quality of Waters in California) in that the Order imposes conditions to prevent impacts to water quality, does not allow the degradation of water quality, will not unreasonably affect beneficial uses of water, and will not result in water quality less than prescribed in State Water Board or Regional Water Board plans and policies.

20. The action to adopt this General Order is exempt from the California Environmental Quality Act (Public Resources Code §21000 et seq.) because it is an action taken by a regulatory agency to assure the protection of the environment and the regulatory process involves procedures for protection of the environment. (Cal. Code Regs., tit. 14, §15308). In addition, the action to adopt

this Order is exempt from CEQA pursuant to Cal.Code Regs., title 14, §15301 to the extent that it applies to existing sanitary sewer collection systems that constitute "existing facilities" as that term is used in Section 15301, and §15302, to the extent that it results in the repair or replacement of existing systems involving negligible or no expansion of capacity.

21. The Fact Sheet, which is incorporated by reference in the Order, contains supplemental information that was also considered in establishing these requirements.

22. The State Water Board has notified all affected public agencies and all known interested persons of the intent to prescribe general WDRs that require Enrollees to develop SSMPs and to report all SSOs.

23. The State Water Board conducted a public hearing on February 8, 2006, to receive oral and written comments on the draft order. The State Water Board received and considered, at its May 2, 2006, meeting, additional public comments on substantial changes made to the proposed general WDRs following the February 8, 2006, public hearing. The State Water Board has considered all comments pertaining to the proposed general WDRs.

IT IS HEREBY ORDERED, that pursuant to California Water Code section 13263, the Enrollees, their agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted hereunder, shall comply with the following:

A. DEFINITIONS

1. **Sanitary sewer overflow (SSO)** - Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:
   (i) Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;
   (ii) Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
   (iii) Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

2. **Sanitary sewer system** – Any system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not considered to be SSOs.

For purposes of this Order, sanitary sewer systems include only those systems owned by public agencies that are comprised of more than one mile of pipes or sewer lines.

3. **Enrollee** - A federal or state agency, municipality, county, district, and other public entity that owns or operates a sanitary sewer system, as defined in the general WDRs, and that has submitted a complete and approved application for coverage under this Order.

4. **SSO Reporting System** – Online spill reporting system that is hosted, controlled, and maintained by the State Water Board. The web address for this site is http://ciwqs.waterboards.ca.gov. This online database is maintained on a secure site and is controlled by unique usernames and passwords.

5. **Untreated or partially treated wastewater** – Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.

6. **Satellite collection system** – The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility to which the sanitary sewer system is tributary.

7. **Nuisance** - California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements:
    a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
    b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
    c. Occurs during, or as a result of, the treatment or disposal of wastes.

B. APPLICATION REQUIREMENTS

1. Deadlines for Application – All public agencies that currently own or operate sanitary sewer systems within the State of California must apply for coverage under the general WDRs within six (6) months of the date of adoption of the general WDRs. Additionally, public agencies that acquire or assume responsibility for operating sanitary sewer systems after the date of adoption of this Order must apply for coverage under the general WDRs at least three (3) months prior to operation of those facilities.

2. Applications under the general WDRs – In order to apply for coverage pursuant to the general WDRs, a legally authorized representative for each agency must submit a complete application package. Within sixty (60) days of adoption of the general WDRs, State Water Board staff will send specific instructions on how to

apply for coverage under the general WDRs to all known public agencies that own sanitary sewer systems. Agencies that do not receive notice may obtain applications and instructions online on the Water Board's website.

3. Coverage under the general WDRs – Permit coverage will be in effect once a complete application package has been submitted and approved by the State Water Board's Division of Water Quality.

C. PROHIBITIONS

1. Any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.

2. Any SSO that results in a discharge of untreated or partially treated wastewater that creates a nuisance as defined in California Water Code Section 13050(m) is prohibited.

D. PROVISIONS

1. The Enrollee must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for enforcement action.

2. It is the intent of the State Water Board that sanitary sewer systems be regulated in a manner consistent with the general WDRs. Nothing in the general WDRs shall be:

   (i) Interpreted or applied in a manner inconsistent with the Federal Clean Water Act, or supersede a more specific or more stringent state or federal requirement in an existing permit, regulation, or administrative/judicial order or Consent Decree;
   (ii) Interpreted or applied to authorize an SSO that is illegal under either the Clean Water Act, an applicable Basin Plan prohibition or water quality standard, or the California Water Code;
   (iii) Interpreted or applied to prohibit a Regional Water Board from issuing an individual NPDES permit or WDR, superseding this general WDR, for a sanitary sewer system, authorized under the Clean Water Act or California Water Code; or
   (iv) Interpreted or applied to supersede any more specific or more stringent WDRs or enforcement order issued by a Regional Water Board.

3. The Enrollee shall take all feasible steps to eliminate SSOs. In the event that an SSO does occur, the Enrollee shall take all feasible steps to contain and mitigate the impacts of an SSO.

4. In the event of an SSO, the Enrollee shall take all feasible steps to prevent untreated or partially treated wastewater from discharging from storm drains into

flood control channels or waters of the United States by blocking the storm drainage system and by removing the wastewater from the storm drains.

5. All SSOs must be reported in accordance with Section G of the general WDRs.

6. In any enforcement action, the State and/or Regional Water Boards will consider the appropriate factors under the duly adopted State Water Board Enforcement Policy. And, consistent with the Enforcement Policy, the State and/or Regional Water Boards must consider the Enrollee's efforts to contain, control, and mitigate SSOs when considering the California Water Code Section 13327 factors. In assessing these factors, the State and/or Regional Water Boards will also consider whether:

   (i) The Enrollee has complied with the requirements of this Order, including requirements for reporting and developing and implementing a SSMP;

   (ii) The Enrollee can identify the cause or likely cause of the discharge event;

   (iii) There were no feasible alternatives to the discharge, such as temporary storage or retention of untreated wastewater, reduction of inflow and infiltration, use of adequate backup equipment, collecting and hauling of untreated wastewater to a treatment facility, or an increase in the capacity of the system as necessary to contain the design storm event identified in the SSMP. It is inappropriate to consider the lack of feasible alternatives, if the Enrollee does not implement a periodic or continuing process to identify and correct problems.

   (iv) The discharge was exceptional, unintentional, temporary, and caused by factors beyond the reasonable control of the Enrollee;

   (v) The discharge could have been prevented by the exercise of reasonable control described in a certified SSMP for:
      - Proper management, operation and maintenance;
      - Adequate treatment facilities, sanitary sewer system facilities, and/or components with an appropriate design capacity, to reasonably prevent SSOs (e.g., adequately enlarging treatment or collection facilities to accommodate growth, infiltration and inflow (I/I), etc.);
      - Preventive maintenance (including cleaning and fats, oils, and grease (FOG) control);
      - Installation of adequate backup equipment; and
      - Inflow and infiltration prevention and control to the extent practicable.

   (vi) The sanitary sewer system design capacity is appropriate to reasonably prevent SSOs.

(vii) The Enrollee took all reasonable steps to stop and mitigate the impact of the discharge as soon as possible.

7. When a sanitary sewer overflow occurs, the Enrollee shall take all feasible steps and necessary remedial actions to 1) control or limit the volume of untreated or partially treated wastewater discharged, 2) terminate the discharge, and 3) recover as much of the wastewater discharged as possible for proper disposal, including any wash down water.

   The Enrollee shall implement all remedial actions to the extent they may be applicable to the discharge and not inconsistent with an emergency response plan, including the following:

   (i) Interception and rerouting of untreated or partially treated wastewater flows around the wastewater line failure;
   (ii) Vacuum truck recovery of sanitary sewer overflows and wash down water;
   (iii) Cleanup of debris at the overflow site;
   (iv) System modifications to prevent another SSO at the same location;
   (v) Adequate sampling to determine the nature and impact of the release; and
   (vi) Adequate public notification to protect the public from exposure to the SSO.

8. The Enrollee shall properly, manage, operate, and maintain all parts of the sanitary sewer system owned or operated by the Enrollee, and shall ensure that the system operators (including employees, contractors, or other agents) are adequately trained and possess adequate knowledge, skills, and abilities.

9. The Enrollee shall allocate adequate resources for the operation, maintenance, and repair of its sanitary sewer system, by establishing a proper rate structure, accounting mechanisms, and auditing procedures to ensure an adequate measure of revenues and expenditures. These procedures must be in compliance with applicable laws and regulations and comply with generally acceptable accounting practices.

10. The Enrollee shall provide adequate capacity to convey base flows and peak flows, including flows related to wet weather events. Capacity shall meet or exceed the design criteria as defined in the Enrollee's System Evaluation and Capacity Assurance Plan for all parts of the sanitary sewer system owned or operated by the Enrollee.

11. The Enrollee shall develop and implement a written Sewer System Management Plan (SSMP) and make it available to the State and/or Regional Water Board upon request. A copy of this document must be publicly available at the Enrollee's office and/or available on the Internet. This SSMP must be approved by the Enrollee's governing board at a public meeting.

12. In accordance with the California Business and Professions Code sections 6735, 7835, and 7835.1, all engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. Specific elements of the SSMP that require professional evaluation and judgments shall be prepared by or under the direction of appropriately qualified professionals and shall bear the professional(s)' signature and stamp.

13. The mandatory elements of the SSMP are specified below. However, if the Enrollee believes that any element of this section is not appropriate or applicable to the Enrollee's sanitary sewer system, the SSMP program does not need to address that element. The Enrollee must justify why that element is not applicable. The SSMP must be approved by the deadlines listed in the SSMP Time Schedule below.

Sewer System Management Plan (SSMP)

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

(ii) **Organization**: The SSMP must identify:

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

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

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

(iii) **Legal Authority:** Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

(a) Prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.);

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

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

(d) Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and

(e) Enforce any violation of its sewer ordinances.

(iv) **Operation and Maintenance Program**. The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:

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

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

(c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;

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

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

(v) **Design and Performance Provisions**:

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

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

(vi) **Overflow Emergency Response Plan -** Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

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

(b) program to ensure an appropriate response to all overflows;

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

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

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

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

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

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

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

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

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

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

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

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

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

(a) **Evaluation**: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs

that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;

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

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

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

(ix) **Monitoring, Measurement, and Program Modifications:** The Enrollee shall:

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

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

(c) Assess the success of the preventative 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.

(x) **SSMP Program Audits** - As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the

Enrollee's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

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

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

14. Both the SSMP and the Enrollee's program to implement the SSMP must be certified by the Enrollee to be in compliance with the requirements set forth above and must be presented to the Enrollee's governing board for approval at a public meeting. The Enrollee shall certify that the SSMP, and subparts thereof, are in compliance with the general WDRs within the time frames identified in the time schedule provided in subsection D.15, below.

    In order to complete this certification, the Enrollee's authorized representative must complete the certification portion in the Online SSO Database Questionnaire by checking the appropriate milestone box, printing and signing the automated form, and sending the form to:

    State Water Resources Control Board
    Division of Water Quality
    Attn: SSO Program Manager
    P.O. Box 100
    Sacramento, CA 95812

    The SSMP must be updated every five (5) years and must include any significant program changes. Re-certification by the governing board of the Enrollee is required in accordance with D.14 when significant updates to the SSMP are made. To complete the re-certification process, the Enrollee shall enter the data in the Online SSO Database and mail the form to the State Water Board, as described above.

15. The Enrollee shall comply with these requirements according to the following schedule. This time schedule does not supersede existing requirements or time schedules associated with other permits or regulatory requirements.

Sewer System Management Plan Time Schedule

Task and Associated Section	**Completion Date**			
	Population > 100,000	Population between 100,000 and 10,000	Population between 10,000 and 2,500	Population < 2,500
Application for Permit Coverage ***Section C***	6 months after WDRs Adoption			
Reporting Program ***Section G***	6 months after WDRs Adoption[1]			
SSMP Development Plan and Schedule ***No specific Section***	9 months after WDRs Adoption[2]	12 months after WDRs Adoption[2]	15 months after WDRs Adoption[2]	18 months after WDRs Adoption[2]
Goals and Organization Structure ***Section D 13 (i) & (ii)***	12 months after WDRs Adoption[2]		18 months after WDRs Adoption[2]	
Overflow Emergency Response Program ***Section D 13 (vi)***	24 months after WDRs Adoption[2]	30 months after WDRs Adoption[2]	36 months after WDRs Adoption[2]	39 months after WDRs Adoption[2]
Legal Authority ***Section D 13 (iii)***				
Operation and Maintenance Program ***Section D 13 (iv)***				
Grease Control Program ***Section D 13 (vii)***				
Design and Performance ***Section D 13 (v)***	36 months after WDRs Adoption	39 months after WDRs Adoption	48 months after WDRs Adoption	51 months after WDRs Adoption
System Evaluation and Capacity Assurance Plan ***Section D 13 (viii)***				
Final SSMP, incorporating all of the SSMP requirements ***Section D 13***				

1. In the event that by July 1, 2006 the Executive Director is able to execute a memorandum of agreement (MOA) with the California Water Environment Association (CWEA) or discharger representatives outlining a strategy and time schedule for CWEA or another entity to provide statewide training on the adopted monitoring program, SSO database electronic reporting, and SSMP development, consistent with this Order, then the schedule of Reporting Program Section G shall be replaced with the following schedule:

Reporting Program ***Section G***	
Regional Boards 4, 8, and 9	8 months after WDRs Adoption
Regional Boards 1, 2, and 3	12 months after WDRs Adoption
Regional Boards 5, 6, and 7	16 months after WDRs Adoption

If this MOU is not executed by July 1, 2006, the reporting program time schedule will remain six (6) months for all regions and agency size categories.

2. In the event that the Executive Director executes the MOA identified in note 1 by July 1, 2006, then the deadline for this task shall be extended by six (6) months. The time schedule identified in the MOA must be consistent with the extended time schedule provided by this note. If the MOA is not executed by July 1, 2006, the six (6) month time extension will not be granted.

E. WDRs and SSMP AVAILABILITY

1. A copy of the general WDRs and the certified SSMP shall be maintained at appropriate locations (such as the Enrollee's offices, facilities, and/or Internet homepage) and shall be available to sanitary sewer system operating and maintenance personnel at all times.

F. ENTRY AND INSPECTION

1. The Enrollee shall allow the State or Regional Water Boards or their authorized representative, upon presentation of credentials and other documents as may be required by law, to:

    a. Enter upon the Enrollee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;

    b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at any location.

G. GENERAL MONITORING AND REPORTING REQUIREMENTS

1. The Enrollee shall furnish to the State or Regional Water Board, within a reasonable time, any information that the State or Regional Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Enrollee shall also furnish to the Executive Director of the State Water Board or Executive Officer of the applicable Regional Water Board, upon request, copies of records required to be kept by this Order.

2. The Enrollee shall comply with the attached Monitoring and Reporting Program No. 2006-0003 and future revisions thereto, as specified by the Executive Director. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. 2006-0003. Unless superseded by a specific enforcement Order for a specific Enrollee, these reporting requirements are intended to replace other mandatory routine written reports associated with SSOs.

3. All Enrollees must obtain SSO Database accounts and receive a “Username” and “Password” by registering through the California Integrated Water Quality System (CIWQS). These accounts will allow controlled and secure entry into the SSO Database. Additionally, within 30days of receiving an account and prior to recording spills into the SSO Database, all Enrollees must complete the “Collection System Questionnaire”, which collects pertinent information regarding an Enrollee’s collection system. The “Collection System Questionnaire” must be updated at least every 12 months.

4. Pursuant to Health and Safety Code section 5411.5, any person who, without regard to intent or negligence, causes or permits any untreated wastewater or other waste to be discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State, as soon as that person has knowledge of the discharge, shall immediately notify the local health officer of the discharge. Discharges of untreated or partially treated wastewater to storm drains and drainage channels, whether man-made or natural or concrete-lined, shall be reported as required above.

   Any SSO greater than 1,000 gallons discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State shall also be reported to the Office of Emergency Services pursuant to California Water Code section 13271.

H. CHANGE IN OWNERSHIP

1. This Order is not transferable to any person or party, except after notice to the Executive Director. The Enrollee shall submit this notice in writing at least 30 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new Enrollee containing a specific date for the transfer of this Order's responsibility and coverage between the existing Enrollee and the new Enrollee. This agreement shall include an acknowledgement that the existing Enrollee is liable for violations up to the transfer date and that the new Enrollee is liable from the transfer date forward.

I. INCOMPLETE REPORTS

1. If an Enrollee becomes aware that it failed to submit any relevant facts in any report required under this Order, the Enrollee shall promptly submit such facts or information by formally amending the report in the Online SSO Database.

J. REPORT DECLARATION

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

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

    (ii) An individual is a duly authorized representative only if:

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

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

K. CIVIL MONETARY REMEDIES FOR DISCHARGE VIOLATIONS

1. The California Water Code provides various enforcement options, including civil monetary remedies, for violations of this Order.

2. The California Water Code also provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or

falsifying any information provided in the technical or monitoring reports is subject to civil monetary penalties.

L. SEVERABILITY

1. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.

2. This order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Enrollee from liability under federal, state or local laws, nor create a vested right for the Enrollee to continue the waste discharge.

CERTIFICATION

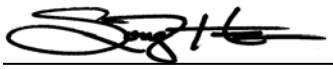
The undersigned Clerk to the State Water Board does hereby certify that the foregoing is a full, true, and correct copy of general WDRs duly and regularly adopted at a meeting of the State Water Resources Control Board held on May 2, 2006.

AYE: Tam M. Doduc
Gerald D. Secundy

NO: Arthur G. Baggett

ABSENT: None

ABSTAIN: None



Song Her
Clerk to the Board

STATE WATER RESOURCES CONTROL BOARD

MONITORING AND REPORTING PROGRAM NO. 2006-0003-DWQ
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 No. 2006-2003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems." Revisions to this MRP may be made at any time by the Executive Director and may include a reduction or increase in the monitoring and reporting.

A. SANITARY SEWER OVERFLOW REPORTING

SSO Categories

1. Category 1 - All discharges of sewage resulting from a failure in the Enrollee's sanitary sewer system that:
   A. Equal or exceed 1000 gallons, or
   B. Result in a discharge to a drainage channel and/or surface water; or
   C. Discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system.

2. Category 2 – All other discharges of sewage resulting from a failure in the Enrollee's sanitary sewer system.

3. Private Lateral Sewage Discharges – Sewage discharges that are caused by blockages or other problems within a privately-owned lateral.

SSO Reporting Timeframes

4. Category 1 SSOs – All SSOs that meet the above criteria for Category 1 SSOs must be reported as soon as: (1) the Enrollee has knowledge of the discharge, (2) reporting is possible, and (3) reporting can be provided without substantially impeding cleanup or other emergency measures. Initial reporting of Category 1 SSOs must be reported to the Online SSO System as soon as possible but no later than 3 business days after the Enrollee is made aware of the SSO. Minimum information that must be contained in the 3-day report must include all information identified in section 9 below, except for item 9.K. A final certified report must be completed through the Online SSO System, within 15 calendar days of the conclusion of SSO response and remediation. Additional information may be added to the certified report, in the form of an attachment, at any time.

   The above reporting requirements do not preclude other emergency notification requirements and timeframes mandated by other regulatory agencies (local

County Health Officers, local Director of Environmental Health, Regional Water Boards, or Office of Emergency Services (OES)) or State law.

5. Category 2 SSOs – All SSOs that meet the above criteria for Category 2 SSOs must be reported to the Online SSO Database within 30 days after the end of the calendar month in which the SSO occurs (e.g. all SSOs occurring in the month of January must be entered into the database by March 1st).

6. Private Lateral Sewage Discharges – All sewage discharges that meet the above criteria for Private Lateral sewage discharges may be reported to the Online SSO Database based upon the Enrollee's discretion. If a Private Lateral sewage discharge is recorded in the SSO Database, the Enrollee must identify the sewage discharge as occurring and caused by a private lateral, and a responsible party (other than the Enrollee) should be identified, if known.

7. If there are no SSOs during the calendar month, the Enrollee will provide, within 30 days after the end of each calendar month, a statement through the Online SSO Database certifying that there were no SSOs for the designated month.

8. In the event that the SSO Online Database is not available, the enrollee must fax all required information to the appropriate Regional Water Board office in accordance with the time schedules identified above. In such event, the Enrollee must also enter all required information into the Online SSO Database as soon as practical.

Mandatory Information to be Included in SSO Online Reporting

All Enrollees must obtain SSO Database accounts and receive a "Username" and "Password" by registering through the California Integrated Water Quality System (CIWQS). These accounts will allow controlled and secure entry into the SSO Database. Additionally, within thirty (30) days of receiving an account and prior to recording SSOs into the SSO Database, all Enrollees must complete the "Collection System Questionnaire", which collects pertinent information regarding an Enrollee's collection system. The "Collection System Questionnaire" must be updated at least every 12 months.

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

9. Category 2 SSOs:

    A. Location of SSO by entering GPS coordinates;
    B. Applicable Regional Water Board, i.e. identify the region in which the SSO occurred;
    C. County where SSO occurred;
    D. Whether or not the SSO entered a drainage channel and/or surface water;
    E. Whether or not the SSO was discharged to a storm drain pipe that was not fully captured and returned to the sanitary sewer system;

F. Estimated SSO volume in gallons;
G. SSO source (manhole, cleanout, etc.);
H. SSO cause (mainline blockage, roots, etc.);
I. Time of SSO notification or discovery;
J. Estimated operator arrival time;
K. SSO destination;
L. Estimated SSO end time; and
M. SSO Certification. Upon SSO Certification, the SSO Database will issue a Final SSO Identification (ID) Number.

10. Private Lateral Sewage Discharges:

A. All information listed above (if applicable and known), as well as;
B. Identification of sewage discharge as a private lateral sewage discharge; and
C. Responsible party contact information (if known).

11. Category 1 SSOs:

A. All information listed for Category 2 SSOs, as well as;
B. Estimated SSO volume that reached surface water, drainage channel, or not recovered from a storm drain;
C. Estimated SSO amount recovered;
D. Response and corrective action taken;
E. If samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA must be selected.
F. Parameters that samples were analyzed for (if applicable);
G. Identification of whether or not health warnings were posted;
H. Beaches impacted (if applicable). If no beach was impacted, NA must be selected;
I. Whether or not there is an ongoing investigation;
J. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
K. OES control number (if applicable);
L. Date OES was called (if applicable);
M. Time OES was called (if applicable);
N. Identification of whether or not County Health Officers were called;
O. Date County Health Officer was called (if applicable); and
P. Time County Health Officer was called (if applicable).

Reporting to Other Regulatory Agencies

These reporting requirements do not preclude an Enrollee from reporting SSOs to other regulatory agencies pursuant to California state law. These reporting requirements do not replace other Regional Water Board telephone reporting requirements for SSOs.

1. The Enrollee shall report SSOs to OES, in accordance with California Water Code Section 13271.

Office of Emergency Services
Phone (800) 852-7550

2. The Enrollee shall report SSOs to County Health officials in accordance with California Health and Safety Code Section 5410 et seq.

3. The SSO database will automatically generate an e-mail notification with customized information about the SSO upon initial reporting of the SSO and final certification for all Category 1 SSOs. E-mails will be sent to the appropriate County Health Officer and/or Environmental Health Department if the county desires this information, and the appropriate Regional Water Board.

B. Record Keeping

1. Individual SSO records shall be maintained by the Enrollee for a minimum of five years from the date of the SSO. This period may be extended when requested by a Regional Water Board Executive Officer.

3. All records shall be made available for review upon State or Regional Water Board staff's request.

4. All monitoring instruments and devices that are used by the Enrollee to fulfill the prescribed monitoring and reporting program shall be properly maintained and calibrated as necessary to ensure their continued accuracy;

5. The Enrollee shall retain records of all SSOs, such as, but not limited to and when applicable:

   a. Record of Certified report, as submitted to the online SSO database;
   b. All original recordings for continuous monitoring instrumentation;
   c. Service call records and complaint logs of calls received by the Enrollee;
   d. SSO calls;
   e. SSO records;
   f. Steps that have been and will be taken to prevent the SSO from recurring and a schedule to implement those steps.
   g. Work orders, work completed, and any other maintenance records from the previous 5 years which are associated with responses and investigations of system problems related to SSOs;
   h. A list and description of complaints from customers or others from the previous 5 years; and
   i. Documentation of performance and implementation measures for the previous 5 years.

6. If water quality samples are required by an environmental or health regulatory agency or State law, or if voluntary monitoring is conducted by the Enrollee or its agent(s), as a result of any SSO, records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The individual(s) who performed the analyses;
e. The analytical technique or method used; and,
f. The results of such analyses.

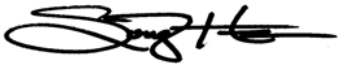
C. Certification

1. All final reports must be certified by an authorized person as required by Provision J of the Order.
2. Registration of authorized individuals, who may certify reports, will be in accordance with the CIWQS' protocols for reporting.

Monitoring and Reporting Program No. 2006-0003 will become effective on the date of adoption by the State Water Board.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Board held on May 2, 2006.



Song Her
Clerk to the Board

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

ORDER NO. WQ 2008-0002-EXEC

ADOPTING AMENDED MONITORING AND REPORTING REQUIREMENTS FOR STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

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

1. The State Water Board is authorized to prescribe statewide general waste discharge requirements for categories of discharges that involve the same or similar operations and the same of similar types of waste pursuant to Water Code 13263, subdivision (i).

2. The State Water Board on May 2, 2006, adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Order No. 2006-0003-DWQ, pursuant to that authority.

3. The State Water Board on May 2, 2006, adopted Monitoring and Reporting Requirements to implement the General Waste Discharge Requirements for Sanitary Sewer Systems.

4. State Water Board Order No. 2006-0003-DWQ, paragraph G.2., and the Monitoring and Reporting Requirements, both provide that the Executive Director may modify the terms of the Monitoring and Reporting Requirements at any time.

5. The time allowed in those Monitoring and Reporting Requirements for the filing of the initial report of an overflow is too long to adequately protect the public health and safety or the beneficial uses of the waters of the state when there is a sewage collection system spill. An additional notification requirement is necessary and appropriate to ensure the Office of Emergency Services, local public health officials, and the applicable regional water quality control board are apprised of a spill that reaches a drainage channel or surface water.

6. Further, the burden of providing a notification as soon as possible is de minims and will allow response agencies to take action as soon as possible to protect public health and safety and beneficial uses of the waters of the state.

IT IS HEREBY ORDERED THAT:

Pursuant to the authority delegated by Resolution No. 2002-0104 and Order No. 2006-0003-DWQ, the Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems No. 2006-0003-DWQ is hereby amended as shown in Attachment A, with new text indicated by double-underline.

Dated: February 20, 2008

Dorothy Rice
Executive Director

ATTACHMENT A

STATE WATER RESOURCES CONTROL BOARD
MONITORING AND REPORTING PROGRAM NO. 2006-0003-DWQ
(AS REVISED BY ORDER NO. wa 2008-0002-EXEC)

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 No. 2006-2003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems." Revisions to this MRP may be made at any time by the Executive Director and may include a reduction or increase in the monitoring and reporting.

NOTIFICATION

Although State and Regional Water Board staff do not have duties as first responders. this Monitoring and Reporting Program is an appropriate mechanism to ensure that the agencies that do have first responder duties are notified in a timely manner in order to protect public health and beneficial uses.

1. For any discharges of sewage that results in a discharge to a drainage channel or a surface water. the Discharger shall. as soon as possible. but not later than two (2) hours after becoming aware of the discharge, notify the State Office of Emergency Services. the local health officer or directors of environmental health with jurisdiction over affected water bodies, and the appropriate Regional Water Quality Control Board

2. As soon as possible. but no later than twenty-four 124) hours after becoming aware of a discharge to a drainage channel or a surface water. the Discharger shall submit to the appropriate Regional Water Quality Control Board a certification that the State Office of Emergency Services and the local health officer or directors of environmental health with jurisdiction over the affected water bodies have been notified of the discharge.

A. SANITARY SEWER OVERFLOW REPORTING

SSO Categories

1. Category 1 - All discharges of sewage resulting from a failure in the Enrollee's sanitary sewer system that:
   A. Equal or exceed 1000 gallons, or
   B. Result in a discharge to a drainage channel and/or surface water; or
   C. Discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system.

2. Category 2 – All other discharges of sewage resulting from a failure in the Enrollee's sanitary sewer system.

3. Private Lateral Sewage Discharges – Sewage discharges that are caused by blockages or other problems within a privately-owned lateral.

SSO Reporting Timeframes

4. Category 1 SSOs – Except as provided above. all SSOs that meet the above criteria for Category 1 SSOs must be reported as soon as: (1) the Enrollee has knowledge of the discharge, (2) reporting is possible, and (3) reporting can be provided without substantially impeding cleanup or other emergency measures. Initial reporting of Category 1 SSOs must be reported to the Online SSO System as soon as possible but no later than 3 business days after the Enrollee is made aware of the SSO. Minimum information that must be contained in the 3-day report must include all information identified in section 9 below, except for item 9.K. A final certified report must be completed through the Online SSO System, within 15 calendar days of the conclusion of SSO response and remediation. Additional information may be added to the certified report, in the form of an attachment, at any time.

   The above reporting requirements are in addition to do not preclude other emergency notification requirements and timeframes mandated by other regulatory agencies (local County Health Officers, local Director of Environmental Health, Regional Water Boards, or Office of Emergency Services (OES)) or State law.

5. Category 2 SSOs – All SSOs that meet the above criteria for Category 2 SSOs must be reported to the Online SSO Database within 30 days after the end of the calendar month in which the SSO occurs (e.g. all SSOs occurring in the month of January must be entered into the database by March 1st).

6. Private Lateral Sewage Discharges – All sewage discharges that meet the above criteria for Private Lateral sewage discharges may be reported to the Online SSO Database based upon the Enrollee's discretion. If a Private Lateral sewage discharge is recorded in the SSODatabase, the Enrollee must identify the sewage discharge as occurring and caused by a private lateral, and a responsible party (other than the Enrollee) should be identified, if known.

7. If there are no SSOs during the calendar month, the Enrollee will provide, within 30 days after the end of each calendar month, a statement through the Online SSO Database certifying that there were no SSOs for the designated month.

8. In the event that the SSO Online Database is not available, the enrollee must fax all required information to the appropriate Regional Water Board office in

accordance with the time schedules identified above. In such event, the Enrollee must also enter all required information into the Online SSO Database as soon as practical.

Mandatory Information to be Included in SSO Online Reporting

All Enrollees must obtain SSO Database accounts and receive a "Username" and "Password" by registering through the California Integrated Water Quality System (CIWQS). These accounts will allow controlled and secure entry into the SSO Database. Additionally, within thirty (30) days of receiving an account and prior to recording SSOs into the SSO Database, all Enrollees must complete the "Collection System Questionnaire", which collects pertinent information regarding an Enrollee's collection system. The "Collection System Questionnaire" must be updated at least every 12 months.

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

9. Category 2 SSOs:

    A. Location of SSO by entering GPS coordinates;
    B. Applicable Regional Water Board, i.e. identify the region in which the SSO occurred;
    C. County where SSO occurred;
    D. Whether or not the SSO entered a drainage channel and/or surface water;
    E. Whether or not the SSO was discharged to a storm drain pipe that was not fully captured and returned to the sanitary sewer system;
    F. Estimated SSO volume in gallons;
    G. SSO source (manhole, cleanout, etc.);
    H. SSO cause (mainline blockage, roots, etc.);
    I. Time of SSO notification or discovery;
    J. Estimated operator arrival time;
    K. SSO destination;
    L. Estimated SSO end time; and
    M. SSO Certification. Upon SSO Certification, the SSO Database will issue a Final SSO Identification (ID) Number.

10. Private Lateral Sewage Discharges:

    A. All information listed above (if applicable and known), as well as;
    B. Identification of sewage discharge as a private lateral sewage discharge; and
    C. Responsible party contact information (if known).

11. Category 1 SSOs:

A. All information listed for Category 2 SSOs, as well as;
B. Estimated SSO volume that reached surface water, drainage channel, or not recovered from a storm drain;
C. Estimated SSO amount recovered;
D. Response and corrective action taken;
E. If samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA must be selected.
F. Parameters that samples were analyzed for (if applicable);
G. Identification of whether or not health warnings were posted;
H. Beaches impacted (if applicable). If no beach was impacted, NA must be selected;
I. Whether or not there is an ongoing investigation;
J. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
K. OES control number (if applicable);
L. Date OES was called (if applicable);
M. Time OES was called (if applicable);
N. Identification of whether or not County Health Officers were called;
1. Date County Health Officer was called (if applicable); and
P. Time County Health Officer was called (if applicable).

Reporting to Other Regulatory Agencies

These reporting requirements do not preclude an Enrollee from reporting SSOs to other regulatory agencies pursuant California state law. These reporting requirements do not replace other Regional Water Board telephone reporting requirements for SSOs.

2. The Enrollee shall report SSOs to OES, in accordance with California Water Code Section 13271.

Office of Emergency Services
Phone (800) 852-7550

3. The Enrollee shall report SSOs to County Health officials in accordance with California Health and Safety Code Section 5410 et seq.

4. The SSO database will automatically generate an e-mail notification with customized information about the SSO upon initial reporting of the SSO and final certification for all Category 1 SSOs. E-mails will be sent to the appropriate County Health Officer and/or Environmental Health Department if the county desires this information, and the appropriate Regional Water Board.

B. Record Keeping

1. Individual SSO records shall be maintained by the Enrollee for a minimum of five years from the date of the SSO. This period may be extended when requested by a Regional Water Board Executive Officer.

[2. Omitted.]

3. All records shall be made available for review upon State or Regional Water Board staff's request.

4. All monitoring instruments and devices that are used by the Enrollee to fulfill the prescribed monitoring and reporting program shall be properly maintained and calibrated as necessary to ensure their continued accuracy;

5. The Enrollee shall retain records of all SSOs, such as, but not limited to and when applicable:

   a. Record of Certified report, as submitted to the online SSO database;
   b. All original recordings for continuous monitoring instrumentation;
   c. Service call records and complaint logs of calls received by the Enrollee;
   d. SSO calls;
   e. SSO records;
   f. Steps that have been and will be taken to prevent the SSO from recurring and a schedule to implement those steps.
   g. Work orders, work completed, and any other maintenance records from the previous 5 years which are associated with responses and investigations of system problems related to SSOs;
   h. A list and description of complaints from customers or others from the previous 5 years; and
   i. Documentation of performance and implementation measures for the previous 5 years.

6. If water quality samples are required by an environmental or health regulatory agency or State law, or if voluntary monitoring is conducted by the Enrollee or its agent(s), as a result of any SSO, records of monitoring information shall include:

   a. · The date, exact place, and time of sampling or measurements;
   b. The individual(s) who performed the sampling or measurements;
   c. The date(s) analyses were performed;
   d. The individual(s) who performed the analyses;
   e. The analytical technique or method used; and,
   f. The results of such analyses.

C. Certification

1. All final reports must be certified by an authorized person as required by Provision J of the Order.
2. Registration of authorized individuals, who may certify reports, will be in accordance with the CIWQS' protocols for reporting.

Monitoring and Reporting Program No. 2006-0003 will become effective on the date of adoption by the State Water Board. The notification requirements added by Order No. WO 2008-0002-EXEC will become effective upon issuance by the Executive Director.

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 Board.

Jeanine Townsend
Clerk to the Board

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 information[2] 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_quality/2006/wqo/wqo2006_0003.pdf

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

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 re- designing the CIWQS[3] 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 Program[4] 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.

75/C/

Date

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

[4] Statewide Sanitary Sewer Overflow Reduction Program information is available at: http://www.waterboards.ca.gov/water issues/programs/sso/

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 13350; up to $1,000 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. SUMMARY OF MRP REQUIREMENTS

Table 1 – Spill Categories and Definitions

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

Table 2 – Notification, Reporting, Monitoring, and Record Keeping Requirements

ELEMENT	REQUIREMENT	METHOD

NOTIFICATION **(see section B of MRP)**	ï Within two hours of becoming aware of any Category 1 SSO **greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water**, 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)**	ï 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. ï 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. ï Category 3 SSO: Submit certified report within 30 calendar days of the end of month in which SSO the occurred. ï 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. ï "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. ï Collection System Questionnaire: Update and certify every 12 months.	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee's Legally Responsible Official(s).
WATER QUALITY MONITORING **(see section D of MRP)**	ï Conduct water quality sampling **within 48 hours** after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.	Water quality 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)**	ï SSO event records. ï Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. ï Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters. ï 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.

1. 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, but not later than two (2) hours 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 within a privately owned sewer lateral or from other private sewer asset(s) if the enrollee becomes aware of the PLSD.

C. REPORTING REQUIREMENTS

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

   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 within three (3) business days 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 within 15 calendar days 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 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. **PLSDs**

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 sanitary sewer system assets may be voluntarily 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 CIWQS@waterboards.ca.gov 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. **Draft Category 1 SSOs**: At a minimum, the following mandatory information shall be reported for a draft Category 1 SSO report:

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. **Certified Category 1 SSOs**: 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. **Draft Category 2 SSOs**: At a minimum, the following mandatory information shall be reported for a draft Category 2 SSO report:

1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO.

d. **Certified Category 2 SSOs**: 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. **Certified Category 3 SSOs**: 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 **electronic** 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
Attn: 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. RECORD KEEPING REQUIREMENTS:

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. CERTIFICATION

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 help@ciwqs.waterboards.ca.gov.

5. 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.

CERTIFICAT
ION

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 J nine Townsend
erk to the Board

APPENDIX B:

BEST MANAGEMENT PRACTICES FOR FATS, OILS AND GREASE FACT SHEET

A FACT SHEET FOR

Best Management Practices for Oils, and Grease

Residual fats, oils, and grease (FOG) are by-products that food service establishments must constantly manage. Typically, FOG enter a facility's plumbing system from ware washing, floor cleaning, and equipment sanitation. Sanitary sewer systems are neither designed nor equipped to handle the FOG that accumulates on the interior of the municipal sewer collection system pipes. Over 30% of Wes's 2000 sanitary sewer blockages were the result of pipe buildup from FOG accumulation from residential, institutional and commercial sources. The best way to manage FOG is to keep the material out of the plumbing systems. The following are suggestions for proper FOG management.

Clean-Up

Practice dry cleanup. Remove food waste with "dry" methods such as scraping, wiping, or sweeping before using "wet" methods that use water. Wet methods typically wash the water and waste materials into the drains where it eventually collects on the interior walls of the drainage pipes. Do not pour grease, fats or oils from cooking down the drain and do not use the sinks to dispose of food scraps. Likewise, it is important to educate kitchen staff not to remove drain screens as this may allow paper or plastic cups, straws, and other utensils to enter the plumbing system during clean up. The success of dry clean-up is dependent upon the behavior of the employee and availability of the tools for removal of food waste before washing. To practice clean up:

- Use rubber scrapers to remove fats, oils and grease from cookware, utensils, chafing dishes, and serving ware.
  Use food grade paper to soak up oil and grease under fryer baskets.
  Use paper towels to wipe down work areas. Cloth towels will accumulate grease that will eventually end up in your drains from towel washing/rinsing.

Spill Prevention

Preventing spills reduces the amounts of waste on food preparation and serving areas that will require clean up. A dry workplace is safer for employees in avoiding slip, trips, and falls. For spill prevention:

- Empty containers before they are full to avoid spills.
- Use a cover to transport interceptor contents to rendering barrel.
- Provide employees with the proper tools (ladles, ample containers, etc.) to transport materials without spilling.

Maintenance

Maintenance is key to avoiding FOG blockages. For whatever method or technology is used to collect, filter and store FOG, ensure that equipment is regularly maintained. All staff should be aware of and trained to perform correct cleaning procedures, particularly for under-sink interceptors that are prone to break down due to improper maintenance. A daily and weekly maintenance schedule is highly recommended.

- Contract with a management company to professionally clean large hood filters. Small hoods can be hand-cleaned with spray detergents and wiped down with cloths for cleaning. Hood filters can be effectively cleaned by routinely spraying with hot water with little or no detergents over the mop sink that should be connected to a grease trap. After hot water rinse (separately trapped), filter panels can go into the dishwasher. For hoods to operate properly in the removal of grease-laden vapors, the ventilation system will also need to be balanced with sufficient make-up air.

  Skim/filter fryer grease daily and change oil when necessary. Use a test kit provided by your grocery distributor rather than simply a "guess" to determine when to change oil. This extends the life of both the fryer and the oil. Build-up of carbon deposits on the bottom of the fryer act as an insulator that forces the fryer to heat longer, thus causing the oil to break down sooner.
  Collect fryer oil in an oil rendering tank for disposal or transport it to a bulk oil rendering tank instead of discharging it into a grease interceptor or waste drain.
- Cleaning intervals depend upon the type of food establishment involved. Some facilities require

monthly or once every two months cleaning. Establishments that operate a large number of fryers or handle a large amount of fried foods such as chicken, along with ethnic food establishments may need at least monthly cleanings. Full cleaning of grease traps (removing all liquids and solids and scraping the walls) is a worthwhile investment. Remember, sugars, starches and other organics accumulate from the bottom up. If sediment is allowed to accumulate in the trap, it will need to be pumped more frequently.

- Develop a rotation system if multiple fryers are in use. Designate a single fryer for products that are particularly high in deposits and change that one more often.

Oil & Grease Collection/Recycling & Food Donations

FOG is commodities that if handled properly can be treated as a valuable resource.

- Begin thinking of oil and grease as a valuable commodity. Some rendering companies will offer services free-of-charge and others will give a rebate on the materials collected.

Use 25-gallon rendering barrels with covers for onsite collection of oil and grease other than from fryers. Educate kitchen staff on the importance of keeping outside barrels covered at all times. During storms, uncovered or partially covered barrels allow storm water to enter the barrel resulting in oil running onto the ground and possibly into storm drains, and can "contaminate" an otherwise useful by-product.

- Use a 3-compartment sink for ware washing. Begin with a hot pre-wash, then a scouring sink with detergent, then a rinse sink.
  Make sure all drain screens are installed.
  Prior to washing and rinsing use a hot water ONLY (no detergent) prerinse that is separately trapped to remove non-emulsified oils and greases from ware washing. Wash and rinse steps should also be trapped.
- Empty grill top scrap baskets or scrap boxes and hoods into the rendering barrel.
- Easy does it! Instruct staff to be conservative about their use of fats, oils and grease in food preparation and serving. Ensure that edible food is not flushed down your drains. Edible food waste may be donated to a local food bank. A local garbage feeder who will use food discards for feeding livestock can collect inedible food waste. Food donation is a win-win situation. It helps restaurants reduce disposal costs and it puts the food in the hands of those who can use it.

Grease Traps

- For grease traps to be effective, the units must be properly sized, constructed, and installed in a location to provide an adequate retention time for settling and accumulation of the FOG. If the units are too close to the FOG discharge and do not have enough volume to allow amassing of the FOG, the emulsified oils will pass through the unit without being captured. For information on properly locating, constructing, and sizing grease traps, contact your local county and city representatives and examine EPA guidance documents.
- Ensure all grease-bearing drains discharge to the grease trap. These include mop sinks, woks, wash sinks, prep sinks, utility sinks, pulpers, dishwashers, prerinse sinks, can washes, and floor drains in food preparation areas such as those near a fryer or tilt/steam kettle. No toilet wastes should be plumbed to the grease trap.
- If these suggested best management practices do not adequately reduce FOG levels, the operator may consider installing a second grease trap with flow-through venting. This system should help reduce grease effluent substantially.

Consumer Tip

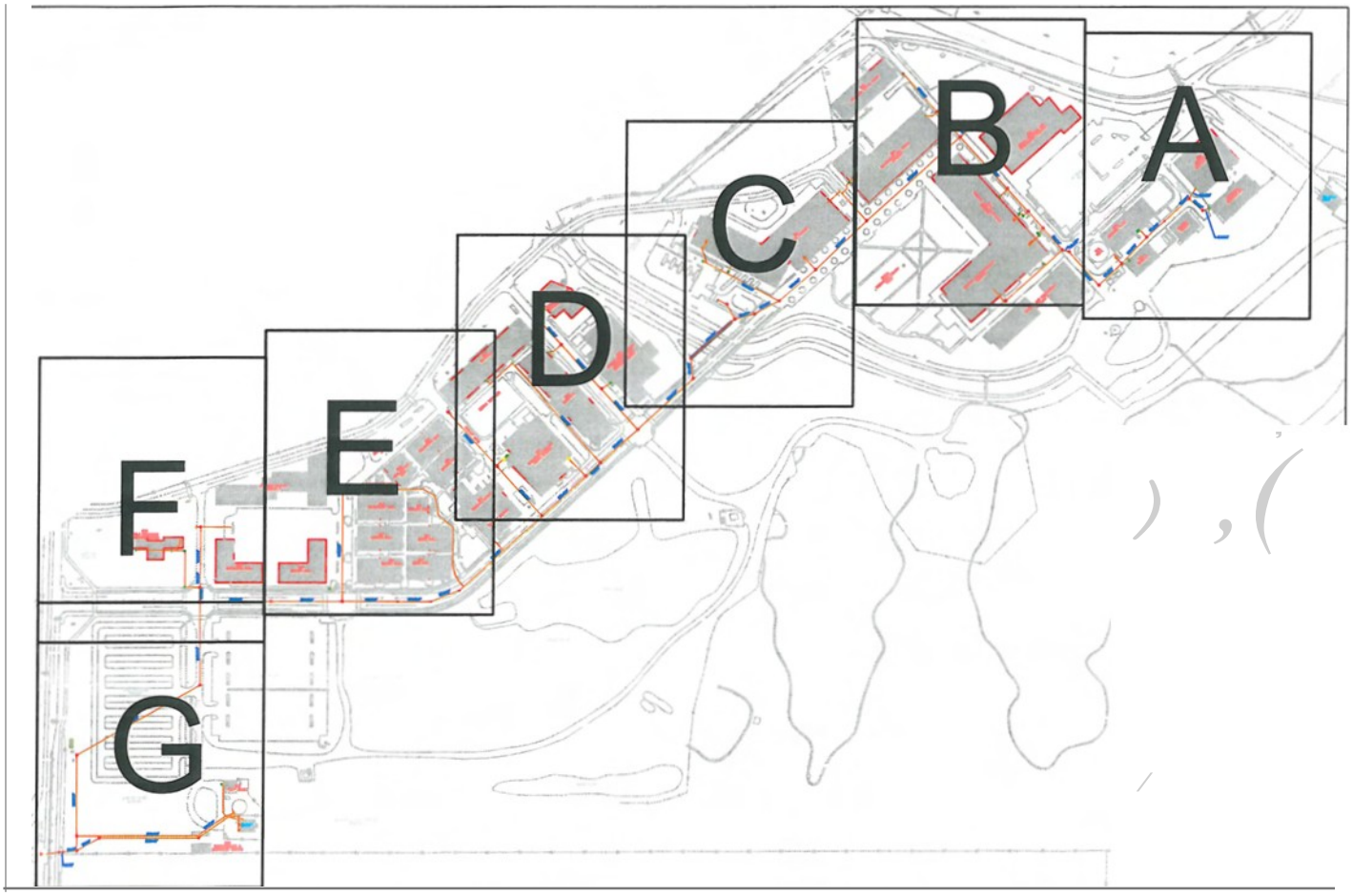
Buyer beware! When choosing a method of managing your oil and grease, ensure that it does what the vendor says it will do. Some technologies or "miracle cures" don't eliminate the problem but result in grease accumulations further down the sewer line. "Out of sight" is not "out of mind." Check the vendor's references.

APPENDIX C:

UC MERCED PROPERTY BOUNDARY AND SANITARY SEWER SYSTEM MAP

UNIVERSITY OF CALIFORNIA
UCMERCED

SANITARY SEWER



UC Merced

UnNttt.tl)' of Celiloml• MtfCtd.Cttlfornlt

Sanitary Sewer Management Plan

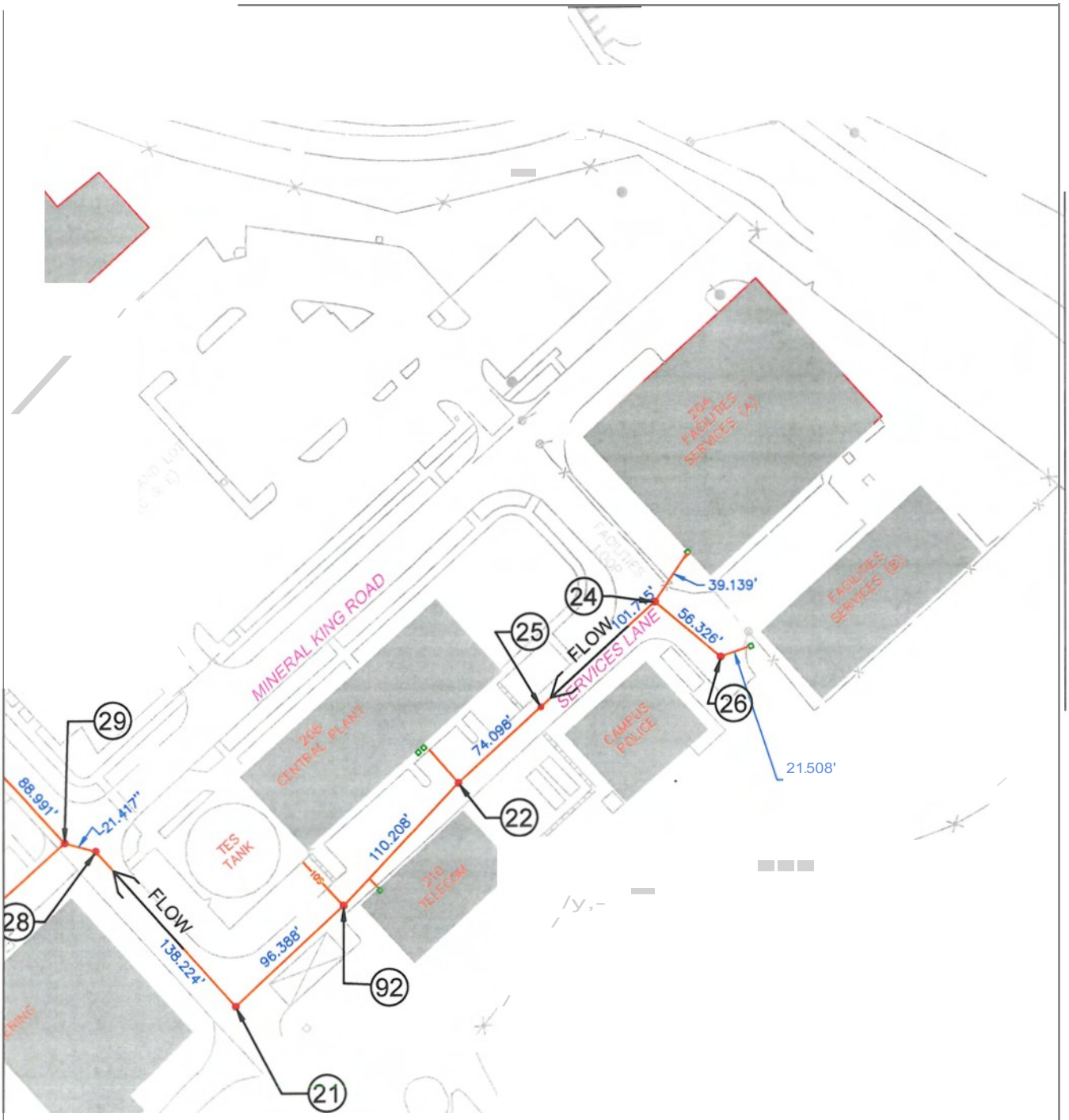
SSMP Map

Key Plan:

Building Number:

Drawn By: S.R.
Revision Date: 7/
Plot Date: 7/25/2
Scale:
Drawing Ref:
Drawing Number:

N



IJCMerced

ojeet •me

Sanitary Sewer Management Plan

SSMP Map

Univtdlty of C9lIIOI'nltl Merc..cl, Cilliforn t.

Key Plan:

PROJECT AREA

Building Number:

Drawn By:

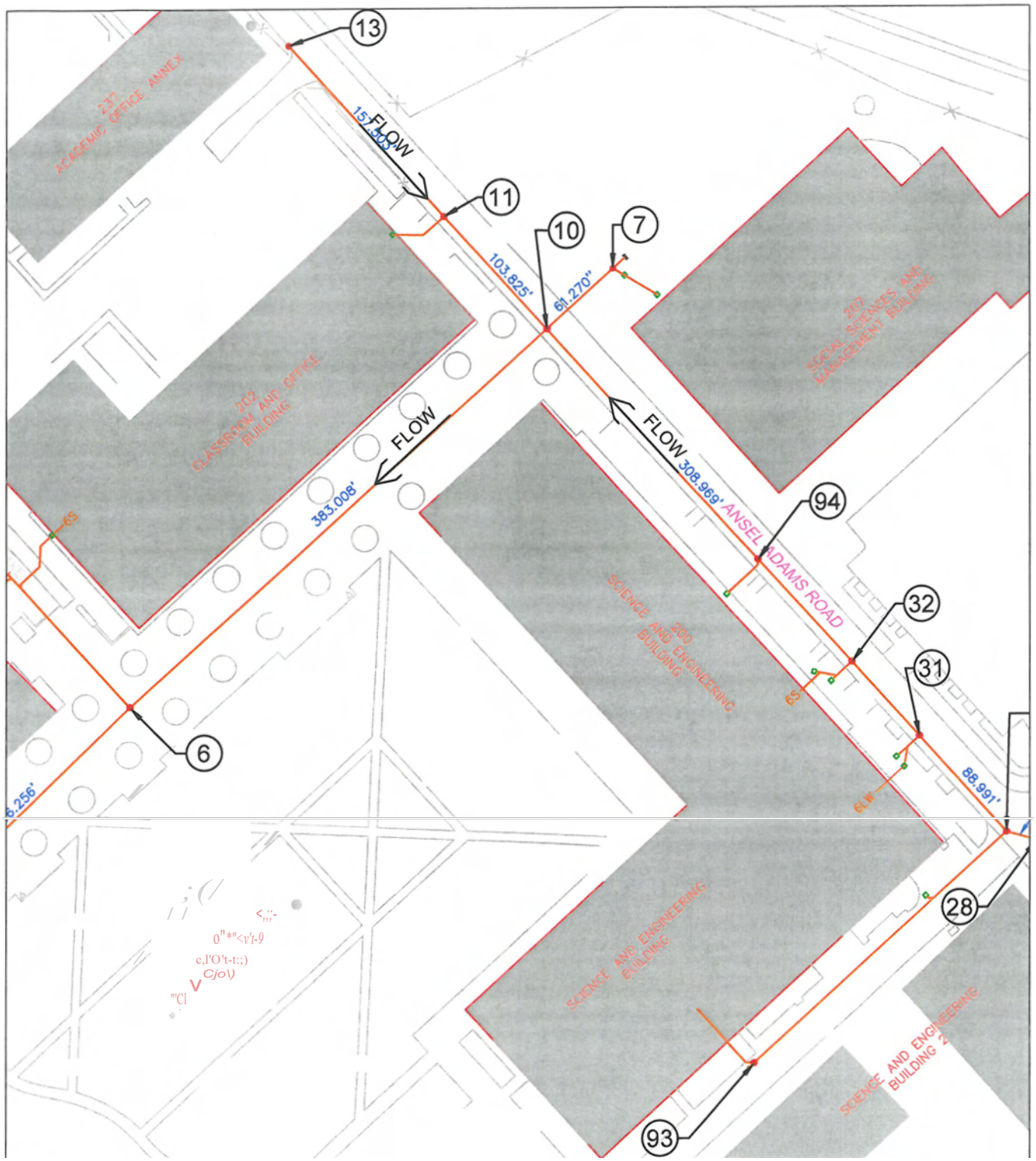
Revision Date:

Plot Date:

Scale:

Drawing Ref:

Drawing Number: A



arced

Sanitary Sewer Management Plan

SSMP Map

Key Plan:

PROJECT AREA

Building Number:

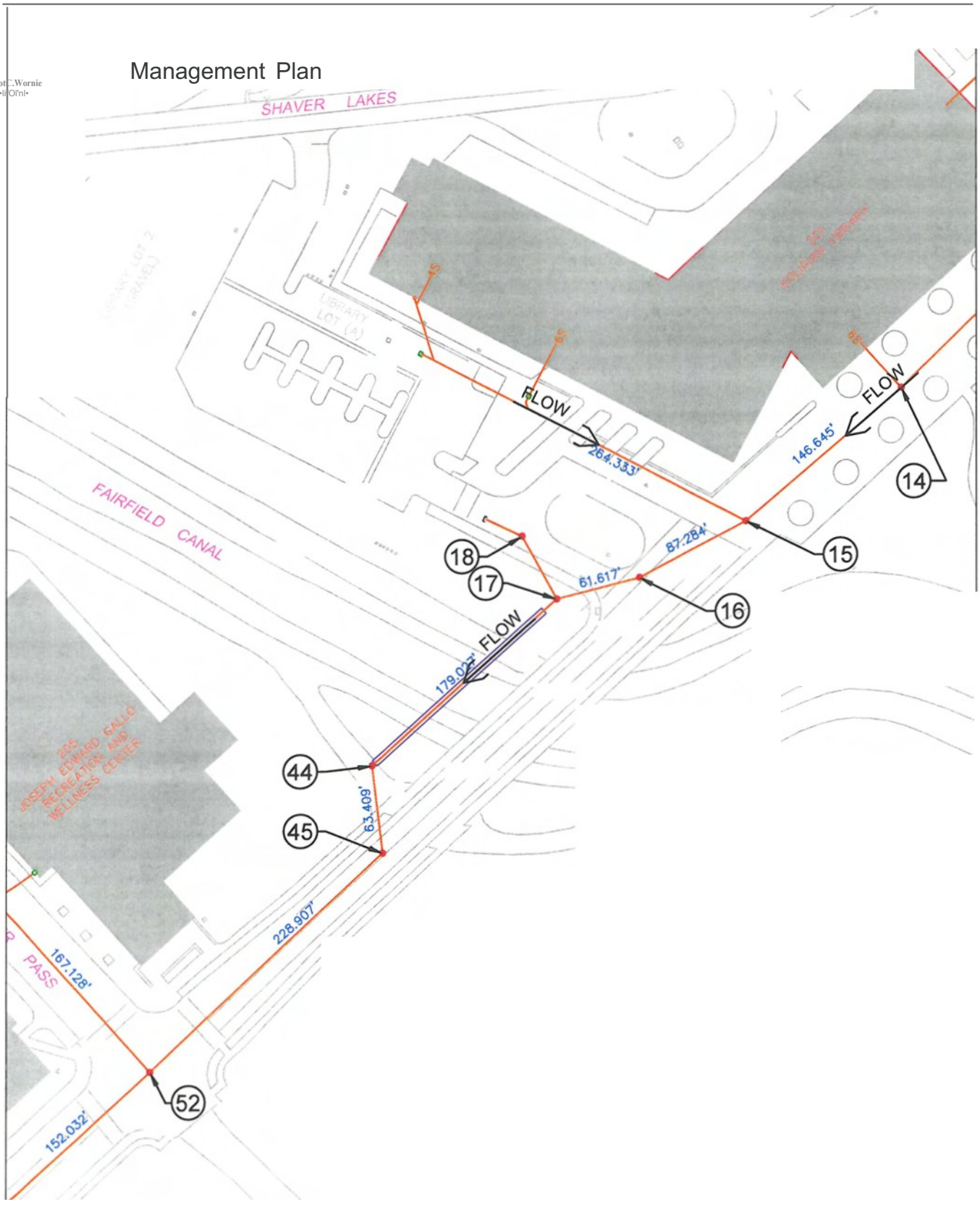
Drawn By: S.R.
Revision Date: 7/25/2012
Plot Date: 7/25/20012
Scale: 1"=100'
Drawing Ref:
Drawing Number:
B

Sanitary Sewer

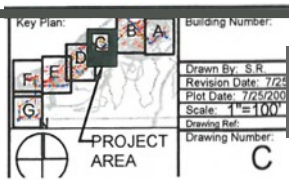
SSMP Map

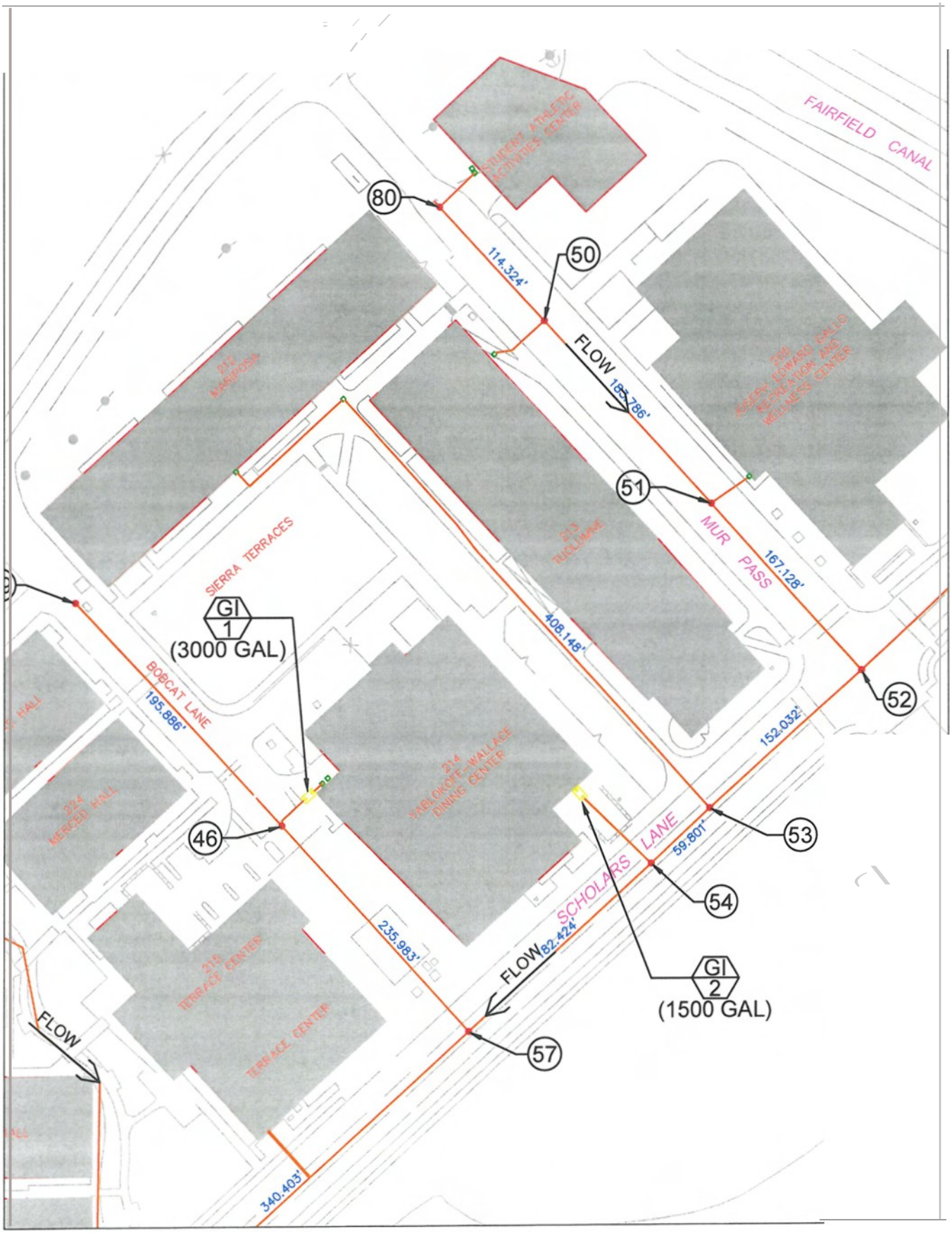
U'Wen.rtyotC.Wornie
Me<ced,C•liOl'nl•

Management Plan



UC Merced





arced

Univtfiltyot C.Wctn.e
Mtr d.Cllt-1ornl•

Sanitary Sewer Management Plan

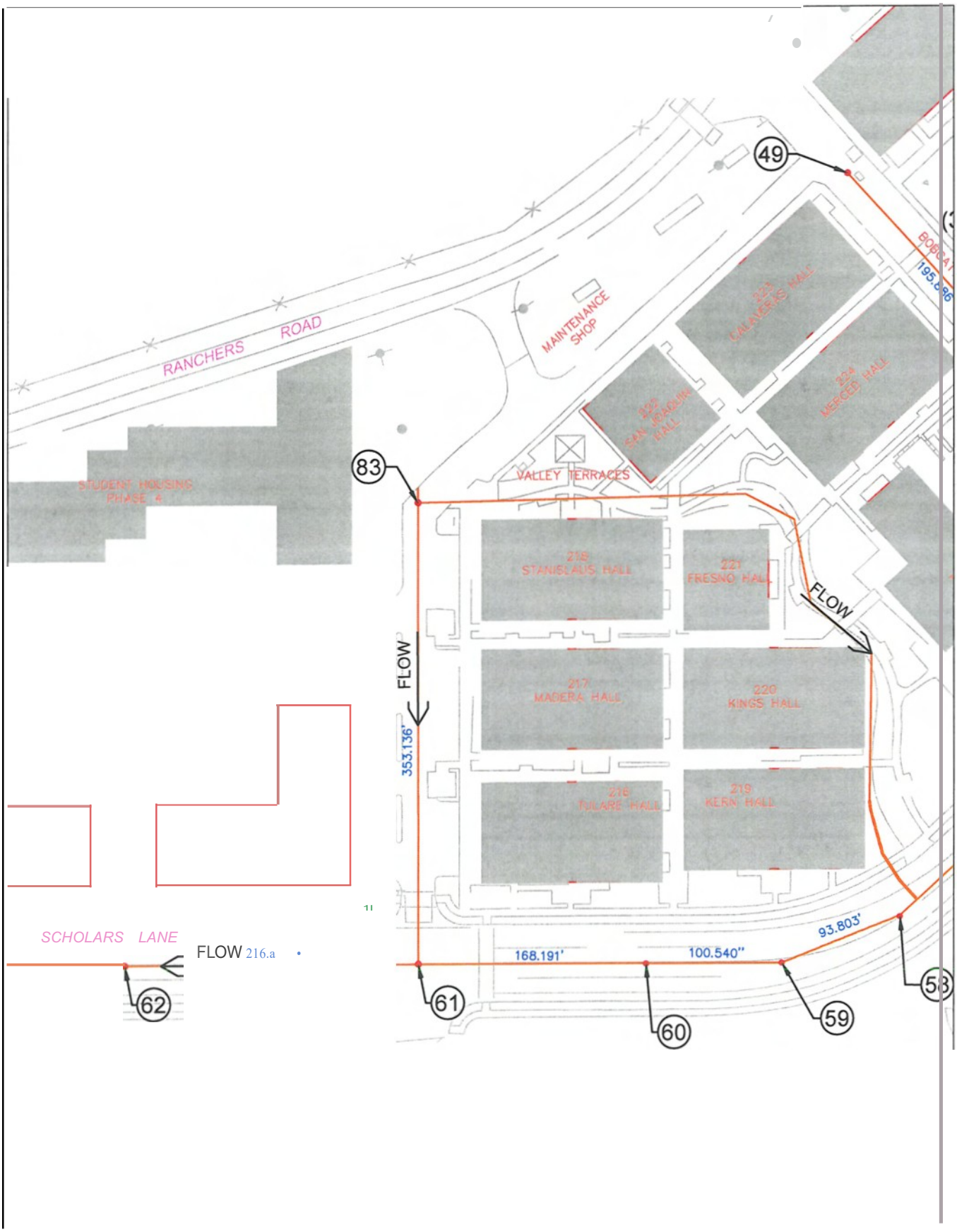
SSMP Map

Key Plan:

PROJECT AREA

Building Number:

Drawn By: S.R.
Revision Date: 7/2
Plot Date: 7/25/20
Scale: 1"=100
Drawing Ref:
Drawing Number:
D



arced

Unlvenlty ol Cll1 fofnil
Merotd, CaMetrl•

Sanitary Sewer Management Plan

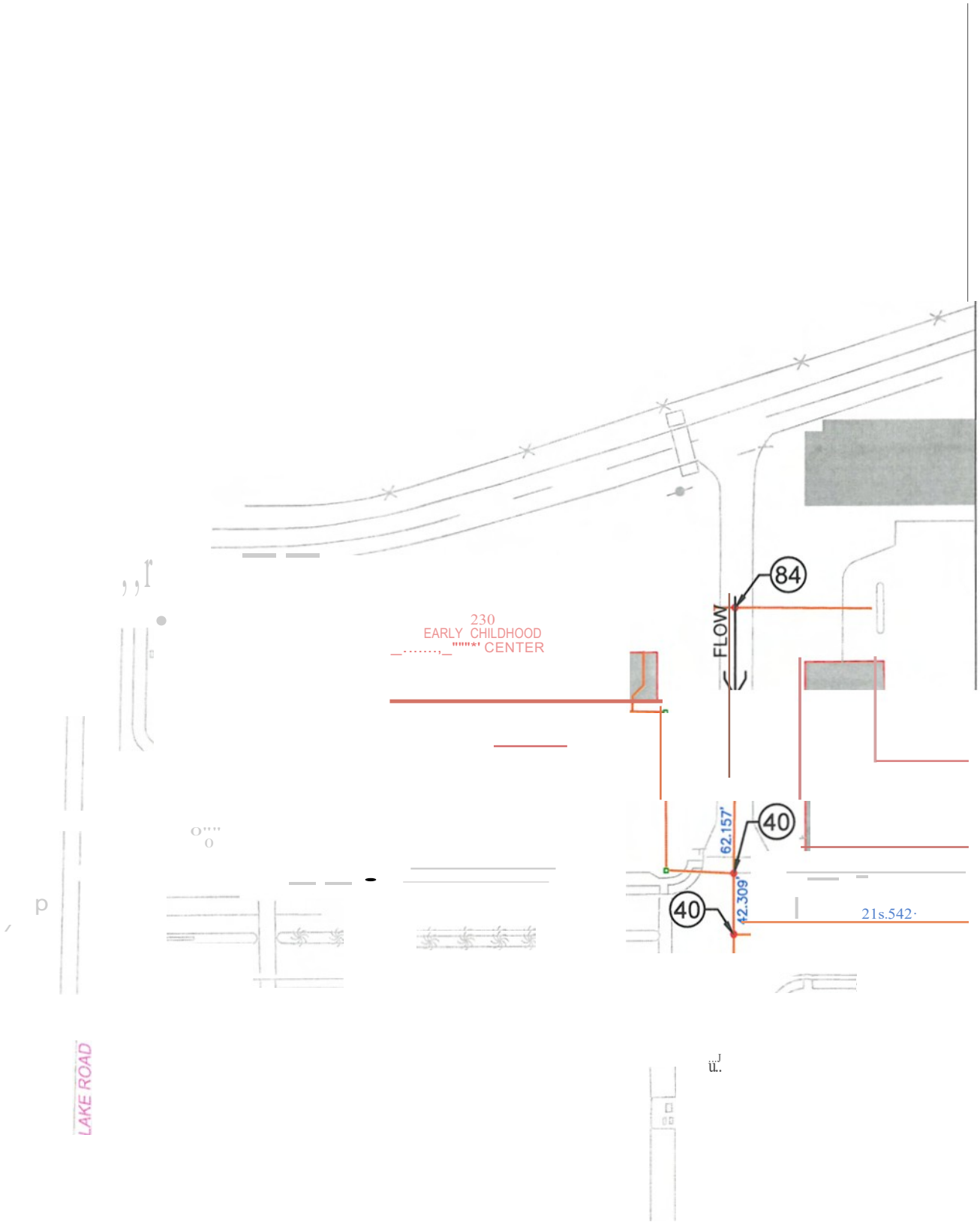
SSMP Map

Key Plan:

PROJECT AREA

Building Number:

Drawn By: S.R.
Revision Date: 7/25/2012
Plot Date: 7/25/20012
Scale: 1"=100'
Drawing Ref:
Drawing Number:
E



arced

UnlvtnityorC.utorrU
M.ud,C1Mornla.

Sanitary Sewer
Management Plan

SSMP Map

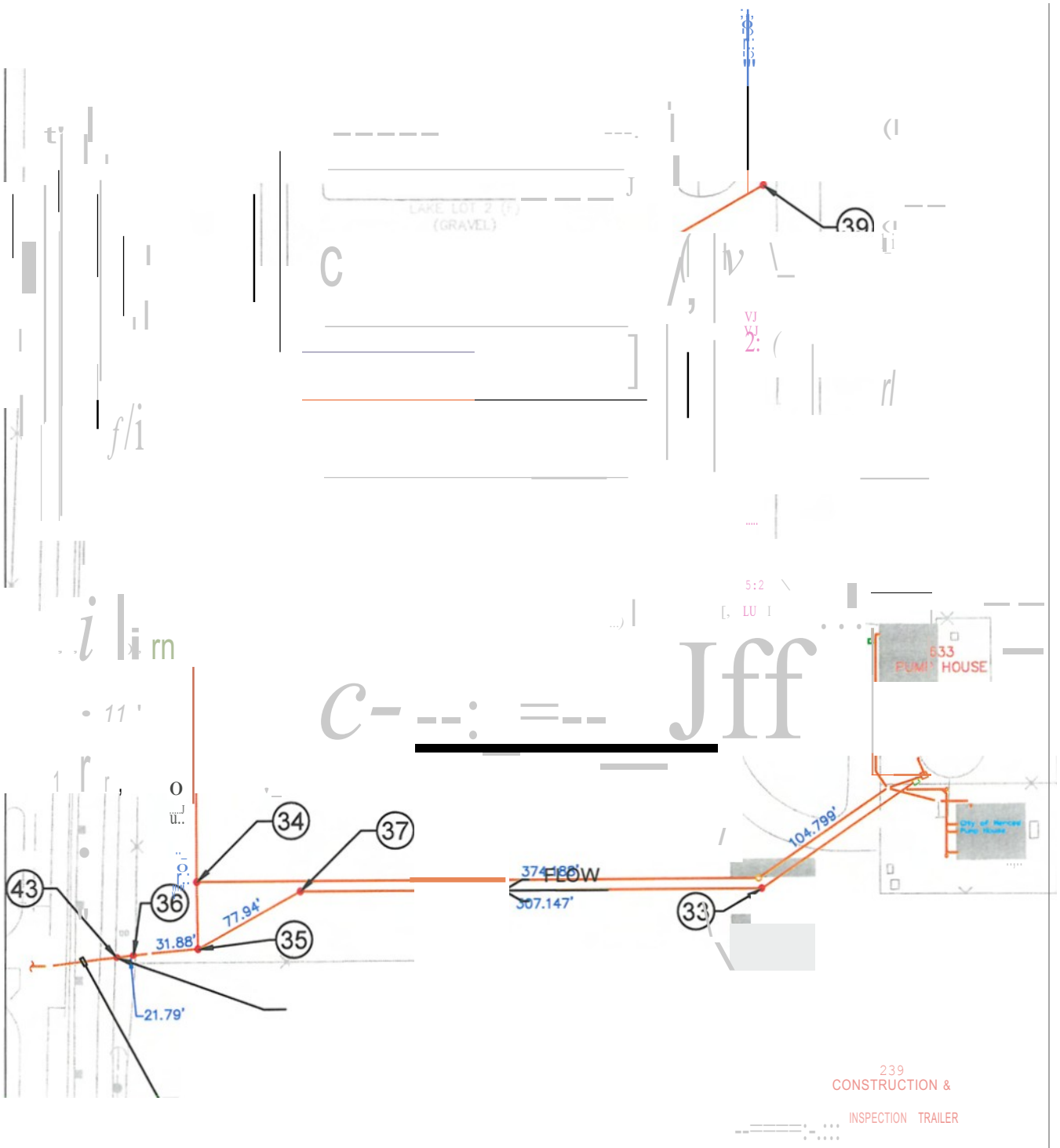
Key Plan:

Building Number:

Drawn By: S.R.
Revision Date: 7/25/2012
Plot Date: 7/25/20012
Scale: 1"=100'
Drawing Ref:

PROJECT AREA

Drawing Number:
F



UCM DISCHARGE POINT
SEWER METER

CITY OF MERCED
COLLECTIONS
SYSTEM

arced unlvm ol C•lifornl• Mtrotd.ClMorni•	Sanitary Sewer Management Plan	SSMP Map	Key Plan: PROJECT AREA Building Number: Drawn By: S.R. Revision Date: 7/25/2012 Plot Date: 7/25/20012 Scale: 1"=100' Drawing Ref: Drawing Number: G

APPENDIX D:

OVERFLOW EMERGENCY RESPONSE PLAN

Emergency Response Plan

Sewage Spill

Response Procedure

for any Release

or Threatened Release to

the UCM Campus Storm

Drains or Waterways

June 2019

EH&S Department
University of California, Merced

Table of Contents

A. INTRODUCTION AND PURPOSE 4
B. SCOPE 4
C. SANITARY SEWER SYSTEM DESCRIPTION 4
D. AVAILABLE RESOURCES 5
On-Campus Personnel 5
Contract Assistance 5
Materials and Supplies 5
Personal Protective Equipment (PPE) 5
E. RESPONSIBILITIES 5
EH&S Responsibilities 5
Facilities Management (Water Operations Department) Responsibilities 6
F. EH&S RESPONSE 6
G. FM (WATER OPERATIONS DEPARTMENT) RESPONSE 6
I. SEWAGE SPILL RESPONSE PROCEDURES 7
Health and Safety Considerations for Responders 7
Spill Response 7
Notification of Campus Departments (EH&S and Facilities Management) 7
Releases with hazardous chemical from laboratories 7
Agency reporting 7
Waterways Posting 7
Wet Weather Release 8
Pumping Procedure 8
Dry Weather Release 9
J. NOTIFICATION AND REPORTING 11
Reporting procedures for campus employees & general public 11
Sewage spill reporting procedures for EH&S and Facilities Management 11
For spills that equal or exceed 1,000 gallons AND/OR discharge to canal, lake or the storm drain system 11
For spills confirmed to be < 1,000 gallons that do NOT discharge to canal, lake or the storm drain system 12
Online and Written Reports, Summary 13

K. POSTING PROCEDURES 13
Posting Procedures for Sewage Spills 13
Authority to post, authority to remove posting 13
When to post 13
Public Health Warning Statement 14
Availability of Signs 14
Posting in the City of Merced 14
Where and how to post 14
When to remove posting 14

A. INTRODUCTION AND PURPOSE

Sanitary sewers on the University of California, Merced (UCM) campus and in the surrounding City of Merced may potentially leak or overflow due to breaks or blockages in the sewerage. These potential leaks or overflows may result in discharges of grey water or black water sewage into campus buildings or, outside campus buildings, into the environment including the potential for sewage to enter storm drains, lakes, ponds or irrigation canals. In order to protect public health and the environment from untreated sewage, an immediate and coordinated response from UCM will be provided to halt the source of the leak or overflow and to eliminate the downstream migration of sewage.

This response procedure was developed to provide instruction for campus departmental personnel responsible for responding to sewage spills or overflows in order to maximize the effectiveness of the response including implementing control and cleanup of sanitary sewer discharges.

An electronic copy of this procedure is available on the Environmental Health & Safety (EH&S) website at: http://ehs.ucmerced.edu.

B. SCOPE

The scope of this procedure includes UCM coordinated response to sanitary sewer leaks, spills or overflows that have been, or threaten to be, released into the environment including: storm drains or bodies of water on campus. This procedure does not apply to sewage spills that are contained within buildings or in areas where there is no threat of release to local waterways.

This procedure includes instructions for sewage spill or overflow clean-up, posting public health warnings and regulatory reporting.

C. SANITARY SEWER SYSTEM DESCRIPTION

The UCM sanitary sewerage is comprised of a network of various sized sewer pipes, sumps, lift pumps and access manholes. The UCM campus is connected to the City of Merced sanitary sewer wastewater collection and treatment system by way of a sanitary sewer line in Bellevue Road that connects to the City of Merced's sewer system at an existing 27-inch line that runs north and south along G Street and subsequently connects to a series of larger diameter sewer lines that run to the City of Merced Waste Water Treatment Plant (WWTP).

The UCM connects to the G Street sewer line via a trunk sewer that runs west from the UCM along Bellevue Road; this trunk sewer line is 27" in diameter. Wastewater generated on the UCM campus is transported via sewer lines to the City of Merced WWTP for treatment prior to discharge. The WWTP currently has a secondary treatment capacity of 12 million gallons per day (mgd).
https://www.cityofmerced.org/depts/pw/wastewater_system/wwtp/default.asp

D. AVAILABLE RESOURCES

Response to sewage spills on the UCM campus is coordinated by both the EH&S and FM Departments. Both departments have management and staff capable of coordinating rapid response to SSOs. UCM also utilizes third-party contractors available if additional assistance is needed, including vacuum trucks for large scale cleanup if required.

The following list identifies department phone numbers both during the work day and after hours and on weekends should an emergency event occur:

On-Campus Personnel

- Environmental Health & Safety (EH&S):
  - (209) 228-4234 (business hours)
  - (209) 201-9820 (after hours)
- University of California, Police Department (UCPD):
  - (209) 228-8273 (business hours)
  - (209) 228-2677 (CAT COPS) (24 hours)
- Facilities Management
  - (209) 228-2986 (FM Help Desk - business hours)
  - (209) 761-9432 (after-hours)

Contract Assistance

- Applegate Teeples Plumbing, Sewer and Drain
  - (209) 581-0480 (office and emergency after-hours)

Materials and Supplies

- Sorbent materials, dike materials and repair materials are available from the FM Department
- Pumps and excavation equipment and tools are available from the FM Department as well

Personal Protective Equipment (PPE)

- Information regarding controls, work practices and personal protective equipment (PPE) necessary for response to a sewage spill, can be found in an EH&S Fact Sheet, *Handling Sewage and Fecal Matter Safely* (Attachment 1).

E. Roles and Responsibilities

Sewage spills are detected and reported through a variety of channels. Once a sanitary sewage spill or overflow is detected, swift action is required to minimize exposure to human health and the environment. Swift action is also required to reduce the downstream migration of a sewage spill. The following list delineates departmental roles and responsibilities for sewage spill response and cleanup:

EH&S Roles and Responsibilities

- Assist FM with mobilizing resources to stop the source of the spill, minimize migration of sewage and prevent sewage from entering a surface water body if at all possible

- Report the spill/overflow to the State of CA Water Resources Control Board (WRCB) through the CIWQS Database or by telephone to the
- Submit a follow up, written report to RWQCB and SWQCB as necessary
- Provide environmental compliance support and management for any spill or overflow event

Facilities Management (FM) Roles and Responsibilities

- Coordinate with the Director whenever a sewage spill overflow is reported
- Coordinate clean up and restoration activities to any spill or overflow event involving sanitary sewage including coordination and procurement of outside resources and support as needed
- Mobilize resources to stop the source of the sanitary sewer leakage or overflow and provide berms to retain sanitary sewage from entering storm drains or water bodies as necessary

F. EH&S RESPONSE

Immediately following a report or discovery of a sewage spill:

1. EH&S shall contact Facilities Management to request personnel, supplies and equipment to respond to and eliminate the discharge as well as to build a berm (if necessary) to contain and collect fugitive sewage.
2. EH&S shall visit the spill site to evaluate the situation including the potential for sanitary sewage to migrate to surface waters at the UCM. EH&S has access to UCM SS system sewerage maps and communication media (cellular phones) to help facilitate and coordinate spill control and cleanup **(see Attachment 2)**.
3. EH&S shall assess the spill or overflow and shall work with FM to expeditiously halt the leak/overflow and begin the containment and cleanup of the sewage.
4. EH&S shall serve to notify and report SS spills or overflows to the contact appropriate agencies. After-hours, complete reporting as described in **Section J: Notification and Reporting Procedures.**

G. FM RESPONSE

Immediately following a report or discovery of a sewage spill:

1. FM shall contact EH&S or UCPD after hours at (510) 642-6760 to contact EH&S and begin the process of responding to a SS spill or overflow event.
2. FM shall respond to the spill or overflow site to stop the source of the spill or overflow and work to contain the spill. FM may contract with Applegate Teeples to identify a blockage in the sewerage and clean and disinfect any pavement or other areas impacted by the SS spill or overflow event.

3. FM shall work singly or with the 3rd party contractor to correct the identified source of spill or overflow plumbing problem.
4. FM shall complete the spill or overflow cleanup and report the volume estimate for fugitive sewage to EH&S as well as notifying EH&S of any migration of sewage to stormwater drains or surface water bodies.

H. SEWAGE SPILL RESPONSE CONSIDERATIONS

These procedural considerations shall be taken into account and implemented by FM, EH&S UCM personnel upon discovery of a sewage spill.

Health and Safety Considerations for Responders

FM employees receive training in spill response and have personnel and equipment in place to address spills or overflows of sanitary sewage. All personnel responding to sewage spills will be trained in the implementation of controls (engineering, administrative and work practices) along with the proper use of personal protective equipment (PPE).

Spill Response

Notification of Campus Departments (EH&S and Facilities Management)
Immediately upon the discovery of a sewage spill, personnel should contact the following UCM Departments:

- Environmental Health & Safety (EH&S):
  - (209) 228-4234 (business hours)
  - (209) 201-9820 (after hours)
- University of California, Police Department (UCPD):
  - (209) 228-8273 (business hours)
  - (209) 228-2677 (CAT COPS) (24 hours)
- Facilities Management
  - (209) 228-2986 (FM Help Desk - business hours)
  - (209) 761-9432 (after-hours)

Agency reporting
The UCM EH&S Director or delegate shall notify the CA SWRCB (CIWQS online database) or the CA Governor's Office of Emergency Services (OES) at 800-852-7550 as appropriate agencies. For details, see **Section J: Notification and Reporting Procedures.**

Waterways Posting

In the event of a sanitary sewer overflow that reaches a water body, FM shall post warning signs as appropriate and as soon as possible should the sewage spill impact surface water bodies or storm sewerage. For details, see **Section K: Posting Procedures.**

Wet Weather Release

FIRST PRIORITY: Contain the spill and stop the source of the leak.

Containing the spill and repairing the problem have equal priority. If the volume of flow in the line, storm drain, or body of water is so great as to be uncontainable, then all attention will be focused upon repairing the problem.

The initial call to Facilities Management (Water Operations Department) will mobilize personnel that are equipped to stop sanitary sewer overflows. Once on site, if they determine that further assistance is necessary in order to stop the spill, a contractor (currently Applegate Teeples) should be contacted immediately. While waiting for the contractor to arrive, efforts should be aimed at containing the spill and, if possible, pumping the sewage to another nearby sanitary sewer. If possible, water supply to buildings discharging sewage should be shut off to reduce discharge (this may not be practical for some campus buildings but may be feasible).

If the spill has entered a storm drain but has not yet migrated to the canals, the storm drain should be sandbagged down gradient from the spill and the spill diverted to the nearest sanitary sewer.

If the sewage spill has entered a waterway, the contaminated water must be pumped out to the sanitary sewer or to storage tanks. **Note: Prior approval from the City of Merced wastewater treatment plant (WWTP) must be received if creek water is also pumped into the sanitary sewer!**

In addition, while waiting for the source of the leak to be repaired, crews should attempt to pump sewage from the blockage into another nearby sanitary sewer. This will minimize the extent of downstream cleanup needed.

Pumping Procedure

A. Best method: Diverting upstream canal water around the spill.

   This method can be used if the response time is quick enough to capture the leading edge of the spill. Otherwise, go to method B.

   Dams mad out of sandbags should be placed at key locations to isolate the spill.

   Step 1: Place a dam immediately downstream of the sewage. Using a trash pump, begin pumping the sewage to an adjacent sanitary sewer.

   Step 2: Place a dam immediately upstream of the affected are, and using another trash pump, pump creek water to below the dam placed in Step 1.

B. Diverting the sewage and canal water.

Most often, spill response is not quick enough to capture the leading edge of a spill and diverting the canal is impractical due to the long distances. In this case, a downstream dam should be set up and the creek pumped to a nearby sanitary sewer. This will minimize the amount of sewage entering the City of Merced and Lake Yosemite.

Once the dams are in place, trash pumps should be used to pump the contaminated water to the sanitary sewer. Pumping should continue until clean water is flowing. If a layer of solids has been deposited on the canal bed, it will need to be flushed with water. The wash water should also be pumped to the sanitary sewer.

If the volume of flow in the line, storm drain, or canal is so great as to be uncontainable, then all attention will be focused upon repairing the problem.

SECOND PRIORITY: Clean the storm drains and canal

After the leak has been stopped, the contaminated storm drains and the area of discharge into the canal will be cleaned of all solids by Facilities Management (Water Operations Department) or an outside contractor. The drains and creek should be flushed with water from a fire hydrant or tanker truck to the downstream dam and wash water pumped to the sanitary sewer. Cleanup should continue as long as practical – care should be taken to avoid damaging natural resources.

Techniques for creek cleaning may include bypassing, damming or diking, flushing with potable water, the use of pumps / vacuum trucks, pressure washing, and discharging to intact sewer lines. EH&S will coordinate the cleanup with guidance from the Regional Water Quality Control Board and the Department of Fish and Game, as necessary.

THIRD PRIORITY: Sampling

Facilities Management (Water Operations Department) will take confirmatory samples for fecal and total coliform analyses in the dammed area after cleaning and a "background" sample will be taken upstream of the discharge. Coordination between EH&S and the Regional Water Quality Control Board to discuss the sample results will be made prior to disassembly of the sandbag dams.

Dry Weather Release

FIRST PRIORITY: Contain the spill

The first priority of the responding staff will be to contain the spill.

If the spill has entered a storm drain but has not yet migrated to the canal, the storm drain should be sandbagged down gradient from the spill and the spill diverted to the nearest sanitary sewer.

If the sewage spill has entered the canal, the contaminated water must be pumped out to the sanitary sewer or to storage tanks. **Note: Prior approval from the City of Merced wastewater treatment plan (WWTP) must be received if creek water is also pumped into the sanitary sewer!**

In addition, while waiting for the source of the leak to be repaired, crews should attempt to pump sewage from the blockage into another nearby sanitary sewer. This will minimize the extent of downstream cleanup needed.

Pumping Procedure

A. Best method: Diverting upstream canal water around the spill.

   This method can be used if the response time is quick enough to capture the leading edge of the spill. Otherwise, go to method B.

   Dams mad out of sandbags should be placed at key locations to isolate the spill.

   Step 1: Place a dam immediately downstream of the sewage. Using a trash pump, begin pumping the sewage to an adjacent sanitary sewer.

   Step 2: Place a dam immediately upstream of the affected are, and using another trash pump, pump creek water to below the dam placed in Step 1.

B. Diverting the sewage and canal water.

   Most often, spill response is not quick enough to capture the leading edge of a spill and diverting the canal is impractical due to the long distances. In this case, a downstream dam should be set up and the creek pumped to a nearby sanitary sewer. This will minimize the amount of sewage entering the City of Merced and Lake Yosemite.

   Once the dams are in place, trash pumps should be used to pump the contaminated water to the sanitary sewer. Pumping should continue until clean water is flowing. If a layer of solids has been deposited on the canal bed, it will need to be flushed with water. The wash water should also be pumped to the sanitary sewer.

SECOND PRIORITY: Clean the storm drains and canal

After the leak has been stopped, the contaminated storm drains and the area of discharge into the canal will be cleaned of all solids by Facilities Management (Water Operations Department) or an outside contractor. The drains and creek should be flushed with water from a fire hydrant or tanker truck to the downstream dam and wash water pumped to the sanitary sewer. Cleanup should continue as long as practical – care should be taken to avoid damaging natural resources.

Techniques for creek cleaning may include bypassing, damming or diking, flushing with potable water, the use of pumps / vacuum trucks, pressure washing, and discharging to intact sewer lines. EH&S will coordinate the cleanup with guidance from the Regional Water Quality Control Board and the Department of Fish and Game, as necessary.

THIRD PRIORITY: Sampling

Facilities Management (Water Operations Department) or an outside contractor will take confirmatory samples for fecal and total coliform analyses in the dammed area after cleaning and a “background” sample will be taken upstream of the discharge. Coordination between EH&S and the Regional Water

Quality Control Board to discuss the sample results will be made prior to disassembly of the sandbag dams.

I. NOTIFICATION AND REPORTING

Federal and state laws and regulations require that sewage spills to waterways, including storm drains and canals, be reported to local or state agencies. Timely reporting is required to allow agencies to respond quickly to spills to protect public health and the environment through cleanup and posting of warning signs. The following sewage spill reporting procedures apply to spills from campus and leading to a body of water (canals, lakes, and ponds). Procedures are taken from: http://www.waterboards.ca.gov/rwqcb5/water_issues/waste_to_surface_water/spill_13267_ltr_aug2008.pdf

Reporting procedures for campus employees & general public

Report sewage or suspect sewage spills to EH&S immediately

Any sewage spill that enters or threatens to enter a storm drain or canal needs to be reported to EH&**S** ***immediately***. Sewage spills equal to or greater than 1,000 gallons also must be reported ***immediately***. EH&S will notify the appropriate agencies.

Call EH&S: (209) 228-4234 during business hours or (209) 201-9820 after hours

Call UCPD: 9-911 or (209) 228-2677 (or CAT COPS) after hours
(UCPD will contact the EH&S Director)

Sewage spill reporting procedures for EH&S and Facilities Management

State regulations require reporting sewage spills to a variety of agencies, including the California Emergency Management Agency (Cal EMA), the Regional Water Quality Control Board and the State Water Quality Control Board. In addition, the Merced County Health Department should be called so that they can initiate or help coordinate spill cleanup and posting in the City of Merced.

For spills that equal or exceed 1,000 gallons AND/OR discharge to canal, lake or the storm drain system

Notify each of the following as soon as possible but ***not later than 2 hours*** after becoming aware of the sewage spill:

California Emergency Management Agency (Cal EMA) State Warning Center (formerly Office of Emergency Services, OES): 1-800-852-7550 – obtain a control number for tracking

Merced County Environmental Health Department: 1-800-734-7391

Regional Water Quality Control Board (RWQCB) – Fresno (RB5F): Phone the RWQCB at (559) 445-5116. If the telephone report is made to the RWQCB after normal business hours, leave a message regarding the spill.

Notify each of the following as soon as possible but ***not later than 24 hours*** after becoming aware of the sewage spill:

Regional Water Quality Control Board (RWQCB): Provide certification that all agencies were contacted (including Cal EMA and Merced County Environmental Health Department) by telephone (916) 464-3291 and be prepared to provide, at minimum, the following details:

- *Specific location of the spill*
- *OES Control Number*
- *Whether or not the spill entered a surface water*
- *Estimated volume in gallons (total, amount recovered, and amount entering a surface water)*
- *Time the spill was discovered*
- *Corrective action taken*
- *Whether or not samples were taken; and*
- *Which local health department was contacted?*

Within ***5 business days,*** submit a report to the Regional Water Quality Board.

CA State Water Resources Control Board (SWRCB): http://ciwqs.waterboards.ca.gov

If spill response requires pumping sewage and canal water mix to the sanitary sewer, obtain permission from the City of Merced Wastewater and Treatment Plant prior to pumping:

Call the **City of Merced Waste Water and Treatment Plant:** (209) 385-6892

Fish kill: In case of a fish kill (regardless of size of spill):

Call: **Cal OES:** 1-800-852-7550

CA Department of Fish and Game (DFG) – Central Region: (559) 243-4005 ext. 151

Hazardous Substance: If the sewage spill also involves a hazardous substance release:

Call: **Merced County Environmental Health Department:** 1-800-734-7391

For spills confirmed to be < 1,000 gallons and do NOT discharge to canal, lake or the storm drain system

Within ***30 calendar days after the end of the calendar month in which the spill occurred,*** submit a final report:

State Water Resources Control Board (SWRCB): Submit online final report at https://ciwqs.waterboards.ca.gov

If spill response requires pumping sewage and surface water mixtures to the sanitary sewer, obtain permission from the City of Merced Wastewater and Treatment Plant prior to pumping:

Call the **City of Merced Waste Water and Treatment Plant:** (209) 385-6892

Fish kill: In case of a fish kill (regardless of size of spill):

Call: **CA OES:** 1-800-852-7550

Department of Fish and Game (DFG) – Central Region: (559) 243-4005 ext. 151

Hazardous Substances: If the spill also involves a hazardous substance:

Call: **Merced County Environmental Health Department:** 1-800-734-7391

Online and Written Reports, Summary

The following written reports should be completed:

- For all sewage spills to storm drains or waterways: <form on software tracking program>
- For sewage spills ≥ 1,000 gallons OR entering the storm drain system or waterways: an initial online follow-up report is required **within three business days** to the State Water Quality Control Board (SWQCB). A final report must be submitted online to the SWQCB within **15 calendar days after response activities have been completed.**
- For sewage spills ≤ 1,000 gallons AND which do NOT enter the storm drain system or the canal / lake: a final online follow-up report is required **within 30 calendar days after the end of the calendar month in which the spill occurred** to the SWQCB.
- All online reporting for the SWQCB shall be done on the following site: https://ciwqs.waterboards.ca.gov.

J. POSTING PROCEDURES

CA environmental water quality regulations require that sewage spills to waterways, including storm drains, irrigation canals, lakes or ponds shall be reported to regional or state agencies. Timely reporting is required and delineated above. To protect human health and the environment, the following public health warning for sewage spills to waterbodies ("posting procedures") apply to spills from UCM sanitary sewerage that reach campus water bodies or storm drains leading to water bodies.

Posting Procedures for Sewage Spills

Authority to post, authority to remove posting

The authority to post and remove public health posting signs at the University of California, Merced has been assigned to the EH&S Director or delegate. In general, all posting is to be performed under the direction of EH&S.

When to post

Warning signs should be posted whenever a sewage spill is detected or suspected* to have entered any waterways.

* Note: Sewage spills are discovered in a number of ways. FM may become aware of discharges to waterways when investigating complaints of sewage or sewer odors in or near buildings.

Public Health Warning Statement

Following is the public health warning statement that appears on signs posted along waterways on campus:

WARNING
RAW SEWAGE IN WATER

AVOID CONTACT WITH WATER

This section of water contains untreated Sewage as a result of a sewer line failure. Do not enter this water body unless authorized. Keep children and pets away from this waterbody. The UCM is currently working to disinfect this water body.

For more information, contact
Environmental Health & Safety
(209) 228-4234

Availability of Signs

Public health warning statements will be made available when a sewer overflow occurs. All Facilities Management trailers, trucks, shops have equipment (including tape, caution signs, etc.) to blockade and prevent people from accessing the area.

Posting in the City of Merced

In the event that sewage has been discharged into the City of Merced, the Merced County Health Department must be contacted to coordinate posting in the City of Merced at open stretches of water. Generally, posting in the City of Merced is the responsibility of the Merced County Health Department, but they may request assistance, in which UCM signs can be posted in locations that they recommend.

Where and how to post

Signs should be placed in conspicuous areas on both sides of the canal, in general approximately every 100 feet, with an emphasis on areas where people are expected to access the waterway. Signs should be placed from the point of entry of sewage into the waterway to the point of exit of the waterway. If necessary, caution tape should be strung between signs, especially in areas where the chance of incidental contact with the waterway is greatest.

When to remove posting

Public health warning signs can be removed upon the approval of the EH&S Director or delegated EH&S staff member. Following are the criteria for removing posting:

Public Health posting following sewage spills can be removed after the spill has resolved (by active clean up, dissipation over time or flushing by storm water) based on the following observations:

1. Bacteriological levels have dropped to below the Regional Water Quality Control Board levels (to be coordinated with the Regional Water Quality Control Board).
2. A significant rainfall event (> 0.25 inches in 24 hours) has flushed the canal with storm water adequately to remove all deposited sewage. No confirmatory sampling is required in this event.