



# **UNIVERSITY VILLAGE ALBANY COLLECTION SYSTEM**

## **Sewer System Management Plan**

**August 2023**

**WDID # 2SSO18101**

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## 1.0 INTRODUCTION

### 1.1 Regulatory Background

The Waste Discharge Requirements (WDR) Order No. 2022-0103-DWQ (“General Order No. 2022-0103-DWQ”), adopted by the State Water Resources Control Board (SWRCB) on December 6, 2022, regulates sanitary sewer systems conveying sewage. As a public entity that owns and/or operates one or more sanitary sewer systems greater than one mile in length (each individual sanitary sewer system), University of California, Berkeley (UC Berkeley) maintains regulatory coverage under the General Order No. 2022-0103-DWQ for the University Village Albany (UVA) Collection System (CS) as an Enrollee.

Enrollees must develop and implement a Sewer System Management Plan (SSMP). The UVA CS is currently required to meet the SSMP requirements outlined in the previous SWRCB order, WDR Order No. 2006-0003-DWQ (“General Order No. 2006-0003-DWQ”). The required SSMP update due date for the UVA CS is May 2, 2026, at which time the SSMP shall be updated to meet requirements outlined in the General Order No. 2022-0103-DWQ.

### 1.2 Purpose and Goals of the SSMP

This document was developed to comply with WDR Order No. 2006-0003-DWQ, which sets specific wastewater collection system requirements for all Enrollees. The General Order No. 2006-0003-DWQ requires Enrollees to prepare and implement a SSMP to:

- Provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system to provide reliable service in the future;
- Minimize infiltration/inflow (I/I);
- Reduce and prevent sanitary sewer overflows (SSOs)<sup>1</sup>;
- Help mitigate any SSOs that do occur.

Many spills can be prevented with adequate and appropriate facilities, source control measures, and operation and maintenance of the sanitary sewer system.

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<sup>1</sup> The General Order No. 2022-0103-DWQ required preparation of the SERP by June 5, 2023 (plan formerly referred to as the Overflow Emergency Response Plan). As such, this SSMP dated June 2023 includes the SERP as an attachment. Consistent with WDR Order No. 2006-0003-DWQ terminology, this SSMP continues to use “SSO” to refer to a sanitary sewer spill.

## 2.0 ORGANIZATION

### 2.1 Administration and Maintenance Organization

The administrative responsibility for the UVA CS is shared among several departments including Residential & Student Service Programs (RSSP), Environment, Health & Safety (EH&S) and Capital Projects. The responsibilities of each department are summarized below and an organizational chart ([Figure 2-1](#)).

**RSSP:** RSSP is responsible for the overall operation and maintenance of the sanitary sewer system, implementation of the SSMP, and certifications to regulatory agencies. RSSP also maintains drawings of new design and construction to the sanitary sewer system.

**EH&S:** The implementation of permit requirements and collection and submittal of data/reports to regulatory agencies is the responsibility of EH&S, including tracking and reporting of all SSOs, notifying agencies by phone about spills, and development and implementation of the SSMP. EH&S also provides support to all parts of operation and oversees enforcement actions.

**Capital Projects:** Capital Projects is responsible for the management of the design and construction of additions, rehabilitations or modifications to the sanitary sewer system.

### 2.2 Monitoring System and Reporting SSOs

UC Berkeley utilizes a variety of methods to monitor the status of the sanitary sewer system, including SmartCover monitoring system, dye testing, Closed-Circuit Television (CCTV) testing and visual/lamping examinations. Any tests and all preventative maintenance are documented through RSSP's work order tracking system.

Reporting and certification reminders are placed on the EH&S Environmental Compliance Calendar, which is a part of the university-wide calendaring system (bCal). Reminders and other notifications are sent out to the Legally Responsible Officials and members of the EH&S Environmental Protection (EP) team, which consists of Environmental Specialists and the and the Environmental Programs Manager.

Members of the University community who observe an SSO may call the following departments to report the spill:

- RSSP at (510) 642-2828
- EH&S at (510) 642-3073

- Campus Emergency Dispatch Phone Line at (510) 642-3333

The Chain of Communication for Sanitary Sewer Spills is outlined in [Figure 2-2](#). Emergency response procedures for sanitary sewer spills are described in **Appendix A**, the Spill Emergency Response Plan (SERP).

## 2.3 Facility Description

The UC Berkeley campus is one of 10 University of California campuses governed by the Regents of the University of California. Specifically, only the UVA CS is covered by this SSMP.

The UVA CS covers approximately 58 acres on a larger 77.22-acre parcel (APN 66-2692-8) in Albany, Alameda County, California, approximately 2.25 miles northwest of UC Berkeley's central campus. The 58-acre complex of family student housing includes 974 apartments and townhouses, a recreational and community center, a café, laundry rooms, and a childcare center.

Construction of Albany Village Graduate Student Apartments, a project that will provide 761 single-occupancy bedrooms in apartment-style units, began in September 2022 and is anticipated to be open for the fall semester 2024. The apartments will be connected to the UVA CS.

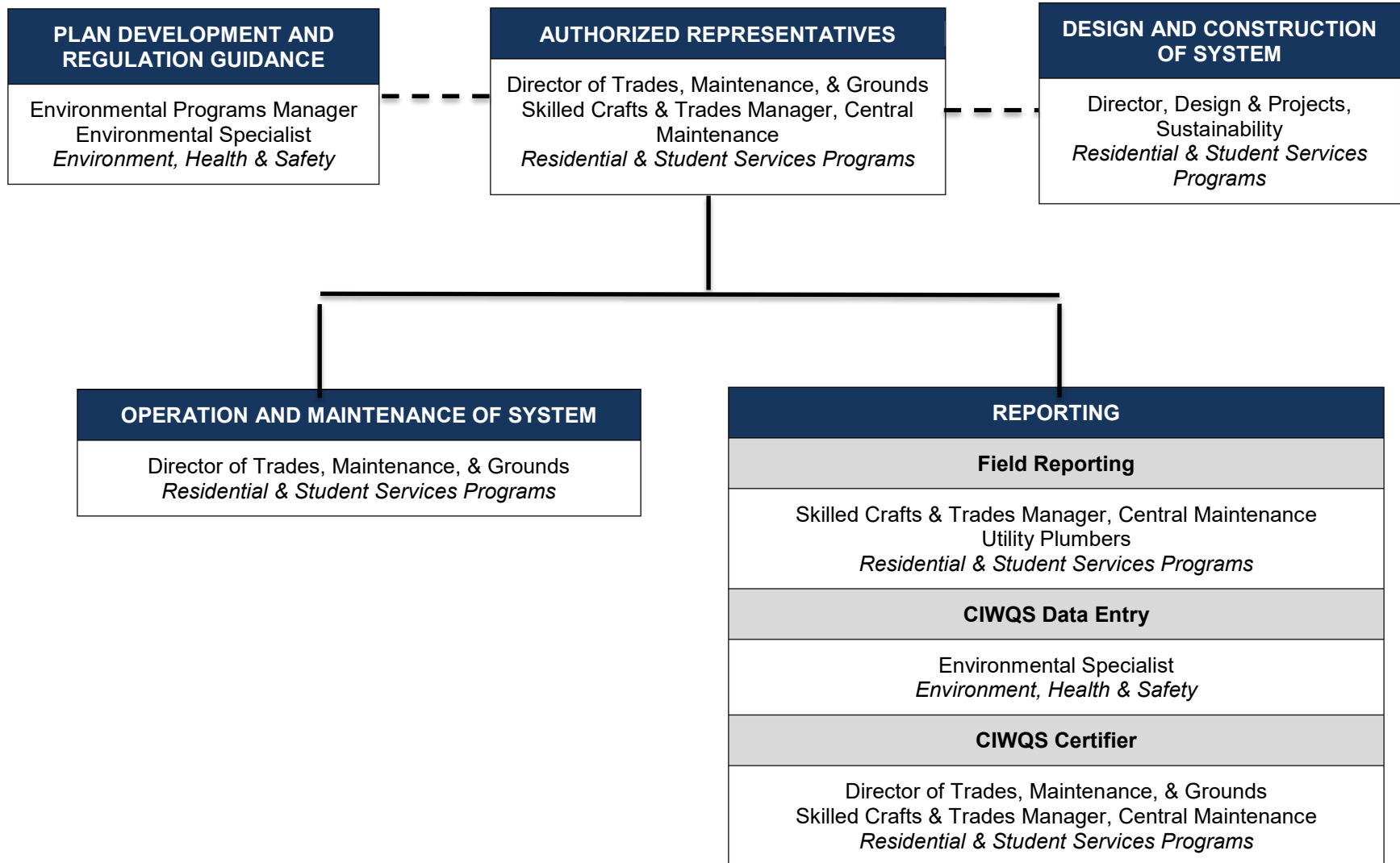
The UVA CS also includes a sewer line located on an easement extending westward from the northwest corner of the parcel. This UVA CS sewer line ends in the Target parking lot and is connected to the East Bay Municipal Utility District (EBMUD) North Interceptor, the large sewer interceptor that connects municipal sewer infrastructure to the EBMUD wastewater treatment plant.

The property is located in a mixed residential, commercial, and industrial land use area. Current use of adjacent properties and the associated sanitary sewer collection systems are listed below.

DIRECTION	PROPERTY/LAND USE	COLLECTION SYSTEM
North	Buchanan St, Marin Ave, Village Creek, Oceanview Elementary School, Ocean View Park and US Department of Agriculture Western Regional Research Center.	City of Albany
South	Codornices Creek (the southern property boundary is approximately the center of the creek), beyond which are industrial and commercial buildings and a recreational sports field.	City of Berkeley
East	UC Gill Tract Community Farm (on University-owned property)	No sanitary sewer service

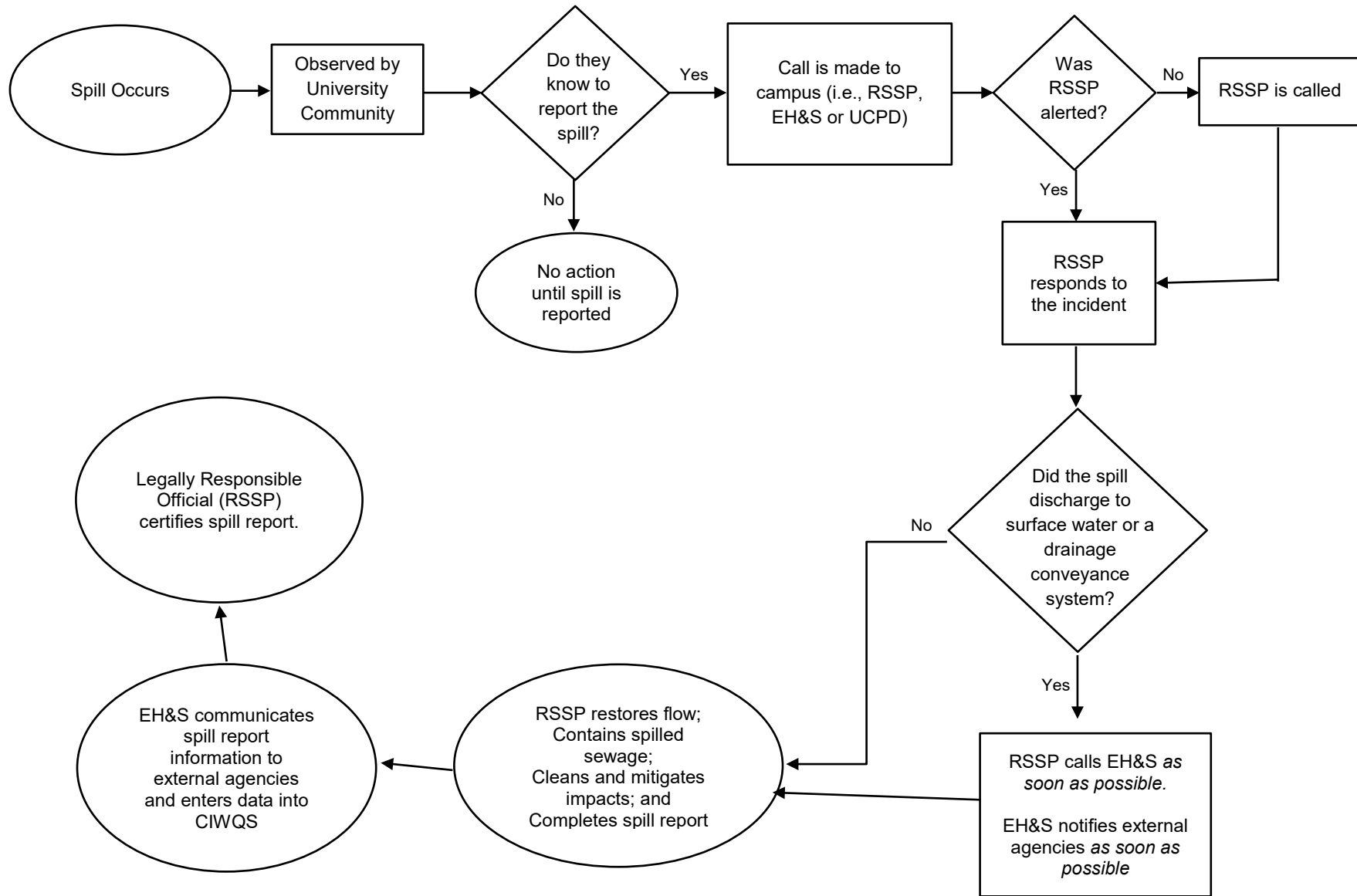
<b>DIRECTION</b>	<b>PROPERTY/LAND USE</b>	<b>COLLECTION SYSTEM</b>
	San Pablo Ave followed by industrial and commercial buildings	City of Albany
	University Village, a mixed-use retail shopping center with Sprouts Farmers Market and operators (e.g., bank, restaurants, coffee shop); and an assisted living facility for seniors; these areas are under Public-Private Partnership agreements	Private laterals connect to the UVA CS at Monroe St
West	Union Pacific Railroad tracks, beyond which is a retail store operated by Target.	City of Albany

**Figure 2-1 Administrative and Maintenance Responsibilities for UVA CS**





**Figure 2-2 Chain of Communication for Sanitary Sewer Spills, UVA CS**



## **2.4 Sanitary Sewer System Description**

The UVA CS collects sewage from 71 residential buildings (apartments and townhouses), a Community Center and gymnasium building, as well as three administrative office buildings, two shop buildings and a temporary office for the Albany Unified School District (AUSD). There are no grease traps or interceptors at the UVA residential complex. The UVA CS connects to the City of Albany CS and the EBMUD North Interceptor, which routes sewage to the to the EBMUD wastewater treatment plant in Oakland for primary and secondary treatment.

The UVA residential complex was developed for residential use by the Federal Government for shipyard workers during the Second World War. The sanitary sewer lines were replaced throughout the residential areas beginning with phase 1 construction in 1998 and completed with phase 2 in 2008.

The UVA CS is approximately 8,886 linear feet (1.68 miles) of gravity sewers. The lifetime of these pipes is expected to be about 50 years. In addition to the sewer line, there are 76 service lateral connections with approximately 1.5 miles of upper and lower laterals, for which UC Berkeley is responsible. There are no pump stations at UVA.

## 3.0 LEGAL AUTHORITY

The Regents 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 sewers and connections be properly designed and constructed.
- 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 and greases and other debris that may cause blockages in the collection system.
- Prevent illicit discharges into its system (e.g., stormwater or chemical dumping).
- Ensure access for maintenance, inspection or repairs of all portions of the system operated by UC Berkeley.
- Implement the national pretreatment program authorities specified under 40 CFR 403.8(f)(1).

## 4.0 OPERATION AND MAINTENANCE PROGRAM

In order to reduce and prevent SSOs the SSMP establishes measures and activities to facilitate the proper management, operation and maintenance of all parts of the sanitary sewer system. Measures and activities include maintaining system maps, scheduling routine maintenance in areas that are historically “hot spots”, identifying, and addressing system deficiencies, providing public education, and describing fiscal resources and training.

**Table 4-1** presents the required elements for the SSMP. The table identifies each element and the person and position at UC Berkeley who is responsible for that element.

**Table 4-1: Operation and Maintenance Program**

University Village Albany CS: Operation and Maintenance Program	Responsible Party	Point of Contact
<b>A. Operations and Maintenance</b>		
<p><i>"Provide adequate operations and maintenance of facilities and equipment"</i></p> <p>Operation and maintenance of the sanitary sewer is the responsibility of RSSP. This includes maintaining all lines and manholes. The department is also the first responder to sanitary sewer overflows.</p>	RSSP Director of Trades, Maintenance, & Grounds	Francisco Armenta-Gutierrez armenta_gutierrez@berkeley.edu (510) 520-5735
<b>B. Update Maps</b>		
<p><i>"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."</i></p> <p>The maps of the sanitary sewer system are either in AutoCAD or hard copy format.</p> <ul style="list-style-type: none"> <li>• Sanitary sewer maps are in electronic format (kept on the RSSP server) and hard copy format (in RSSP). Maps are being updated to show line size and material type. Maps are updated with additional rehabilitations or modifications.</li> <li>• For new construction, "As-Built" drawings are turned over to RSSP where the drawings are placed in the CAD library and paper library.</li> <li>• If a difference between the map and actual field conditions is noted during an inspection or routine maintenance, a staff member would redline the plan and send the revisions to be made to RSSP Design Services for corrections to the drawing. The revision is then entered into the library. <ul style="list-style-type: none"> <li>○ The proposed 10-year CCTV plan will uncover any differences between current maps and field conditions. If differences are noted, RSSP Design Services will be contacted.</li> </ul> </li> </ul>	RSSP Executive Director of Housing Facilities	Makoto Ushihara ushihara@berkeley.edu (510) 642-0582
<b>C. Maintain Information for Establishing Priorities</b>		
<p><i>"Maintain relevant information to establish and prioritize appropriate SSMP activities such as the elimination of overflows and identify and illustrate trends in overflows."</i></p>	EH&S Environmental Programs Manager	Alicia Bihler abihler@berkeley.edu

University Village Albany CS: Operation and Maintenance Program	Responsible Party	Point of Contact
<p>EH&amp;S is responsible for maintaining records regarding SSOs. All records are kept on the EH&amp;S server and an additional copy may be kept in the EH&amp;S hard copy files. Overflows of any amount of wastewater are reported to EH&amp;S. EH&amp;S tracks overflows and assesses the frequency and volume of overflows and works with campus departments to reduce and prevent overflows.</p>		(510) 725-2528
<b>D. Preventative Maintenance</b>		
<p><i>"Routine preventative maintenance O&amp;M activities by staff and contractors."</i></p> <p>UC Berkeley has measures in place in order 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.</p> <p><b>Routine Inspections:</b></p> <ul style="list-style-type: none"> <li>Manholes: Manholes are regularly inspected semi-annually on a 3-year schedule.</li> </ul> <p><b>Routine Maintenance:</b></p> <ul style="list-style-type: none"> <li>Root control: Maintenance from root intrusion is conducted on an as-needed basis, documented in the RSSP work order system.</li> <li>Overall System: Once a year (or as necessary) the sewer system at the UVA complex is cleaned using a hydrojet in targeted areas. This maintenance is documented through the RSSP work order system, TMA Systems. (TMA Systems is a Computerized Maintenance Management System [CMMS] and allows UC Berkeley to manage its assets and streamline maintenance operations.)</li> </ul>	<p>RSSP Skilled Crafts &amp; Trades Manager, Central Maintenance</p>	<p>Karla Robbins                  ksrobbins@berkeley.edu                  (510) 642-5399 (office)                  (510) 610-8978 (cell)</p>
<b>E. Scheduled Inspections and Condition Assessment</b>		
<p><i>"Identify and prioritize structural deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency."</i></p> <p><b>Long term planning:</b>                  Since the majority of the University Village Albany site was recently rehabilitated, there are no long-term rehabilitation actions at the moment. However, we will continue to monitor the current sewer system assets and implement upgrades as the budget allows.</p>	<p>RSSP Executive Director of Housing Facilities</p> <p>RSSP Director of Trades, Maintenance, &amp; Grounds</p>	<p>Makoto Ushihara                  ushihara@berkeley.edu                  (510) 642-0582</p> <p>Francisco Armenta-Gutierrez                  armenta_gutierrez@berkeley.edu</p>

University Village Albany CS: Operation and Maintenance Program	Responsible Party	Point of Contact
<p><b>Short term actions:</b>                      In the short term, RSSP will be identifying a National Association of Sewer Service Companies (NASSCO)-certified contractor that can conduct a 10-year CCTV evaluation and assessment plan. The CCTV assessment will identify any structural deficiencies and once the data is collected, UC Berkeley will prioritize any findings into short term and long-term rehabilitation projects.</p> <p>Other short-term actions are taken on an as-needed-basis depending on information gathered during inspections. RSSP Central Maintenance will work with Capital Projects and EH&amp;S as necessary to develop short-term project scope and subsequently implement the project, all to be documented in the RSSP work order system. Short term actions implemented through this method include the following:</p> <ul style="list-style-type: none"> <li>• Grease interceptor or trap installation</li> <li>• Identification and replacement of laterals</li> <li>• Manhole replacement</li> <li>• Reverse grade and root intrusion corrections</li> </ul>		(510) 520-5735
<b>F. Training</b>		
<p><i>"Provide training on a regular basis for staff collection system operations, maintenance and monitoring and determine if contractors' staffs are properly trained."</i></p> <p>Training is conducted by EH&amp;S and RSSP or a third-party provider. The two departments (EH&amp;S and RSSP) are responsible for training staff in the following areas:</p> <p><b>EH&amp;S:</b></p> <ul style="list-style-type: none"> <li>• Provides bloodborne pathogen awareness training for RSSP Central Maintenance staff; EH&amp;S training is documented through the UC Learning Center.</li> <li>• Provides in-person sewer spill response training for plumbers responding to sewer spills; training is documented through bCal Sewer Summit attendance and other in-person meetings and training events and documentation maintained on the EP(V) drive.</li> </ul>	<p>EH&amp;S Environmental Programs Manager</p> <p>EH&amp;S Environmental Specialist</p> <p>RSSP Skilled Crafts &amp; Trades Manager, Central Maintenance</p>	<p>Alicia Bihler                      abihler@berkeley.edu                      (510) 725-2528</p> <p>Sharon Harichandran                      sharon.harichandran@berkeley.edu                      (510) 812-1541</p> <p>Karla Robbins                      ksrobbins@berkeley.edu                      (510) 642-5399 (office)                      (510) 610-8978 (cell)</p>

University Village Albany CS: Operation and Maintenance Program	Responsible Party	Point of Contact
<p><b>RSSP:</b></p> <ul style="list-style-type: none"> <li>Provides regular technical training for staff; most training is on the job and is not formally documented.</li> <li>Provides technical training when new systems are installed to operators of the system. Training on new systems is documented.</li> <li>Responsible for overseeing operations of contractors. UC Berkeley utilizes a service agreement 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.</li> </ul>		
<b>G. Equipment</b>		
<p><i>"Provide equipment and replacement parts inventories, including identification of critical replacement parts."</i></p> <p>RSSP stocks parts and equipment, including emergency pumps, lights and generators. Repairs that require equipment or materials beyond existing capabilities are executed by an outside contractor via a service agreement contract.</p>	<p>RSSP Skilled Crafts &amp; Trades Manager, Central Maintenance</p>	<p>Karla Robbins ksrobbins@berkeley.edu (510) 642-5399 (office) (510) 610-8978 (cell)</p>
<b>H. Public Education Outreach Program</b>		
<p><i>"Establish an implementation plan and schedule for public education outreach program that promotes the proper disposal of grease and fats."</i></p> <p>The university has direct control over any food-related facility, within our property line, which disposes of grease and fats into the sanitary sewer system since UC Berkeley owns and operates all of the laterals and mains. Policies adopted in this plan, specifically Section 8, Source Control Program, are adopted by all entities at UC Berkeley. The additional items below comprise the outreach program to the community.</p> <p>The following measures are adopted in order to foster the successful implementation of the SSMP and disposal of grease and fats by those that use the sanitary sewer system:</p>	<p>EH&amp;S Environmental Programs Manager</p> <p>EH&amp;S Environmental Specialist</p>	<p>Alicia Bihler abihler@berkeley.edu (510) 725-2528</p> <p>Sharon Harichandran sharon.harichandran@berkeley.edu (510) 812-1541</p>



University Village Albany CS: Operation and Maintenance Program	Responsible Party	Point of Contact
<ul style="list-style-type: none"> <li>The most recent copy of the UC Berkeley University Village Albany CS SSMP is posted on the UC Berkeley EH&amp;S website (<a href="https://ehs.berkeley.edu/safety-subjects/environmental-protection/sewer-system-management-plans">https://ehs.berkeley.edu/safety-subjects/environmental-protection/sewer-system-management-plans</a>).</li> <li>UVA residents are reminded about proper disposal of grease and fats generated within their kitchens through email reminders and website announcements.</li> </ul>		
<b>I. Private Property Overflow Plan</b>		
<p><i>“Establish a plan for responding to overflows from private property that discharge to public right of ways and storm drains, to prevent discharges from overflows to surface waters and storm drains.”</i></p> <p>All of UVA’s sanitary sewer system is located on campus property and owned by the Regents.</p> <p>There are private laterals on the UC Berkeley property for Sprouts, various retail shops and the assisted living facility for seniors. Maintenance and operation of these laterals are included in contractual documents under the Public-Private Partnership program.</p> <p>For private property overflows that enter UC Berkeley property, UC Berkeley will alert the entity who owns the sewer lines involved and assist in coordinating response, as necessary.</p>	<p>RSSP Director of Trades, Maintenance, &amp; Grounds</p> <p>EH&amp;S Environmental Programs Manager</p>	<p>Francisco Armenta-Gutierrez armenta_gutierrez@berkeley.edu (510) 520-5735</p> <p>Alicia Bihler abihler@berkeley.edu (510) 725-2528</p>
<b>J. Staffing for System Operations</b>		
<p><i>“Describe staffing available to ensure system operation including developing, implementing and revising the SSMP.”</i></p> <p>The responsibility for system operation is shared among five departments and is summarized in <a href="#">Figure 2-1</a>, Administrative Responsibilities for University Village Albany Collection System.</p> <p>Staff are available 24 hours a day, 365 days to operate the system.</p> <p>The SSMP revision and implementation will be accomplished by RSSP in cooperation with EH&amp;S and Construction &amp; Design. Together, these departments ensure the operation of the sanitary sewer system.</p>	<p>RSSP Director of Trades, Maintenance, &amp; Grounds</p> <p>EH&amp;S Environmental Programs Manager</p>	<p>Francisco Armenta-Gutierrez armenta_gutierrez@berkeley.edu (510) 520-5735</p> <p>Alicia Bihler abihler@berkeley.edu (510) 725-2528</p>

## 5.0 DESIGN AND PERFORMANCE PROVISIONS

The University of California, Berkeley has established [Construction Design Standards](#) (CDS) for construction projects on campus. Standards for sanitary sewer installation, rehabilitation and repair are included in CDS Division 2-Site Work.

Capital Projects is responsible for ensuring the design standards are implemented on campus. There are two categories of design and performance provisions specified in General Order No. 2006-0003-DWQ, discussed below.

### 5.1 Standards for Installation, Rehabilitation and Repair

The CDS outlines construction specifications for installing new sewer systems and for rehabilitation and repair of existing sewer systems. Design criteria include specifications for items such as pipe materials, minimum sizes, minimum cover, strength, minimum slope, trench and backfill, structure standards, and other factors. Any new construction, rehabilitation or repair of the sanitary sewer system will adhere to the CDS.

### 5.2 Standards for Inspection and Testing of New and Rehabilitated Facilities

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

## 6.0 SPILL EMERGENCY RESPONSE PLAN

### 6.1 Objective and Purpose

The SERP (formerly the Overflow Emergency Response Plan) is attached as **Appendix A** to this SSMP and has the purpose of establishing guidelines and measures to protect public health and the environment in case of an accidental sewer spill.

In the case of a sewer spill, UC Berkeley shall dispatch the appropriate crews to investigate, identify the cause, and provide appropriate service to minimize the effects of the spill on public health and quality of surface waters. The SERP further specifies the required notification and reporting that is necessary for local and state agencies.

All utility personnel should be required to read the SERP and familiarize themselves with the procedures. Training is made available for all utility personnel on the SERP. The plan is also posted on the EH&S website to allow easy access for all utility personnel and the general public.

### 6.2 Plan Update

The effectiveness of the SERP is reviewed on an annual basis by EH&S with feedback requested from First Responders, Designated Urgent Response Team (DURT), and Legally Responsible Officials. The plan is updated, as necessary, following the review.

## 7.0 FOG CONTROL PROGRAM

This fats, oils and grease (FOG) control program has been developed as part of the University Village Albany SSMP, and builds upon the Best Management Practices for FOG (fact sheet) that UC Berkeley has in place (**Appendix B**). The purpose of the program is to reduce the amount of fats, oils and grease discharged to the wastewater collection system.

### 7.1 Current Infrastructure

Currently there are no commercial grease interceptors or traps at UVA that the University maintains. RSSP does outreach and shares information with residents about proper disposal of grease upon move-in.

If commercial grease interceptors or traps are installed within the UVA CS in the future, the entity operating the food-related facility would be responsible for performing their own maintenance on their commercial grease devices.

### 7.2 Elements of FOG Control Program

The elements of the FOG control program include identification of grease blockages, maintenance, BMPs, record keeping practices and inspections. The details are provided in [Table 7-1](#).

**Table 7-1 FOG Control Program**

FOG Control Measures	Responsible Party	Point of Contact
<b>A. Identification of Grease Blockages and Maintenance Requirements</b>		
<p>Grease blockages are identified through routine inspections of the sanitary sewer system. The inspections are conducted as part of the regular scheduled maintenance and cleaning of the system, which is outlined in <a href="#">Table 4-1</a>, Measures and Activities, Parts D and E.</p> <p>System maintenance includes both preventative maintenance and maintenance of parts of the system determined to be in need of cleaning during routine inspections. Preventive maintenance procedures are outlined in <a href="#">Table 4-1</a>, Part D.</p>	<p>RSSP Skilled Crafts &amp; Trades Manager, Central Maintenance</p>	<p>Karla Robbins <a href="mailto:ksrobbins@berkeley.edu">ksrobbins@berkeley.edu</a> (510) 642-5399 (office) (510) 610-8978 (cell)</p>
<b>B. Installation of New Grease Traps or Interceptors</b>		
<p>Installation of a new grease trap or interceptor may be recommended based on inspection and maintenance of the system, construction of new food service facilities that may tie into the collection system, and/or renovation of additions to existing buildings. Installation of new grease traps or interceptors will conform to current California Plumbing Code design standards.</p> <p>Design plans for new grease traps and interceptors will be reviewed by RSSP and/or EH&amp;S during Design Development Documents and Construction Documents review.</p>	<p>RSSP Director of Trades, Maintenance, &amp; Grounds</p> <p>EH&amp;S Environmental Programs Manager</p>	<p>Francisco Armenta-Gutierrez <a href="mailto:armenta_gutierrez@berkeley.edu">armenta_gutierrez@berkeley.edu</a> (510) 520-5735</p> <p>Alicia Bihler <a href="mailto:abihler@berkeley.edu">abihler@berkeley.edu</a> (510) 725-2528</p>
<b>C. Best Management Practices (BMPs)</b>		
<p>Source control BMPs are in place to prevent the introduction of grease and fats into the sanitary sewer and consist of training.</p> <ul style="list-style-type: none"> <li>Residents are educated upon move in and at outreach events to ensure BMPs are implemented.</li> </ul>	<p>EH&amp;S Environmental Programs Manager</p> <p>EH&amp;S Environmental Specialist</p>	<p>Alicia Bihler <a href="mailto:abihler@berkeley.edu">abihler@berkeley.edu</a> (510) 725-2528</p> <p>Sharon Harichandran <a href="mailto:sharon.harichandran@berkeley.edu">sharon.harichandran@berkeley.edu</a> (510) 812-1541</p>

FOG Control Measures	Responsible Party	Point of Contact
<b>D. Recordkeeping</b>		
Currently, this section is not applicable to the UVA CS because there are no grease interceptors or grease traps.	Not applicable	
<b>E. Inspection</b>		
Routine preventative maintenance would identify any grease blockages in the collection system. This preventative maintenance is tracked in the RSSP work order system.	RSSP Skilled Crafts & Trades Manager, Central Maintenance	Karla Robbins <a href="mailto:ksrobbins@berkeley.edu">ksrobbins@berkeley.edu</a> (510) 642-5399 (office) (510) 610-8978 (cell)

## **8.0 SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN**

Currently, UC Berkeley is not planning a long-range infrastructure rehabilitation initiative for University Village Albany due to the age of the system. Much of the system was rehabilitated in the last 10 years. Preventative maintenance is being completed to address shortfalls or deficiencies within the sanitary sewer system.

### **8.1 System Evaluation and Capacity Enhancement Measures**

RSSP will continue to camera the laterals and mains at UVA. The line will be evaluated using the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment Program. RSSP is in the process of creating a multi-year camera plan CCTV work will be contracted.

### **8.2 Design Criteria**

RSSP and EH&S are involved in plan review for projects on campus involving infrastructure upgrades and construction projects which may have an environmental or infrastructure impact. During plan review, RSSP and EH&S ensure that sanitary sewer design meets best practices and campus design standards. All UC Berkeley projects must go through the Plan Review Process.

### **8.3 Schedule**

UVA is implementing sanitary sewer upgrades as budget allows and in conjunction with new building projects. A list of projects is available on the EH&S Website at [ehs.berkeley.edu/ssmp](https://ehs.berkeley.edu/ssmp).

## **9.0 MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS**

EH&S will monitor the effectiveness and implementation of the SSMP. Members of the EP team will communicate with each other mid-year in order to monitor plan implementation. This can occur with a meeting or by e-mail. The purpose of the mid-year communication is to monitor how effectively the SSMP is working and is being implemented.

Every two years, the EP team and RSSP staff will evaluate the effectiveness of each element of the SSMP. The EP Team created a checklist of the SSMP requirements during the first review cycle, which will be utilized in reviews going forward. The Checklist will assist in determining if all elements of the SSMP are effective and are being implemented. Program elements will be updated, as appropriate, based upon monitoring or performance evaluation.



## 10.0 SSMP AUDITS

The EP team will assess the effectiveness of the SSMP, complete an audit, and will make updates in accordance with the General Order No. 2022-0103-DWQ. The next 3-year audit period is from May 3, 2022, to May 2, 2025, and the audit report is due within six months on November 2, 2025.

The EH&S EP Team will evaluate any sanitary sewer spills and make recommendations to prevent them from reoccurring. As part of the first annual plan update, the EP team will create a checklist of the SSMP requirements, which will be utilized in annual reviews going forward. The checklist will assist the EP team in evaluating all the components of the SSMP. Through this review, the EP Team will evaluate the SSMP, including its deficiencies, and recommend steps to correct them.

## 11.0 COMMUNICATION PROGRAM

### 11.1 Communicating Plan Information and Updates

EH&S will communicate with the campus community regarding the development, implementation and performance of the SSMP. The SSMP is posted on the UC Berkeley EH&S website for the campus community to review and comment.

The SSMP will be updated as needed to describe any significant changes in proposed actions or implementation schedules. The update will include available information on the performance of measures that have been implemented. UC Berkeley will communicate with campus stakeholders regarding implementation and performance of the SSMP.

## 12.0 ACRONYMS

<b>AUSD</b>	Albany Unified School District
<b>BMP</b>	Best Management Practice
<b>CCTV</b>	Closed-Circuit Television
<b>CDS</b>	Construction Design Standards
<b>CIWQS</b>	California Integrated Water Quality System
<b>CMMS</b>	Computerized Maintenance Management System
<b>EBMUD</b>	East Bay Municipal Utility District
<b>EH&amp;S</b>	Environment, Health & Safety
<b>EP</b>	Environmental Protection
<b>EPA</b>	Environmental Protection Agency
<b>FOG</b>	Fats, Oils and Grease
<b>I/I</b>	Inflow and Infiltration
<b>O&amp;M</b>	Operations and Maintenance
<b>OERP</b>	Overflow Emergency Response Plan
<b>RSSP</b>	Residential & Student Services Programs
<b>SERP</b>	Spill Emergency Response Plan
<b>SSO</b>	Sanitary Sewer Overflow
<b>SWRCB</b>	State Water Resources Control Board
<b>UC Berkeley</b>	University of California, Berkeley
<b>UCPD</b>	University of California, Police Department
<b>UVA</b>	University Village Albany

**UVA CS**                      University Village Albany Collection System

**WDR**                              Waste Discharge Requirements

## 13.0 UPDATES TO THE SEWER SYSTEM MANAGEMENT PLAN

DATE UPDATED	SECTIONS REVISED	NOTES	CHANGE WRITTEN BY / AUTHORIZED BY (EH&S)
10/2013	Section 1.0; Section 3.0; Section 5.0; Section 9.0; Section 10.0	<b>New Sections Developed:</b> <ul style="list-style-type: none"> <li>Section 1.0 - Goal</li> <li>Section 3.0 - Legal Authority</li> <li>Section 5.0 - Design and Performance Provisions</li> <li>Section 9.0 - Monitoring, Measurement and Program Modifications</li> <li>Section 10.0 - SSMP Program Audits</li> </ul>	Bernadette Dugtong / Greg Haet
05/2014	All	<b>Revisions:</b> <ul style="list-style-type: none"> <li>Minor grammar changes</li> <li>Updated staff contacts</li> </ul> <b>New Sections Developed:</b> <ul style="list-style-type: none"> <li>Section 2.0 - Organization</li> <li>Section 4.0 - Operation and Maintenance Program</li> <li>Section 6.0 - Overflow Emergency Response Plan</li> <li>Section 7.0 - FOG Control Program</li> <li>Section 8.0 - System Evaluation and Capacity Assurance Plan</li> <li>Section 11.0 - Communication Program</li> <li>Section 12.0 - Acronyms</li> <li>Appendices</li> </ul>	Bernadette Dugtong / Greg Haet
07/2014	Section 2.0; Section 4.0; Section 12.0	<b>Revisions:</b> <ul style="list-style-type: none"> <li>Section 2.0 (Figure 2-1): Changed "Authorized Representative" from "Associate Director, Maintenance and Trades" to "Associate Vice of Student Affairs"; Changed Operation and Maintenance System responsible party from "Senior Superintendent Central Maintenance" to "Associate Director of Maintenance and Trades"</li> </ul>	Bernadette Dugtong / Greg Haet

		<ul style="list-style-type: none"> <li>Section 4.0 (Table 4.1, Part B): A description of the process of maintaining maps has been added to the SSMP in addition to the goals for the 2014-2015 fiscal year (creation of a manhole identification system and a hot spots maps).</li> <li>Section 4.0 (Table 4.1, Part D): Contact information has been changed from "Kevin Cuellar" to "Mike Cupp". Manhole assessment goal has been changed from "monthly" to "semi-annually", based on available staff time, but still remains on a 3-year schedule. A description of RSSP's Computerized Maintenance Management System (CMMS) - TMA has been added.</li> <li>Section 4.0 (Table 4.1, Part E): Short term action added (CCTV 10-Year Plan).</li> <li>Section 4.0 (Table 4.1, Part G): Procedure for inventory management has been added.</li> <li>Section 12.0: Added "CMMS" to the list.</li> </ul>	
12/2015	All	<p><b>Revisions:</b></p> <ul style="list-style-type: none"> <li>Added WDID # to Title Page</li> <li>Changed "University Village Apartments" to "University Village, Albany" in all sections of the SSMP</li> <li>Changed "Capital Projects" to "Construction &amp; Design" in all sections of the SSMP</li> <li>Change "Physical Plant-Campus Services" to "Facilities Services"</li> <li>Section 2.1: Removed text: "The Associate Vice Chancellor of Student Affairs is considered the permittee for the sanitary sewer system."</li> <li>Section 2.3: Referenced the UVA parcel number and added information about Albany is part of Alameda County.</li> <li>Table 4.1: <ul style="list-style-type: none"> <li>Section A - Updated name of staff from Enrrique Villasana to Michael Cupp</li> <li>Section D – Updated Michael Cupp's phone number and removed pump station routine inspections. There are no pump stations are UVA.</li> <li>Section E – Updated staff contact from Dave Johnson to Brian Main</li> <li>Section G – Updated list of service agreement contracts (removed Roto-Rooter and Berkeley Plumbing and Heating)</li> <li>Section J – Updated staffing numbers</li> </ul> </li> <li>Section 5.0: Updated new website for Construction Design Standards to <a href="http://realestate.berkeley.edu/design">realestate.berkeley.edu/design</a></li> <li>Section 8.1: Updated text to include that CCTV will be contracted out.</li> <li>Section 8.3: Added two new tables to track capital improvement projects that have been completed or are in progress/planned <ul style="list-style-type: none"> <li>Incorporated information regarding Community Center Lateral rehabilitation work</li> </ul> </li> </ul>	Bernadette Dugtong / Greg Haet

		<ul style="list-style-type: none"> <li>Section 12: Updated acronym page to include Facilities Services, Construction &amp; Design, and University Village Albany</li> </ul>	
<p>04/2019 – 05/2019</p>	<p>Various</p>	<p><b>Revisions:</b></p> <ul style="list-style-type: none"> <li><b>Title Page</b>, updated date to “May 2019”</li> <li><b>Title Page</b>, updated title to “University Village, Albany CS” to correspond with CIWQS Database</li> <li><b>All Sections:</b> Fixed minor grammatical errors and adjusted word choice for improved clarity.</li> <li><b>Section 2.0:</b> <ul style="list-style-type: none"> <li><b>Section 2.1:</b> Insert &lt;space&gt; between “Construction &amp; Design” and “is”. (Typo)</li> <li><b>Section 2.2:</b> Update sentence: “In addition, Codornices Creek and Village Creek <del>is</del><b>are</b> observed daily by staff members and residents.”</li> <li><b>Figure 2-2:</b> <ul style="list-style-type: none"> <li>Change “responsible” to “response” in Private Lateral Sewage Discharge box.</li> <li>Remove footnote: “*** There are no private laterals at UVA since UC Berkeley is a public agency and owns all of the laterals on the campus.”</li> </ul> </li> <li><b>Section 2.3:</b> Insert description regarding the new Sprouts, Retail Shops and Belmont Village areas at UVA.</li> <li><b>Section 2-4:</b> <ul style="list-style-type: none"> <li>Remove “temporary office for the Albany Unified School District (AUSD)” from description as it is no longer at the facility.</li> <li>Remove sentence: “Sanitary lines are subject to preventative maintenance inspection and jet cleaning on a semi-annual basis.” as cleaning intervals are mentioned in the Operations and Maintenance section of the SSMP (Section 4.0).</li> <li>Update sentence: “The lifetime of these pipes <del>would be</del> <b>is expected</b> to be about 50 years.”</li> <li>Update sentence: “This replacement is expected <b>to commence</b> in the next 2-4 years.”</li> </ul> </li> </ul> </li> <li><b>Table 4.1:</b> <ul style="list-style-type: none"> <li><b>Section A:</b> Remove “Interim” from Responsible Party title</li> <li>Section A: Revise sentence to exclude “lift stations, force mains, and alarm systems” as those are not applicable to UVA. Include manholes.</li> <li><b>Section B:</b> Remove sentence: “Within the next fiscal year (2014-2015), RSSP is planning to update the maps to include manhole identification labels and create a hot spot map.” since those tasks have been completed.</li> </ul> </li> </ul>	<p>Bernadette Dugtong / Greg Haet</p>

		<ul style="list-style-type: none"> <li>○ <b>Section D:</b> Replace “Mike Cupp” with “Dan Foidl”, Change phone number to: (510) 610-8978</li> <li>○ <b>Section D:</b> Remove typo “has has”</li> <li>○ <b>Section E:</b> Update point of contact to “Shannon Holloway” (510) 642-1954 and spell out “NASSCO”</li> <li>○ <b>Section G:</b> Remove sentence: “A service agreement is maintained with ATI and NRC Environmental.” as these are response contractors; not service equipment.</li> <li>○ <b>Section H:</b> Update sentence: “A-<del>The most recent</del> copy of the UC Berkeley University Village, Albany CS SSMP <del>will be</del> <b>is</b> posted on the UC Berkeley EH&amp;S website (<a href="http://ehs.berkeley.edu">http://ehs.berkeley.edu</a>).”</li> <li>○ <b>Section I:</b> Add description regarding new private laterals.</li> <li>○ <b>Section J:</b> Remove description of number of staff to simplify future updates.</li> <li>○ <b>Section J:</b> “Staff is available 25-24 hours a day, 365 days to operate the system.”</li> <li>● <b>Section 5.0:</b> Updated website link to Campus Design Standards to “<a href="http://facilities.berkeley.edu/design">facilities.berkeley.edu/design</a>”</li> <li>● <b>Section 7.1:</b> <ul style="list-style-type: none"> <li>○ Update description of grease control devices. UC Berkeley does not maintain any devices. There are private entities that maintain their own devices.</li> </ul> </li> <li>● <b>Section 8.0:</b> <ul style="list-style-type: none"> <li>○ Remove sentence: “Much of the system was rehabilitated in the last 10 years.” to streamline future updates.</li> <li>○ Section 8.1: Remove “\” from last sentence. (Typo)</li> <li>○ <b>Section 8.2:</b> Add sentence: “All Projects must go through the Plan Review Process and submit an application for a permit: <a href="https://facilities.berkeley.edu/permits">https://facilities.berkeley.edu/permits</a>.”</li> <li>○ Section 8.3: Remove table of projects and link to the EH&amp;S website for an up-to-date list of Capital Improvement Projects.</li> </ul> </li> </ul>	
8/2023	All	<ul style="list-style-type: none"> <li>● Global updates to update personnel positions, names, contact information, and department.</li> <li>● <b>Sections 1.0 and 2.0</b> updated to include the reissued permit language around the SERP.</li> <li>● Revised <b>Figure 2-2</b> with updated chain of communication for sanitary sewer spills.</li> <li>● Removed references to Appendix A: Regulatory Language and replaced with a link.</li> <li>● Changed SERP from Appendix B to Appendix A.</li> <li>● Changed Appendix D: Resources to Appendix B: Best Management Practices for FOG.</li> <li>● Removed references to Appendix C: Maps as figures/maps are maintained by RSSP and/or Capital Projects.</li> </ul>	Sharon Harichandran / Alicia Bihler



		<ul style="list-style-type: none"><li>• Revised inspections/audits; complies with the regulation.</li><li>• <b>Section 10.0</b> updated to reflect the next audit timelines.</li></ul>	
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