



Sewer System Management Plan



Prepared by

Risk Management/Environmental Health
and Occupational Safety
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Introduction

The California Regional Water Quality Control Board¹ oversees water, its runoff, and water quality in all water regions and counties throughout California. California State University, Dominguez Hills (CSUDH), falls in Region 4 and includes Los Angeles Ventura and small portions of Kern and Santa Barbara counties.

In this region, of particular concern has been closure to coastal beaches due to contaminated surface water run-off and sewer spills. These concerns, in turn, have impacted the economy and summer beach activities in this region.



In response to beach closures and impact to the economy of California, the State Water Resources promulgated storm drain and sewer regulations. State Water Resource Control Board (State Board) Order No. 2006-0003-DWQ², *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*, adopted by the State Board on May 2, 2006, established minimum requirements to prevent sanitary sewer overflows (SSOs) from publicly owned/operated sanitary sewer systems. A sanitary sewer overflow is any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. Sanitary sewer overflows often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oil, and grease. Sanitary sewer overflows pollute surface and ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters. Typical consequences of SSOs include the closure of beaches and other recreational areas, inundated properties, and polluted rivers and streams.

Order No. 2006-0003-DWQ is the primary regulatory mechanism for sanitary sewer systems statewide, but allows each regional board to issue more stringent or more prescriptive Waste Discharge Requirements (WDRs) for sanitary sewer systems within their respective jurisdiction.

¹ <http://www.swrcb.ca.gov/>

² [Order No. 2006-0003-DWQ](#)

In accordance with Order No. 2006-0003-DWQ, all federal and state agencies, municipalities, counties, districts, and other public entities that own, operate, acquire, or assume responsibility for 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 apply for coverage under the statewide general WDRs. CSUDH is a designated Municipal Separate Stormwater (MS4), based on an infrastructure of conveyances that include catch basins, curbs, gutters, ditches, man-made channels, pipes, tunnels or storm drains that discharges into water of the United States. Additionally, CSUDH contains sewer pipelines of greater than one mile that is connected to the Los Angeles County Sanitation District.

One of the requirements of the Waste Discharge Requirements is preparation and implementation of a Sewer System Management Plan (SSMP). By preparing and practicing the procedures in the plan, the occurrence of sewer spills should decrease. The SSMP for CSUDH is described herein and most requirements are in place due to our proactive approach to sewer system management.

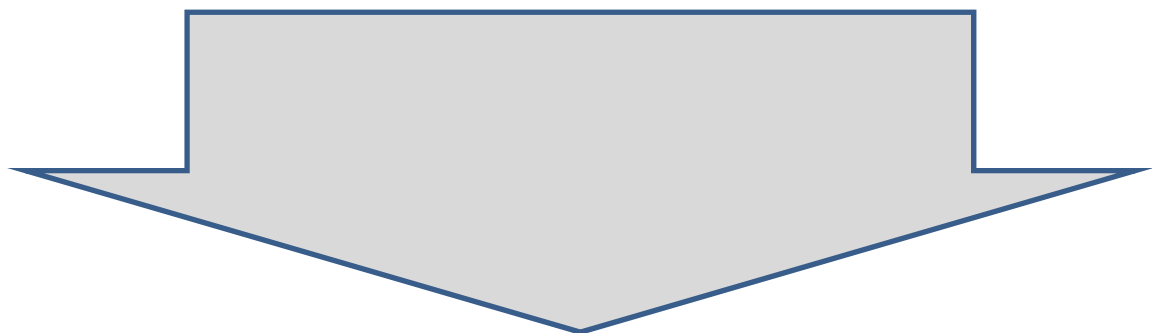
Sanitation District of Los Angeles County



Chain of Communication

The chain of communication describes the notification of a spill to Work Control. The Director of Physical Plant or his/her designee will be responsible for reporting an SSO to the appropriate agencies including, but not limited to the Regional Water Quality Control Board, Los Angeles County Health Care Agency, and the California Emergency Management Agency (Cal EMA)³. Reporting to Cal EMA is required if the discharge is one thousand gallons (1,000 gal) or larger⁴.

University Housing University Student Union	CAMPUS COMMUNITY Working Hours 0700 – 1700 Monday - Friday	CAMPUS COMMUNITY Non-Working Hours 1700 – 0700 Monday – Friday Sat., Sun. and Holidays (24/7)
1. Person observing the spill reports the spill to Work Control 2. Work Control notifies the Plumbing Shop	1. Person observing the spill reports the spill to Work Control 2. Work Control notifies the Plumbing Shop	1. Person observing the spill reports the spill to Dispatch (Campus Police) 2. Dispatch notifies the Trades Manager 3. Trades Manager notifies the Plumbing Shop



Director of Physical Plant
notifies appropriate CSUDH Departments and
required government agencies

³ California State Warning Center - (800) 852-7550

⁴ [California Emergency Management Agency Spill/Release Notification](#)

Organization and Key Contacts

Physical Plant	Contact	Contact Information
Director of Physical Plant	<u>Jonathan Scheffler</u>	310-243-2139
Manager, Building Trades	<u>John Epps</u>	310-243-2142
Work Control Center		310-243-3587
Risk Management/EHOS	Contact	Contact Information
Risk Manager	<u>Jeff Wood</u>	310-243-2895
Environmental Compliance Specialist	<u>Orson Faynor</u>	310-243-3012
University Police	Contact	Contact Information
Emergency Preparedness	<u>Gary Singer</u>	310-243-2751

Key Contacts	Contact Information
<u>California Emergency Management Agency (Cal/EMA) Spill/Release Information</u>	916-845-8911 800-852-7550
<u>California Regional Water Control Board</u>	213-576-6600
<u>Sanitation District of Los Angeles County</u>	562-437-6520 562-437-1881
<u>Los Angeles County Department of Public Works</u>	800-675-4357
<u>Los Angeles County Department of Public Health</u>	213-240-8117

Legal Authority

The Sewer System Management Plan (SSMP) shall include legal authority through sewer use ordinances, service agreements or other legally binding procedures.

The individual California State colleges were amalgamated together as a system by the California Legislator in 1960 (Donahoe Higher Education Act), in 1972 the system became the California University and Colleges and in 1982 they became the California State University System (CSU).

The authority for the California State University is vested in the Board of Trustees, who are appointed by the Governor of California. The California Legislature has designated authority to the CSU to install sewer lines/systems in accordance with the State Architect's Office and utilizes the 'Green Book' Standard Specifications for Public Works Construction to service the buildings within the contiguous boundaries of the campus to facilitate specification requirements for contractors. CSUDH endeavors to:

- *Prevent illicit discharges into its sanitary sewer system from off campus sources*
- *Requires that all sewers and connections be properly designed and constructed as per requirements of the State Architects office.*
- *Ensure proper installation, testing and inspection of new and rehabilitated sewers and or collection laterals.*
- *CSUDH ensures access by campus maintenance and trade personnel (campus plumbers and/or contractors) for maintenance, inspection, testing or repairs of campus owned conveyances. The campus also ensures access by the Los Angeles County Sanitation District or City of Carson to inspect or repair trunk connections to LACSD or City of Carson conveyances.*
- *Limit the discharge of fats, oils, and grease (FOG) and other debris that may cause blockages.*
- *Enforce any violations of campus sewer policies*

Operation and Maintenance Program

In order to reduce and prevent sanitary sewer overflows, the Sewer System Management Plan 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.

The table below presents the required elements for the SSMP. The table identifies each component and the person and position at CSUDH that is responsible for that component.

Operation and Maintenance Program Components

CSUDH Operation and Maintenance Program Components	Responsible Party	Point of Contact	Telephone Number
A. Operations and Maintenance Operation and maintenance of the sanitary sewer is the responsibility of the CSUDH Physical Plant. This includes maintaining all lines, lift stations, force mains, and alarm systems. The department is also first responder to sanitary sewer overflows.	Director, <i>Physical Plant</i>	Jonathan Scheffler	310-243-2139
B. Update Maps All maps are kept updated and active in the Physical Plant Department. Maps are updated as sewer system designs change.	Director, <i>Physical Plant</i>	Jonathan Scheffler	310-243-2139
C. Maintain Information for Establishing Parties Physical Plant is responsible for maintaining records regarding SSOs. Reportable spills/overflows should be reported to the Environmental Compliance Specialist in Risk Management/EHOS.	Director, <i>Physical Plant</i>	Jonathan Scheffler	310-243-2139

CSUDH Operation and Maintenance Program Components	Responsible Party	Point of Contact	Telephone Number
<p>D. Preventative Maintenance CSUDH has measures in place in order to keep the sewer 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 systems. Maintenance may include but not be limited to the following:</p> <p>Routine Inspections:</p> <ul style="list-style-type: none"> • Pump Stations: Inspections conducted periodically, at least annually. • Manholes: Manholes are regularly inspected on an annual basis, at minimum. <p>Routine Maintenance:</p> <ul style="list-style-type: none"> • Root control: Maintenance from root intrusion is conducted on an as-needed basis, and documented in the Physical Plant work order system. • Overall System: Twice a year (or as necessary) the sewer system is cleaned using a hydrojet in targeted areas. This maintenance is documented through the Physical Plant work order system. 	<p>Manager, Building Trades</p>	<p>John Epps</p>	<p>310-243-2142</p>
<p>E. Scheduled Inspections and Condition Assessment</p> <p>Long term planning: The CSUDH sanitary sewer infrastructure renewal will address rehabilitation and replacement of sewer pipes which are at risk of collapse or are prone to more frequent blockages due to pipe deficiencies.</p> <p>Short term actions: Short term actions are taken on an as-needed basis depending on information gathered during inspections. Short term actions implemented through this method include the following:</p> <ul style="list-style-type: none"> • Grease interceptor or trap installation • Identification and replacement of laterals • Manhole replacement • Reverse grade and root intrusion corrections 	<p>Manager, Building Trades</p>	<p>John Epps</p>	<p>310-243-2142</p>

CSUDH Operation and Maintenance Program Components	Responsible Party	Point of Contact	Telephone Number
<p>F. Training Training will be provided, as needed, to ensure responsible staff is aware of requirements of this plan and all safety requirements to required when responding to sewer spills. Most training is on the job and is not officially documented. Technical training will be provided when new systems are installed. Training on new systems is documented.</p>	<p>Manager, <i>Building Trades</i></p>	<p>John Epps</p>	<p>310-243-2142</p>
<p>G. Equipment Stock parts and equipment, including emergency pumps, lights, and generators are maintained. Repairs that require equipment or materials beyond existing capabilities are executed by an outside contractor via a service agreement contract.</p>	<p>Manager, <i>Building Trades</i></p>	<p>John Epps</p>	<p>310-243-2142</p>
<p>H. Public Education Outreach Program Since the sewer system at CSUDH is not a public system, the university has direct control over any facility that disposes of grease and fats into the sanitary sewer.</p> <p>Policies adopted in this plan, specifically the Fats, Oil, and Grease (FOG) Program will be disseminated to all affected entities on campus. An effort will be made to implement an educational approach to eliminating fats, oils, and grease from entering the sewer system on campus.</p>	<p>Director, <i>Physical Plant</i></p>	<p>Jonathan Scheffler</p>	<p>310-243-2139</p>
<p>I. Private Property Overflow Plan CSUDH's sanitary sewer system is located on campus property. For private property overflows, CSUDH will alert all required agencies to assist in response, if necessary.</p>	<p>Director, <i>Physical Plant</i></p>	<p>Jonathan Scheffler</p>	<p>310-243-2139</p>
<p>J. Staffing for System Operations The responsibility for system operation is shared among campus departments, Auxiliary Services, Housing and is summarized in the Chain of Communication and Organization Chart as part of this report. Physical Plant staff is available 24 hours a day, 365 days to operate the system or respond to an overflow.</p> <p>Revisions to this plan will be accomplished by Physical Plant in cooperation with Risk Management/Environmental Health and Occupational Safety.</p>	<p>Director, <i>Physical Plant</i></p>	<p>Jonathan Scheffler</p>	<p>310-243-2139</p>

Design and Performance Provisions

Facilities Planning and Construction Management

Facilities Planning and Construction Management develops and manages a framework for the University to implement the buildings and infrastructure necessary to support the strategic and academic goals of the campus.

Facilities Planning and Construction Management is responsible for:

- The campus environment including space planning and management, sustainability, and development of the Campus Master Plan;
- Development and implementation of Campus Standards, including furnishings and signage;
- Managing state and non-state capital construction projects;
- Issuing building construction permits;
- Ensuring projects constructed according to CSU standards, state and federal codes, and life safety compliance.

Inspection and testing of new or rehabilitated facilities ensures that the established standards are being implemented in the field. Rehabilitation and repair of existing sanitary sewer systems are handled by Physical Plant, in conjunction with Facilities Planning and Construction Management.

Physical Plant is equipped with maintenance procedures for repairing and rehabilitation of any damaged or subpar components of a sanitary system. After the installation of new sewers, pumps, or other appurtenances, inspecting and testing of the installation is conducted as part of the procedure process.

Collection System Mapping

CSUDH keeps an active map of the sanitary sewer and stormwater collection systems in Physical Plant. The maps are updated as the systems are upgraded, retrofitted, and as new laterals are added to serve the campus community. The map includes the location, size, and materials type, location of all sewer mains, manholes, laterals, pumping stations gravity lines and pressurized sewer lines (forced mains). Maps are also updated as new facilities are constructed and are used in conjunction with the sewer line capacity calculation as a planning tool for future capacity and needs.

The campus understands the California Regional Water Control Board's requirements for stormwater management and has an active stormwater management in place. The campus actively protects against illicit dumping into the campus stormwater system as well as monitors the activities of contractor's during construction activities on campus. The campus requires contractors to submit a Stormwater Pollution Prevention Plan or a Water Pollution Control & Prevention Plan based on the area of disturbed soil. The Risk Management/Environmental Health & Occupational Safety Department serves as a resource in to inspect and monitor construction activities to ensure compliance with the Campus Stormwater Management Plan.

The campus maintains relevant information to establish and prioritize appropriate SSMP activities to identify and illustrate trends in overflows, such as frequency and volumes. The information is utilized to eliminate dry weather overflows or overflow into sensitive waters.

The University has identified the main causes of SSOs within the campus boundaries and has extended efforts to prioritize and eliminate the causes through posting of signage and education of the faculty, staff and students with regard to foreign body introduction into toilets. Incidents involving line breakage or rupture caused by natural disasters such as earthquakes or material failure are addressed through contingency planning.

Monitoring, Measurements and Program Modifications

The Environmental Compliance Specialist will monitor the effectiveness and implementation of the SSMP. The Environmental Compliance Specialist and Building Trades Manager will communicate with each other mid-year in order to monitor plan implementation. This will occur during a scheduled in-person or telephone meeting. The purpose of the mid-year communication is to monitor how effectively the SSMP is working and is being implemented, as well as to discuss and assess previous overflow procedures (if they had occurred in the past 6 months).

At least annually, all team members directly involved with Sewer System Management (representatives from Risk Management/Environmental Health and Occupational Safety, Physical Plant, Loker Student Union, University Housing Services and University Police) will evaluate the effectiveness of each element of the SSMP. The goal of the annual review is to determine if all elements of the SSMP are effective being implemented as well as discussing any necessary program modifications.

Program elements will be updated, as appropriate, based upon monitoring, performance evaluation, and input from the team. Should program modifications be made, changes will be highlighted and given to all team members.

Overflow Emergency Response Plan

California State University, Dominguez Hills does not engage in any onsite sewage treatment. All sanitary sewer treatment operations are conducted by the Sanitation District of Los Angeles.

On campus, the sewers are operated and maintained by Physical Plant. They are operated under all applicable local codes and ordinances. All campus, University Housing and Loker Student Union sanitary sewer lines are connected to 'trunk lines' maintained by either the City of Carson or the Sanitation District of Los Angeles County.

Fats, Oils and Grease (FOG)

Fats, oils, and grease, collectively known as FOG, are found in most kitchen and food service establishments. Waste FOG is generated during the food preparation, kitchenware and equipment maintenance, and sanitizing process. Many foods that are processed and served contain FOG, including meats, sauces, gravy, dressings, deep-fried foods, baked goods, cheeses, butter and others. Discharging FOGs to the sanitary sewer system can cause FOG to accumulate in the sewer and cause a backup or overflow resulting in significant hazards to public health and hazards to the Food Service Establishment, or damage to the public sewer system.

Fats, oils and grease that are disposed of down the sewer drain can coagulate and congeal into a hardened layer on the inside of building drain pipes and waste water collection lines in waste water treatment system. The accumulation of hardened FOG on the inside of pipes causes a reduction in the effectiveness of these collection lines to transport wastewater away from the campus housing and foodservice establishments. Over time, the accumulation of FOG can block the collection system causing a backup of sewage into campus residences or foodservice establishments presenting a significant public health hazard.

The first line of defense and the easiest way to solve the FOG buildup problem on campus and help prevent sewerage overflows is by keeping the material out of the sewer system. The following preventative measures will assist in preventing blockages on campus.

Preventative Measures to Prevent Blockages in the Campus Sanitary Sewer System and Entering Water Sources

- Training appropriate staff and vendors in FOG best management practices.
- Never pour grease down sink drains or into toilets.
- Post “No Grease” signs above sinks and on the front of dishwashers (Student Union, University Housing and temporary food facilities)
- Scrape grease and food scraps from trays, plates, pots, pans, utensils, and grills and cooking surfaces into a can or the trash for disposal.
- Pour fats, oils and grease into a container such as an empty jar or coffee can. Once the materials have cooled and solidified and the container is full, secure the lid and place it in the trash.
- Locate grease dumpsters and storage containers away from storm drain catch basins.
- Use absorbent pads or other non-flowable materials to clean up spilled materials in the oil/grease storage area.
- Don’t put grease down garbage disposals. Put baskets/strainers in sink drains to catch food scraps and other solids, and empty the drain baskets/strainers into the trash for disposal.
- Recycle used cooking oil. There are many waste grease/oil recyclers throughout California.
- Communicate with faculty, students and staff about the problem of grease in our sewer system and how to keep it out.

Best Management Practices to Prevent Blockages in the Campus Sanitary Sewer System

Best management practices are a series of activities that effectively reduce the amount of waste generated in a business. In the food service industry and management of fats, oils and greases, the following best management practices include:

- Using less oil, and liquid oil instead of solid grease or lard.
- Dry wiping all dishes, pots, and pans before putting them in the dishwasher
- Collecting and disposing used oil through a licensed grease hauler instead of pouring it down the drain
- Use of disposable paper products instead of dishware when possible
- Capturing the oil accumulated in ventilation and exhaust hoods
- Cleaning grease traps regularly
- Keeping grease traps and interceptors well maintained and properly operating

Prevention of Fats, Oils and Grease in the Sanitary Sewer System Properly Maintaining Grease Traps and Interceptors

- Clean grease traps, exhaust filters and interceptors routinely.
- Establish a maintenance log to document the frequency and volume of cleaning.

System Evaluations and Capacity Assurance Plan

The intent of this section is to document the University's planning efforts to assess the current capacity of the wastewater collection system needs is met before the capacity of the system is exceeded.

Regulatory Requirement

The University shall prepare and implement a capital improvement plan 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:

- **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 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.*
- **Design Criteria:** *Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and*
- **Capacity Enhancement Measures:** *The steps needed to establish a short- and long-term capital improvements to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The capital improvement plan shall include an implementation schedule and shall identify sources of funding.*
- **Schedule:** *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 elsewhere in this document.*

The University will continue to assess capacity needs for the wastewater collection system as part of the campus' overall master plan.

SSMP Program Audits

The intent of this section of the SSMP is to document audits of the SSMP. Audit programs are intended to provide controls for ensuring that all programs associated with the SSMP are being implemented and managed appropriately. Audit outcomes should provide information about challenges and successes in implementing the SSMP and identify any program or policy changes that may be needed to ensure effective implementation. Information collected as part of an audit should be used in to plan program or procedure revisions necessary to improve program performance.

Regulatory Requirement

As part of the SSMP, the University 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.

California State University, Dominguez Hills Audit Results:

No audits have been completed to date.

Communication Goals

The State Water Resources Control Board (SWRCB) Order No. 2006-0003-DWQ Statewide General WDR for Wastewater Collection Agencies – Sewer System Management Plan (SSMP) requires the development and implementation of a communication program that communicates on a regular basis with the campus community on the development, implementation and performance of its SSMP.

This communications plan provides a description of the overall goal and the communication plan objectives, a listing of the key messages to be delivered, and the communications strategies to be used to deliver the key messages to the various stakeholders.

The Campus endeavors to communicate to the campus stakeholders key messages about the University's Sewer System Management Plan which include communicating the SSMP requirements, progress and performance and enlist input from the campus community as well as from the Sanitation District of Los Angeles County and the City of Carson.

Stakeholders include:

- California State University Campus Community
 - *Physical Plant*
 - *Risk Management/Environmental Health and Occupational Safety*
 - *Locker Student Union*
 - *University Housing Services*
- Sanitation District of Los Angeles County
- City of Carson

The University endeavors to communicate the requirements of the SSMP with enough frequency as to adequately inform the campus community regarding the requirements of the SSMP, as well as any changes to the SSMP or upgrades to the campus wastewater collection system. The SSMP will also be used to inform external stakeholders, as necessary and required; of the SSMP requirements and strategies the University has implemented to reduce sanitary sewer overflows (SSO's). The SSMP can also be utilized as a community outreach tool to adequately inform the public of constructions that may affect the public regarding upgrades, repairs, or expansion of the wastewater collections system on campus.

The main message of the SSMP will focus on the University's requirements and actions being taken by the University to protect the human health and the environment as well as provide uninterrupted sewer service to the campus community by reducing the number and volume of SSO's.

The campus community should be informed utilizing focused messages containing the following:

- *Purpose of SSMP, requirements and status of the Universities program*
- *Steps to protect human health, the environment and water quality*
- *Methodology for campus input*
- *Best Management Practices (BMPs) to reduce SSO's*
- *Best Management Practices to minimize the introduction of Fats, Oil and Grease (FOG) into the wastewater collection system*
- *Wastewater collection system improvements such as replacement of existing pipeline infrastructure and construction of new infrastructure*
- *Maintenance and operation activities that lead to reductions in the number and volume of SSO's and prevent the interruption of sewer/wastewater collection services to the campus community*

The strategies used for communication could include some or all of the following:

- *Create a newsletter to be distributed to the campus community*
- *Post information/newsletter on the Physical Plant and/or Risk Management Environmental Health and Occupational Safety website*
- *Outreach meetings for the campus community*
- *Use of CSUDH newspaper*
- *Informational brochures and flyers*
- *SSMP status reports and presentation in terms of achieving the SSMP requirements, resource needed to achieve SSMP compliance and completed activities that have led to a reduction in SSO's.*

Communications Strategy – President and Vice President of Administration and Finance

Physical Plan staff shall inform the University President and Vice President of Administration and Finance at least once per year the following information:

- *Purpose of SSMP and status of the University's SSMP*
- *Progress of Physical Plant staff on meeting performance metrics related to the SSMP requirements and reduction of SSOs*
- *FOG control measures in terms of University Housing and Student Union food services*
- *Response action taken by Physical Plant which include:*
 - *Response time to mitigate SSOs*
 - *Reduction in the number and quantity of SSO spills*
- *Capital improvement projects*

Communications Strategy - Internal Staff

Staff will be educated on the SSMP requirements and their role and responsibilities in implementing various elements of the SSMP in order to support the University's goals in achieving WDR compliance.

The internal staff training should include the following:

- *Overall understanding SSMP purpose*
- *Specific understanding of each of the eleven SSMP elements*
- *Roles and responsibilities of the SSMP elements addressed in their work classification/assignments*
- *Periodic reports on the progress in reducing SSO's*

Communications Strategy – Campus Community

Relevant information about the SSMP, SSO and FOG Reduction Program will be provided to the campus community.

The campus community information should include the following:

- *Purpose of SSMP, SSO and FOG Programs*
- *Status of the University's overall program*
- *FOG control measures in terms of University Housing and campus food service facilities*
- *Capital improvement projects (CIP)*
- *University communication of the SSMP, SSO and FOG Reduction Programs to reach the campus community:*
 - *University Website*
 - *CSUDH newspaper*
 - *Informational brochures/flyers*
 - *Link to the State Water Resources Control Board SSO website*

SSMP Goals

The University's SSMP identifies the administrative and maintenance positions responsible for implementing measures in the SSMP - Sanitary Sewer Overflow Program (SSO), including lines of authority by organization chart.

The campus has identified lines of authority for staff that is directly responsible for successful implementation of this plan.

California State University, Dominguez Hills' Sewer System Management Plan identifies the chain of communication for reporting overflows, from receipt of a complaint or other information, including the person responsible for reporting overflows to the Regional Water Quality Control Board, Sanitation District of Los Angeles County, Los Angeles County Health Department and the California Emergency Management Agency (Cal EMA).

This document has been developed to comply with WDR Order No. R3-2006-0003-DWQ and sets specific wastewater collection system requirements for all permittees and upholds State water quality standards. CSUDH hopes to minimize infiltration/inflow to reduce and prevent SSOs, and to help mitigate any SSOs that do occur by following this SSMP.

Safety

Health Hazards

Many disease-causing agents are potentially present in raw sewage. These organisms include bacteria, viruses, fungi and parasites. In the U.S., most illnesses associated with raw sewage exposure produce mild to severe flu-like or cold-like symptoms. However, more serious illnesses, such as Hepatitis A, can be contracted through direct contact (mouth, eyes, nose, and ears) with raw sewage. With respect to HIV (AIDS) and HBV (Hepatitis B), the Division of Occupational Safety and Health (DOSH) has stated, in the Bloodborne Pathogen Standard, the following:

There is no evidence to suggest that sewage plant or wastewater workers are at increased risk for hepatitis B infection. HBV and HIV may be present in wastewater, but only in a non-viable state and in very dilute concentrations, which would not be expected to pose a risk to wastewater workers or sewage plant workers.

Since microorganisms can cause disease by entering the body through the mouth, eyes, ears, nose, or through cuts and abrasions to the skin, proper hygiene, and appropriate personal protective equipment (PPE) must be utilized when the potential for direct contact with raw sewage is possible.

Proper Hygiene

- Wear waterproof gloves. Do not touch fecal matter or raw sewage with bare hands. Use an instrument such as tongs or a spade when direct contact with fecal material is necessary.
- Wash your hands thoroughly after clean-up work. Use plenty of soap, scrub for at least 30 seconds, and rinse thoroughly. The California Department of Health Services states: "frequent, routine hand washing is the most important safeguard in preventing infection by agents present in sewage."
- Do not touch your nose, mouth eyes or ears with your hands unless you have just washed.
- Do not smoke, eat, drink, apply lip treatments, or chew gum while cleaning up fecal matter or raw sewage.
- Reduce exposure by keeping those who are not properly protected from coming in contact with the material.
- Clean everything, including clothes, tools, and footwear, that came in contact with the fecal matter or raw sewage. Use approved cleaning agent to wash down contaminated surfaces and clean-up equipment.

Personal Protective and Clean Up Equipment

As appropriate, use the following equipment when cleaning sewage spills.

- Waterproof gloves
- Face shield
- Impervious coveralls
- Disinfectant detergent
- Bucket(s)
- Wet/Dry vacuum
- Sprayers
- Mops
- Tongs
- Shovels
- Portable pump
- Fan/blower
- Portable generator
- Confined space entry equipment

Clean Up Procedure

With any spill, the following procedures and actions should be considered.

- Evaluate how big the spill is (or may become) and take actions to contain the spill in the smallest area possible. If possible, prevent the spill from entering a storm drain.
- Secure area against unauthorized entry.
- Investigate the potential for electrical hazards and de-energize electrical circuits as necessary.
- Determine if confined space procedures are required and implement as necessary.
- Follow the “Proper Hygiene” section of this document during any clean-up activities.
- Acquire all appropriate Personal Protective Equipment (PPE) and clean up equipment.
- Prepare disinfectant detergent, in bucket(s) and/or sprayer(s), in accordance with the manufacturer’s directions.
- Put on appropriate PPE
- Remove all furniture, loose rugs, and other items from the contaminated area.
- Saturated wall-to-wall carpeting (including padding) should be removed, wrapped in plastic, and appropriately discarded. These items can not normally be adequately cleaned. If it is decided to keep the carpeting, hire a licensed carpet cleaning company to steam clean and disinfect the carpet.
- All hard surfaces, such as linoleum, hardwood floors, concrete, wood moldings, wood, and metal furniture, etc. should be thoroughly cleaned with hot water and disinfectant detergent. Let the surface air-dry.
- Upholstered furniture, loose rugs, draperies etc., should be professionally cleaned. Notify the cleaner of the problem.
- Remove and replace plaster, plasterboard, and lath that have been saturated and are soft to the touch. If the surface has only been wetted, it should be cleaned as any hard surface would be cleaned, but do not saturate the plaster.

- Clean sinks, rinse basins, and/or other plumbing fixtures that have had sewage back-up, with disinfectant detergent.
- Collect and dispose of raw sewage and/or fecal matter into an active sewer system.
- If spill is inside a building, increase air circulation to reduce odors and mold growth. Open all windows and doors. The use of fans and heaters should also be used to speed the drying process.
- Following complete clean-up of the contaminated area, wash your hands thoroughly and launder soiled clothes separately. Disinfect “clean-up” mops, brooms, shovels, tongs, brushes, etc. with disinfectant detergent.

If any questions or concerns arise during the clean-up and disposal process, the Environmental Compliance Specialist should be contacted.

Exposure and First Aid

If you believe that raw sewage has come into direct contact with your eyes, mouth, ears, nose, or a cut, abrasion, puncture, etc., immediately and thoroughly wash the exposed area with copious amounts of soap and water and seek appropriate medical care.

Appendix

Campus Map

Campus Map – 2011

Legend

- Streets and Roads
- Pedestrian Access/Sidewalks
- Building I.D. Symbol
- Parking Ticket Dispenser
- \$4 – All Day Pass
- Information Center

Building I.D. Number & Name

1. (SCC-1) SMALL COLLEGE COMPLEX 1
2. (SCC-2) SMALL COLLEGE COMPLEX 2
3. (SCC-3) SMALL COLLEGE COMPLEX 3
4. (SCC-4) SMALL COLLEGE COMPLEX 4
5. (SCC-5) SMALL COLLEGE COMPLEX 5
6. (SCC-6) SMALL COLLEGE COMPLEX 6
8. (SCC-8) SMALL COLLEGE COMPLEX 8
7. (SCC-7) SMALL COLLEGE COMPLEX 7
8. (SCC-8) SMALL COLLEGE COMPLEX 8
9. (SCC-9) SMALL COLLEGE COMPLEX 9
10. (SCC-10) SMALL COLLEGE COMPLEX 10
11. (SCC-11) SMALL COLLEGE COMPLEX 11
13. (SCC-13) SMALL COLLEGE COMPLEX 13
14. (COE) SCHOOL OF EDUCATION
20. (LIB) LEO F. CAIN LIBRARY
- 20A. (LIB) LIBRARY ADDITION
23. (WH) JAMES L. WELCH HALL
25. (SHC) STUDENT HEALTH CENTER
28. (LSU) LOKER STUDENT UNION
30. (SBS) SOCIAL AND BEHAVIORAL SCIENCES
40. (LCH) LACORTE HALL
45. (UT) UNIVERSITY THEATRE
60. (NSM) NATURAL SCIENCES AND MATHEMATICS
60. (GYM) GYMNASIUM
61. (FH) FIELD HOUSE
63. (SP) SWIMMING POOL
70. (BLDG A) PUEBLO DOMINGUEZ # 3H-1
71. (BLDG X) PUEBLO DOMINGUEZ # 3H-2
80. (PP) PHYSICAL PLANT
87. (CP) CENTRAL PLANT
100. (SAC-1) SOUTH ACADEMIC COMPLEX 1
102. (SAC-2) SOUTH ACADEMIC COMPLEX 2
103. (SAC-3) SOUTH ACADEMIC COMPLEX 3
104. (SAC-4) CALIFORNIA ACADEMY OF MATHEMATICS AND SCIENCE LABS
105. (HC) HUGHES ATHLETIC AND EDUCATION
106. (EE) EXTENDED EDUCATION CENTER
107. (CAMS) CALIFORNIA ACADEMY OF MATHEMATICS AND SCIENCE
111. BASEBALL/SOFTBALL STORAGE
118. (EAC) EAST ACADEMIC COMPLEX
118. (CAMS) CALIFORNIA ACADEMY OF MATHEMATICS AND SCIENCE
120. (CDC) CHILD DEVELOPMENT CENTER
121. (ITC) INFANT TODDLER CENTER

