

California State University, Bakersfield
Sewer System Management Plan



CALIFORNIA STATE UNIVERSITY
BAKERSFIELD
Safety and Risk Management

Reviewed March 2023

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2. REGULATORY BACKGROUND

This Sanitary System Management Plan (SSMP) is required under the Central Valley Regional Water Resources Control Board (CVRWQCB), Region 5, Waste Discharge Requirements (WDR). The WDR stipulate that the enrollee, California State University, Bakersfield (CSUB), must develop and implement a Management Plan to reduce sanitary sewer overflows. Additionally, the Management Plan provides measures to ensure efficient and effective response to overflows and implement (FOG) control measures to minimize the introduction of grease and oils.

The State Water Resources Control Board (SWRCB) adopted the Statewide General Discharge Requirements for Sanitary Sewer Overflows, (SSOs) on May 2, 2006. The SWRCB developed the WDR to promote uniformity in the management of California's sanitary sewer systems and reduce SSOs. The SWRCB found that Sanitary Sewer Management Programs (SSMP) were effective not only in improving spill reporting, but also in mitigating SSO impacts on California's water resources. Data supported the conclusion that better collection system management, will benefit water quality, and prolong the life of existing sanitary sewer systems.

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

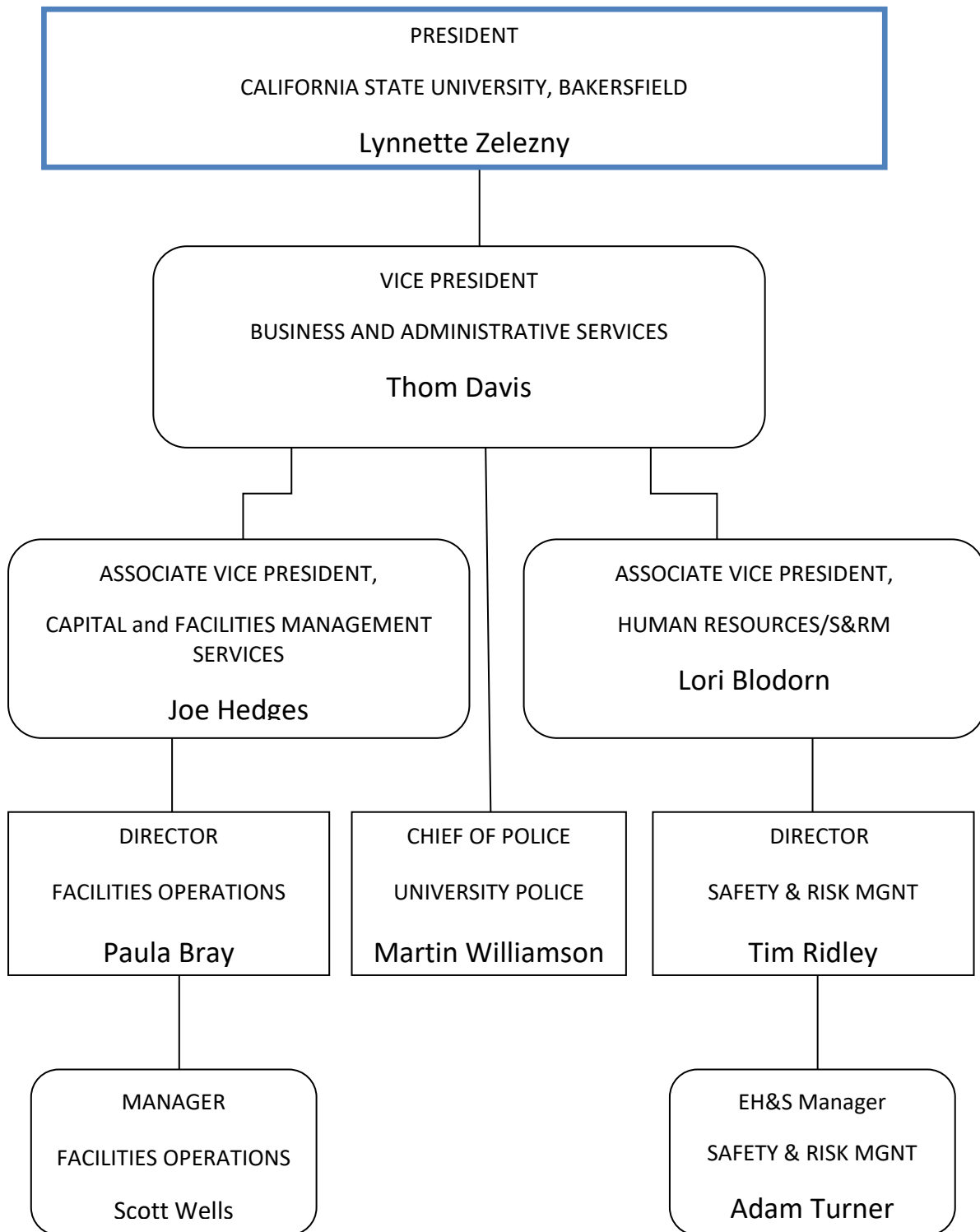
2.1. PURPOSE AND GOALS OF THE SSMP

This document was developed to comply with WDR 2006-0003, Waste Discharge Requirements. Sanitary sewer overflows are defined by the SWRCB as overflows from sanitary sewer systems of domestic, industrial, and/or commercial wastewater as well as wastewater backups into buildings and on private property that are caused by blockages in the publicly owned portion of the sanitary sewer system.

- The goals and objectives of the Sanitary Sewer Management Plan are:
- To properly manage, operate, and maintain the University sanitary sewer system;
- To ensure the system provides for adequate capacity during peak flows; and,
- To minimize the likelihood, frequency, and severity of SSOs.

3. ORGANIZATION

3.1. ORGANIZATIONAL CHART



3.2. ADMINISTRATION AND MAINTENANCE ORGANIZATION

The administrative responsibility for CSUB's sanitary sewer system ultimately rests with the Office of the President, the Vice President of Business and Administrative Services functions as the day-to-day administrator. The departments reportable to the VP, BAS include CFMS, FM Operations, UP, Human Resources, and SRM. The responsibilities of each department are summarized below, and an organizational chart is included, listing administrative responsibilities for CSUB Sanitary Sewer System.

VP BAS: The Vice President of Business and Administrative Services is responsible for long term planning, budget allocation and capital projects.

AVP CFMS: The Associate Vice President of Capital and Facilities Maintenance Systems is responsible for the management of the design and construction of additions, rehabilitations, or modifications to the sanitary sewer system.

FM Ops: The Director of Facilities Operations is responsible for the overall operation and maintenance of the sanitary sewer system including oversight of any contractor making repairs on the system. Supervisor of FM Trades is responsible for monitoring and maintenance of campus grease traps, backflow prevention systems, and sewer lift station.

UP Dispatcher: The University Police Dispatcher is responsible for contacting the assigned campus first responder, Human Resources, and SRM staff in the event of a reported SSO.

AVP HR: The Associate Vice President of Human Resources oversees the Director of Safety & Risk Management and ensures critical communication with staff and faculty.

Safety and Risk Management: The Director of SRM is considered the enrollee for the sanitary sewer system. The implementation of permit requirements and reporting to regulatory agencies is the responsibility of SRM, including the tracking of all SSOs. SRM serves as the coordinator for periodic review and updating of operations. Facilities management will update SRM on any changes to the system.

Table 3.3 Measures and Activities, presents the required elements for the SSMP. The table identifies each element and the person and position at CSUB that is responsible for that element.

3.3. Table Measures and Activities

| CSUB Measures and Activities for General Permit Required Elements | Responsible Party | Telephone |
|---|--|---------------------|
| Operations and Maintenance | | |
| <p>“Provide adequate operations and maintenance of facilities and equipment.”</p> <p>“Provide equipment and replacement parts inventories, including identification of critical replacement parts.”</p> <p>“Routine preventative maintenance O&M activities by staff and contractors.”</p> <p>Operation and maintenance of the sanitary sewer is the responsibility of the CSUB Facilities Management department. This includes maintaining all lines, lift stations, and alarm systems. The Department is also the first responder to sanitary sewer overflows.</p> <p>“Provide training on a regular basis for staff collection system operations, maintenance and monitoring, and determine if contractors’ staffs are properly trained.”</p> <p>The CSUB sanitary sewer system is located on State property, and as such, CSUB will respond to any overflow of our system. Response to overflows is addressed in the Overflow Emergency Response Plan, discussed in Section 6. All overflows will be responded to in the same manner.</p> | <p>Director of Facilities Operations</p> | <p>661-654-3283</p> |
| Update Maps | | |
| <p>“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.”</p> <p>“Describe fiscal resources necessary to ensure system operation, including fee structure, fiscal resources, actual and projected five-year budget expenses for staffing, operation, capital improvement projects, and reserves.”</p> <p>“Identify and prioritize structural deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency.”</p> <p>“Maintain relevant information to establish and prioritize appropriate SSMP activities such as the elimination of overflows and identify and illustrate trends in overflows.”</p> | <p>Associate Vice President, Capital, and Facilities Management Services</p> | <p>661-654-2483</p> |

| CSUB Measures and Activities for General Permit Required Elements | Responsible Party | Telephone |
|---|--------------------------------------|--------------|
| Maintain Information for Establishing Priorities | | |
| SRM is responsible for ensuring the safety & health of employees working on the sewer system, including assistance with confined space entry, hazard assessment, and safe operating procedures. | Director, Safety and Risk Management | 661-654-2066 |
| SRM is responsible for maintaining records regarding SSOs. Overflows of any amount are reported to SRM, whereby staff track overflows and assess the frequency and volume of overflows while working with Facilities Management to reduce and prevent SSOs. | | |
| “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.” | | |

3.4. LEGAL AUTHORITY

The Board of Trustees is responsible for the oversight of the California State University. The Board adopts rules, regulations, and policies and as such, the Board has authority over the development and use of University property, facilities, and fiscal resource management. Under this authority, the California State University Board of Trustees has a legal right to:

- Require that sewers and connections be properly designed and constructed.
- Ensure proper installation, testing, and inspection of new and rehabilitated sewers.
- Prevent illicit discharges into its system (e.g., storm water or chemical dumping).
- Ensure access for maintenance, inspection, or repairs of all portions of the system operated by CSUB.

4. OPERATION AND MAINTENANCE PROGRAM

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

4.1. Preventative Maintenance

CSUB has measures in place to keep the sewer system in good repair and prevent excessive infiltration/inflow, service interruptions, and/or system failures. This is done through regularly scheduled maintenance and cleaning of the collection system, which is summarized below.

4.2. Staffing Levels

There are approximately six FM staff members that operate and maintain the sanitary sewer system. Staff is available 24 hours a day, 365 days a year to respond and operate the system.

4.3. Routine Inspections

Lift stations: visually inspected bi-monthly

Emergency standby generators: No-load runs are conducted for 30 minutes each month.

4.4. Routine Maintenance

Root control: Maintenance from root intrusion is conducted on an as-needed basis.

Odor control: CSUB has an odor control system located at the campus lift stations. The system consists of a degreaser and liquid enzyme feed port. This system prevents the buildup of hydrogen sulfide gas and grease, which can lead to the deterioration of the system.

Overall System: Once a year the system is cleaned using a hydro jet or vacuum in targeted areas selected based on the information obtained through system disruption and problematic areas.

CSUB 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.

4.5. Equipment

A stock room of parts and equipment, including emergency pumps, lights, and generators is maintained in Facilities Management. Repairs that require equipment or materials beyond existing capabilities are contracted out via a service agreement contract facilitated by the Office of Procurement. Current contractors with service agreements are: Stan's Plumbing Services, Taft Plumbing Services, Knight's Plumbing Service, and Granite Construction.

4.6. Training

Ongoing technical training for FM staff responding to sewer spills.

Technical training will be provided when new systems are installed to operators of system.

5. FACILITY DESCRIPTION

California State University, Bakersfield is one of 23 campuses governed by the Trustees of the California State University, and the CSU Chancellor's Office. The university is situated in the heart of the west coast's oil- and food-producing regions and located at a logistics crossroad of east-west and north-south transportation. CSU Bakersfield is the only regionally comprehensive public university within a 100-mile radius. The university offers high-quality undergraduate and graduate programs advancing the intellectual and personal development of its students. CSU Bakersfield is committed to scholarship, diversity, service, global awareness and life-long learning. The university collaborates with partners in the community to increase the region's overall educational level, enhance its quality of life, and support its economic development.

The maps of the sanitary sewer system (Appendix A) are either in AutoCAD or hard copy format. The main campus is in Auto CAD format. The map shows line size and has partial details regarding manholes including name of manhole and ring elevation. Hard copies are in the main Facilities Management building as "as built" blueprints.

CSUB is divided into four major areas:

- (1) North West Campus, comprising academic, administrative, and student service departments, and theater areas
- (2) North East Campus, which includes athletic fields, three science buildings, academic classrooms and library / information technology support services.
- (3) South West Campus, which includes academic and administrative offices, children's center and facilities management
- (4) South East Campus is comprised of athletic fields, athletic administration and the Facility for Animal Care and Treatment which specializes in rehabilitation of endangered or protected species, particularly birds of prey.

The 2022- 2023 population, which included students, faculty, and staff, was 14000 with an additional visitor rate of approximately 20,000 per year. The population projection for 2023–2024 has not changed appreciatively; the campus has limited enrollment due to State budgetary issues. Undeveloped campus property is home to several of the Endangered Kit Fox. These animals are monitored by the State Fish and Game.

6. SANITARY SEWER SYSTEM DESCRIPTION

The campus sanitary sewer system is shown on maps provided in Appendix A.

The sanitary sewer system at CSUB has been in use since 1965 and comprises over 78,000 linear feet of collection pipe ranging from 4 to 18 inches in diameter. Original pipe has been replaced as upgrades or repairs have been required or new facilities have been constructed. The piping consists of a combination of vitrified clay, cast iron, polyvinyl chloride, asbestos, and cement. Sanitary sewage is collected from campus buildings that house administration, classrooms, laboratories, and student residential, and dining hall facilities. The system ultimately feeds to the City of Bakersfield wastewater treatment plant #3, located 6.3 miles from campus.

SSOs of large volume would be captured by the storm sewer system that drains to lateral sumps on the CSU campus. There is no run-off from the campus to off-site streams or water sources.

6.1. DESIGN AND PERFORMANCE PROVISIONS

The University has adopted the City of Bakersfield Wastewater Division's design and performance standards, which are documented in the Procedural Manual and Standard Specifications for the Construction of Sanitary Sewers, specifically Part III (Design Requirements), Part IV (Standard Sewer Construction Specifications), and Part V (Lateral and Building Sewer Construction Specifications). These references are found at the City of Bakersfield's Public Works, Wastewater Division website: [4c6d1bb9-f5c5-4a1f-b0fd-177018967488 \(civicplus.com\)](https://www.civicplus.com/4c6d1bb9-f5c5-4a1f-b0fd-177018967488)

6.2. STANDARDS FOR INSTALLATION, REHABILITATION, AND REPAIR

The City of Bakersfield, Wastewater Division standards (found at referenced internet site above) outline construction specifications for installing new sewer systems, pump stations, and other appurtenances, 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 City of Bakersfield standards. At the present time, CSUB has neither deficiencies nor areas needing rehabilitation.

6.3. 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 / or video inspection to identify grade variations or other construction defects. CSUB will adhere to the standards for inspection and testing of new or rehabilitated facilities that are outlined in the City of Bakersfield standards.

7. OVERFLOW EMERGENCY RESPONSE PLAN

7.1. OBJECTIVE AND PURPOSE

The Overflow and Emergency Response Plan (OERP) was developed as part of the CSUB SSMP. The purpose of the plan is to establish guidelines and measures to protect public health and the environment in case of an accidental overflow.

In case of an overflow, CSUB shall dispatch the appropriate crews to investigate, identify the cause, and provide appropriate service to minimize the effects of the overflow on public health and quality of surface waters. The OERP further specifies the required notification and reporting that is necessary for local and state agencies.

All FM personnel will be required to read the OERP and familiarize themselves with the procedures. The OERP will be kept in an easily available location for all FM personnel and on the CSUB web site for public access reference.

8. ROLES AND RESPONSIBILITIES

The departments of Safety and Risk Management, Facilities Management, and University Police are the campus entities responsible for implementing the OERP. The responsibilities of the departments are specified below:

8.1. Safety and Risk Management

S&RM is responsible for:

- a) External agency notification.
- b) Exposure and hazard assessment
- c) Preparation and submittal of monthly as well as the annual reporting as specified; and
- d) Interface with external regulatory agencies.

8.2. Facilities Management and Operations

FM Operations is responsible for:

- a) Acting as first responder
- b) Providing and coordinating the operational aspects of the SSMP to control and mitigate the overflow; and
- c) Establishing preventive measures to minimize future accidental releases.

8.3. University Police

UP is responsible for:

- a) Site security
- b) Traffic; and
- c) Crowd control measures on an as needed basis.

9. OVERFLOW RESPONSE PLAN

The OERP presents a strategy for CSUB to respond to potential overflows with appropriate personnel, materials, tools, and equipment; this will help correct or repair any condition which may cause or contribute to an un-permitted discharge from the sanitary sewer.

9.1. Receipt of Information Regarding an Overflow

Overflows are typically detected and reported in one of three ways:

By the sewer alarm system - The CSUB sanitary sewer system monitors wet well levels, the system allows for immediate notification of any equipment failure in either the visual or audible alarm.

Members of the University community or the public who observe an SSO may call University Police dispatch phone line, 24 hours a day, at 661-654-2111 to report an incident from any of several "Emergency call stations" located throughout the campus. Upon verbal report or electronic enunciator notification, University Police dispatch will immediately notify the FM Ops staff members designated as the campus's first responder for SSOs.

The FM Ops first responder will immediately investigate and determine the appropriate response. A report of overflow will be reported to S&RM staff as soon as the first responder has verified the SSO and made a determination of cause and proposed actions. The S&RM will notify the appropriate regulatory agencies.

By FM personnel during daily routines - FM personnel who discover a potential overflow during their daily operations are responsible for immediately notifying the proper supervisor and taking appropriate action.

By the public - Members of the campus community who observe a sanitary sewer overflow (SSO) may call the University Police Dispatch center at 661-654-2111. Section 9.2 details dispatch responsibility.

Emergency response is available on campus 24 hours per day, every day.

9.2. Dispatch Responsibility

When the dispatch personnel receive calls from the public, they will obtain all relevant information available regarding the possible overflow including:

- Time and date the call was received,
- Specific location of possible overflow,
- Description of the problem, and
- Caller's name and call back phone number.

UP dispatcher will immediately notify the designated campus first responder for SSOs, who is a member of the FM staff. Response time to a SSO will be less than thirty minutes after the first call.

9.3. First Responder Assessment of Overflow

The failure of any element of the sanitary sewer system that threatens to cause or causes a SSO will be responded to by the FM first responder. The first responder's responsibility is to isolate and correct the problem.

Note: Facility Maintenance personnel and custodial staff who may be first responders to a raw sewage overflow are offered Hepatitis A vaccine as part of the Occupational Medical Program. S&RM recommends personnel who are the call-out list to respond to Sewer Overflows receive the vaccination.

The first responder will:

- Assess the failure of equipment or overflow release
- Call for assistance, including additional personnel, materials, supplies, and equipment. If the spill is larger than they can adequately respond to, an outside contractor will be called
- Review "Sewer Spill Response Procedure" prior to proceeding
- Make internal notification to next in command
- Use appropriate Personal Protective Equipment
- Use appropriate safety precautionary measures including Lockout/Tagout and Confined Space protocols
- Obtain necessary equipment to respond to the spill. FM maintains a supply of materials to mitigate spills. Available equipment includes gravel bags, bypass pumps, hoses, emergency generators, and heavy equipment;
- Assess if the overflow migrated onto private property, and
- Coordinate with S&RM staff if there is any suspicion of hazardous material release (e.g. oil sheen, foam) at the scene, or if there are suspicious odors (e.g. gasoline) not common to the sewer system.

10. Notification Procedures

10.1. Internal Notification Procedures Internal contact phone numbers:

| Department | Contact Hours | Telephone |
|--------------------------------------|--------------------------------|---------------|
| University Police Dispatcher | 24 hours | 661-654-2111 |
| Facilities Management and Operations | Monday-Friday 8:00am-5:00pm | 661-654-2211 |
| University Police | After Hours | 661-654-2111 |
| CFMS Office, AVP | Monday-Friday | 661-654-2211 |
| Joe Hedges | 8:00am-5:00pm | |
| FM Ops Office, Director | Monday-Friday | 661-654-3283 |
| Paula Bray | 8:00am-5:00pm | |
| FM Ops Office, Supervisor | Monday-Friday | 661-654-2522 |
| Scott Wells | 8:00am-5:00pm | |
| Business and Administrative Services | Monday-Friday | 661-654-2287 |
| BAS Office, Vice President | 8:00am-5:00pm | |
| Thom Davis | | |
| SRM Office, AVP, HR | Monday-Friday | 661-654-2266 |
| Lori Blodorn | 8:00am-5:00pm | |
| Safety and Risk Management | Monday-Friday | |
| Tim Ridley, Director | 8:00am-5:00pm | 661-654-2066 |
| Adam Turner, EH&S Manager | | 661-654-6320 |
| Tim Ridley | After Hours | 661-703 -2130 |

11. REGULATORY NOTIFICATION PROCEDURES

Regulatory notification procedures will be administered by Safety and Risk Management staff.

11.1. Oral Notification

Sewage spills greater than 1,000 gallons, all sewage spills that enter waters of the state, and spills that occur where public contact is likely, regardless of the size are reported to the RWQCB, Central Valley Region by telephone (559-445-5116). The response time will be less than 24 hours.

11.2. Online Reporting

Reporting of SSO's shall be according to State Water Resources Control Board, Monitoring and Reporting Program N. 2006-0003-DWQ, Statewide General waste Discharge Requirements for Sanitary Sewer Systems. Reporting will be done via the on-line reporting system at: <https://ciwqs.waterboards.ca.gov/>.

For spills 1000 gallons or greater, which discharge into public surface water way, or discharge into other than a sanitary sewer system are Category 1. These must be reported as soon as possible, but not more than 3 days after the spill. Within 15 days, a final report will be made on the on-line system. Additional reporting requirements follow.

- Category 2 spills include all other discharges resulting from failure of the sanitary sewer system.

Annual on-line certification of the CSUB sewer system management program is also required by January 30 of each year.

11.3. Additional External Notification by Telephone

Any discharge of sewage into or onto a waterway must be reported to OES.

Office of Emergency Services (OES)

800-852-7550 or 916-845-8911 (OES Warning Center)

The following agencies should also be notified when an overflow has occurred:

Central Valley Region WQCB, 559-445-5116

Central Valley Regional Water Quality Control Board; 1685 E Street Suite 100; Fresno, Ca. 93706)

Kern County Public Health Department

Notified within 24 hours when public health concern or waterway release. A written report is due within 72 hours.

1-800-974-2717 or 661-868-0306

California Department of Fish and Game

When there is a spill into a water way

1-805-852-7550 or 1-800-OILS-911

City of Bakersfield

When there is a violation of a discharge prohibition.

Non-emergency reporting

Bakersfield Fire, Prevention Services, 661-326- 3979

12. Overflow Correction, Containment, and Clean-up

The following are specific actions to be performed by the response crews during an SSO:

- Stop the overflow. If the failure is at a lift station, take the malfunctioning pump off line;
- If necessary, call UP Dispatcher to request Officer assistance to secure the affected area and post warning signs. UPD has barricades, cones, and fencing available to secure the site;
- Contain the wastewater discharged to the maximum extent possible by utilizing spill containment devices stored in FM yard;
- Determine the location and cause of the overflow. Assessment will include a check of the lift station pumps, as well as, upstream and downstream manholes;
- Implement corrective action, and notify dispatch if any equipment that is not available on site; UP dispatch will notify Director of Procurement for authorized vendors and call out numbers;
- Coordinate cleaning and sanitizing efforts of the affected area(s);
- Finalize incident documentation;
- Review overall response and debrief.

13. TRAINING REQUIREMENTS

Training will be conducted for members of the departments that are responsible for implementing the OERP which includes Safety and Risk Management, FM Operations, and University Police and Dispatchers.

S&RM is responsible for providing exposure control training for FM staff. FM is responsible for providing technical training for FM staff responding to sewer spills.

14. OVERFLOW EMERGENCY RESPONSE PLAN UPDATE

OERP is reviewed on an annual basis by S&RM and FM Operations. Interim changes are incorporated into the document by S&RM staff on an as needed basis.

Comments, updates, and other relevant information should be submitted to the S&RM department for review and inclusion in the next annual revision.

15. FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM

This FOG control program has been developed as part of the SSMP, the purpose of the program is to reduce the amount of fats, oils, and grease discharged to the sanitary sewer system. Since the sewer system at CSUB is not a public system, the university has direct control over any vendor or contractor which may dispose of grease and fats into the sanitary sewer. These policies are observed by all entities on campus.

CSUB adheres to best management practices (BMPs) that are outlined in Section 7.2 Best Management Practices. The elements of the FOG Control Program include; identification of grease traps or interceptors, routine maintenance, BMPs, record keeping practices, and inspections.

15.1. CURRENT INFRASTRUCTURE

The campus has two inground clarifiers. The campus has three locations which generate fats, oils and greases, the Runner Café, Panda Express, and mechanical repair shop. The system restaurant system does the following:

1. It has 2 tanks for Runner Café and 2 tanks for Panda Express
2. 1 tank has fresh oil for the fryers, the other has the old oil
3. Old oil is pulled out of the fryer at the actual fryer and pulled into the dirty oil tank
4. Fresh oil is then put into the fryer again at the actual fryer.
5. Typically at off times, the Restaurant Technologies Group (who provides the system to Aramark) will come by and pull the old oil out of the dirty oil tank and refill the Fresh Oil tank with new oil.

An outside contractor collects grease and oil from this for recycling.

Practices for collecting, disposing, and treating sewer lines for grease are:

- The Runner Café main trunk lines are hydro-jet cleaned every six months.
- Monthly preventative maintenance schedules to treat FOG emissions with enzymes, and chemical degreaser is used at both locations.

Table 15.2 Grease Interceptors and Traps

| Location | Capacity and general description of history of system | Organization Responsible for Initiating Repair Orders | Organization Responsible for Ensuring Repair Completion/ System Operation |
|---------------------|---|---|---|
| Runner Café | Self-contained oil use and reclaim system. | Owen Smith- Aramark | Wayne Narine – Director Campus Food Services |
| Panda Express | Grease traps | | Joe Hedges - AVP CFMS |
| Back of Runner Cafe | In ground Triple Clarifier | | |
| Maintenance yard | In ground Triple Clarifier | Facilities Mechanical repair shop | |

15.2. BEST MANAGEMENT PRACTICES.

BMPs are in place to prevent the introduction of grease and fats into the sewer system and primarily consists of training of new and established employees. Many employees are students, and therefore there is a high turnover and training needs to be revisited frequently and ongoing. Training occurs upon hiring by the kitchen manager.

- Kitchen staff is trained upon hiring on BMPs to ensure they are implemented.
- Kitchen staff is trained on bulk grease practices. Bulk grease is not washed into the sanitary sewer. Grease in pans is not washed down the drains either.
- Excess grease that is generated from grilling or frying at the Dining Commons, Runner Café, or The Roost is collected in a dedicated container. The grease is disposed of by a grease rendering company.
- Kitchen staff is to be instructed that if a grease interceptor is not working properly, facilities management is to be contacted.

Grease interceptor and trap cleaning/servicing records received by kitchen staff should be forwarded to Facilities Management to ensure the contractor is maintaining the inspection schedule and pumping out the grease interceptors when necessary. A periodic maintenance work order should be maintained in the TMA Work Order system to ensure the periodic servicing is ongoing and accomplished.

16.SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

The university is currently managing infrastructure and/or rehabilitation of the current sanitary sewer system as necessary. There have been no capacity related overflows during the past few years. Situations involving the system have been related to failure of pump motor systems only.

16.1. Short Term Actions

Short term actions are taken on an as-needed basis depending on information gathered during routine inspections. Short term actions implemented through this method include the following:

- Grease interceptor or trap installation,
- Identification and replacement of laterals,
- Manhole replacement, and
- Reverse grade and root intrusion corrections.

16.2. Long Term Planning

CSUB is updating the infrastructure of the campus, including the sanitary sewer. The sanitary sewer system was evaluated, and long-term planning recommendations made by Quad Knoff & Associates. CSUB is implementing sewer upgrades in phases. The first phase was completed with the construction of the Math and Computer Science Project. The sanitary sewer infrastructure improvements address increased campus sewer demand and eliminates the requirement of one existing lift station of sewer pipes which are at risk of collapse or are prone to more frequent blockages due to pipe deficiencies.

16.3. SYSTEM EVALUATION

As part of its plan to ensure adequate infrastructure capacity, and to identify any possible deficiencies in the system, CSUB has been monitoring current infrastructure, continuing to focus on observations of existing conditions, and adding proposed capital improvements necessary for the upkeep of the sanitary sewer system.

The following deficiencies and shortfalls have identified:

Evidence of root intrusion exists within the system.

Grease traps were not present (this deficiency has been addressed).

Although the network itself is structurally sound (minimal longitudinal cracking), many of the manholes are in poor condition.

No hydraulic model of the sanitary sewer system exists.

16.4. DESIGN CRITERIA

System evaluation has identified limitations with the current system; CSUB continues to establish appropriate renovations that meet the City of Bakersfield design criteria.

16.5. CAPACITY ENHANCEMENT MEASURES

Although two of the above deficiencies were corrected under ongoing facility maintenance programs, most will require comprehensive planning, design, and construction to address.

16.6. SCHEDULE

The system upgrades identified above were completed as funding becomes available. System upgrade timelines will be incorporated into the SSMP annual update.

CSUB does not receive revenues from a fee structure. Monetary funding for CSUB operations and capital improvements comes from the CSU Board of Trustee's and is managed by the CSUB Office of Budget and Planning. Funds are annually appropriated for the sewer system operation and maintenance.

Currently, FM Operations and Maintenance is appropriated approximately \$1,025,915 annually for all infrastructure, and maintenance. Of that total, the FM Operations Manager estimates that the sewer operations and maintenance expenditures for the 2021/2022 fiscal year was approximately \$10,000.

Additionally, CSUB pays the City of Bakersfield, Department of Public Works, Industrial Wastewater Division for accepting wastewater. For the 2020/2021 fiscal year, this amounted to approximately \$80,000 (2021/2022 was reduced due to COVID limiting campus population so does not reflect normal year as does 2020/2021).

Infrastructure Renewal Project: CSUB initiated an infrastructure renewal project, including the sanitary sewer.

There two phases to the project:

Phase I Completed 2010.

Phase II Completed in eliminated the need for one sewer lift station by re-routing a portion of the sewer discharge line to the Ming Avenue sewer connection. The budget expenditure plan for this project was included in the already approved Art Center and Satellite Central Plant upgrade. This infrastructure renewal project will expand the sanitary sewer system to ensure adequate capacity to convey base flows and peak flows, including wet weather events.

Phase II Completed 2014.

17. MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

The Associate Vice President of Capital and Facilities maintenance will monitor the effectiveness and implementation of the SSMP. Director of Facilities Operations and SRM will communicate with each other mid-year to monitor plan implementation. This can occur with a meeting, calls, or by e-mail. The purpose of the mid-year communication is to monitor how efficiently the SSMP is working and is being implemented.

Annually, S&RM will review the elements of the SSMP for changes and revisions with input from Facilities Management. Program elements will be updated, as appropriate, based upon monitoring or performance evaluation.

17.1. SSMP PROGRAM AUDITS

SRM will assess the effectiveness of the SSMP and will make updates periodically. SRM in collaboration with Director of Facilities Operations will evaluate any SSOs and make recommendations to prevent them from reoccurring.

18. COMMUNICATION PROGRAM

18.1. COMMUNICATING PLAN INFORMATION AND UPDATES

SRM will communicate with the campus community regarding the development, implementation, and performance of the SSMP. The SSMP will be updated to describe any significant changes in proposed actions or implementation schedules. The plan will be posted on the SRM website.

19. RECORDKEEPING AND REPORTING

Facilities will maintain records. Records will be kept for a minimum of 5 years from the date of any reported SSO. All records will be available for review upon request.

19.1. Table Reporting Schedule

| Report | Date |
|---|----------------------|
| Annual Overflow Report (or Certification Statement) | Annually by: Jan 30 |
| Annual Sewer System Management Plan Updates | Annually by: Jan 30 |
| Infiltration/Inflow & Spill Prevention Program Report | Annually by: Jan 30 |
| Report of Waste Discharge | Annually by: Sept 15 |

20. BIBLIOGRAPHY

California Water Code of Regulations, Division 7. Porter-Cologne Water Quality Control Act. January 1, 2006.
http://www.swrcb.ca.gov/water_laws/docs/portercologne.pdf

Environmental Protection Agency 2002 Clean Water Act. November 27, 2002. <http://epw.senate.gov/water.pdf>

City of Bakersfield Procedure Manual and Standard Specifications for the Construction of Sanitary Sewers:

<https://www.bakersfieldcity.us/632/Wastewater>

Regional Water Quality Control Board 2004 Waste Discharge Requirements Order No. R5-2009-0087

State Water Resources Control Board 2006 Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. May 2, 2006.

http://www.swrcb.ca.gov/resdec/wqorders/2006/wqo/wqo2006_0003.pdf

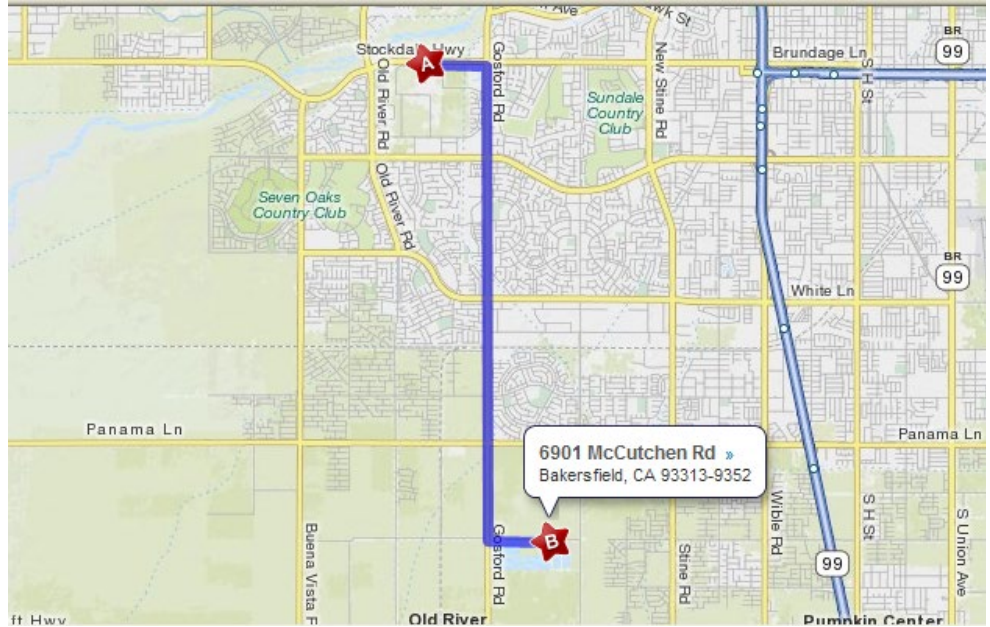
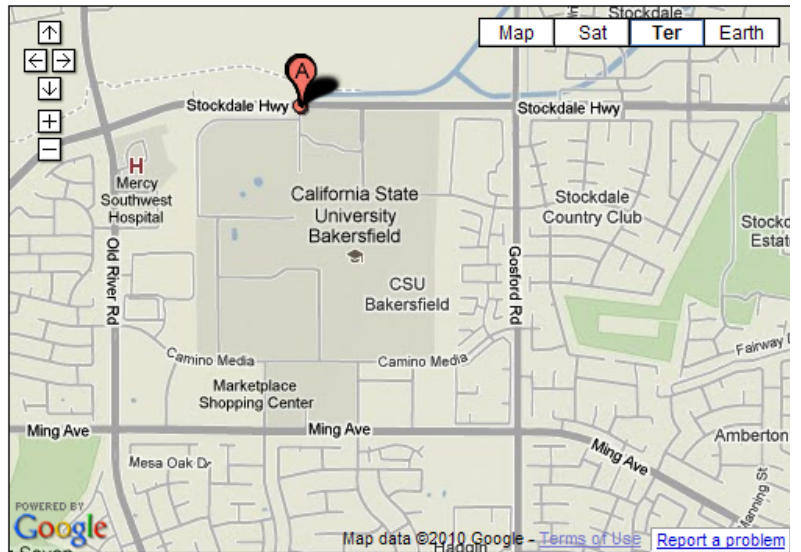
APPENDICES

APPENDIX A MAPS

CSUB PROPERTY BOUNDARY

SANITARY SEWER SYSTEM, SSMP

6.39 miles to station 3



| MH # | BLDG/ AREA # | DESCRIPTION | N-CORD | W-CORD |
|------|-----------------|------------------------------|--------------|---------------|
| MH01 | 37 | Between 37d and 37c- West | N 35° 21.006 | W 119° 06.245 |
| MH02 | 37 | Between 37f and 37c | N 35° 20.688 | W 119° 06.260 |
| MH03 | 37c | South of building | N 35° 20.689 | W 119° 06.211 |
| MH04 | 37b | South of building | N 35° 20.690 | W 119° 06.211 |
| MH05 | 37d | East of building | N 35° 20.703 | W 119° 06.294 |
| MH06 | 37 | Between 37e and 37a | N 35° 20.717 | W 119° 06.257 |
| MH07 | I | SW of Parking Lot I | N 35° 20.720 | W 119° 06.187 |
| MH08 | I | SW of Parking Lot I | N 35° 20.700 | W 119° 06.183 |
| MH09 | I | SW of Parking Lot I | N 35° 20.702 | W 119° 06.178 |
| MH10 | 41 | West of building | N 35° 20.717 | W 119° 06.104 |
| MH11 | 88 | NE of track | N 35° 20.700 | W 119° 06.098 |
| MH12 | 40-45 | East between bldg. 40 and 45 | N 35° 20.876 | W 119° 06.314 |
| MH13 | 61 | South of building 61 | N 35° 20.896 | W 119° 06.102 |
| MH14 | 40 | West of building 40 | N 35° 20.891 | W 119° 06.103 |
| MH15 | 52 | NE of building 52 | N 35° 20.882 | W 119° 06.166 |
| MH16 | 33 | North of building 33 | N 35° 20.909 | W 119° 06.162 |
| MH17 | 33 | South of building 33 | N 35° 20.888 | W 119° 06.166 |
| MH18 | 52 | West of building 52 | N 35° 20.850 | W 119° 06.225 |
| MH19 | 35 | West of building 35 | N 35° 20.861 | W 119° 06.198 |
| MH20 | 35 | West of building 35 | N 35° 20.869 | W 119° 06.197 |
| MH21 | 33-35 | NE between bldg. 33 and 35 | N 35° 20.904 | W 119° 06.183 |
| MH22 | 44c | East of building 44c | N 35° 20.944 | W 119° 06.275 |
| MH23 | 44d | West of building 44d | N 35° 20.902 | W 119° 06.329 |
| MH24 | 14 | West of building 14 | N 35° 20.939 | W 119° 06.465 |
| MH25 | 14 | West of building 14 | N 35° 20.927 | W 119° 06.466 |
| MH26 | 13 | SE of building 13 | N 35° 20.938 | W 119° 06.432 |
| MH27 | 13 | South of building 13 | N 35° 20.941 | W 119° 06.450 |
| MH28 | 13 | South of building 13 | N 35° 20.935 | W 119° 06.441 |
| MH29 | 13 | South of building 13 | N 35° 20.942 | W 119° 06.443 |
| MH30 | 13 | East of building 13 | N 35° 20.951 | W 119° 06.424 |
| MH31 | 29 | North of building 29 | N 35° 20.037 | W 119° 06.485 |
| MH32 | 28 | North of building 28 | N 35° 20.015 | W 119° 06.497 |
| MH33 | 26 | North of building 26 | N 35° 20.983 | W 119° 06.460 |
| MH34 | 27 | South of building 27 | N 35° 20.984 | W 119° 06.492 |
| MH35 | 12-G | Btwn bldg. 12 & prkg lot G | N 35° 20.957 | W 119° 06.369 |
| MH36 | 39 | East of building 39 | N 35° 21.121 | W 119° 06.337 |
| MH37 | 39 | West of building 30 | N 35° 21.215 | W 119° 06.313 |
| MH38 | 2 | North of building 2 | N 35° 21.085 | W 119° 06.308 |
| MH39 | 1 | North of building 1 | N 35° 21.080 | W 119° 06.321 |
| MH40 | 2 | South of building 2 | N 35° 21.068 | W 119° 06.293 |
| MH41 | 1 | East of building 1 | N 35° 21.070 | W 119° 06.344 |
| MH42 | 1-3 | Between building 1 and 3 | N 35° 21.066 | W 119° 06.316 |
| MH43 | 4 | West of building 4 | N 35° 21.055 | W 119° 06.264 |
| MH44 | 4 | South of building 4 | N 35° 21.061 | W 119° 06.297 |
| MH45 | 4 | South of building 4 | N 35° 21.057 | W 119° 06.288 |
| MH46 | 10-34 | North, Btwn bldg. 10 and 34 | N 35° 21.029 | W 119° 06.256 |
| MH47 | 9 | West of building 9 | N 35° 21.033 | W 119° 06.317 |

APPENDIX B CSUB EMERGENCY SEWER SPILL RESPONSE

1.0 PURPOSE

The purpose of this procedure is to:

Establish minimum performance guidelines for employees who respond to spills involving raw sewage

Ensure that proper clean-up procedures are followed

Ensure appropriate personal protective procedures are followed and

Protect employees, the public, and the environment from the potentially harmful effects of chemical and/or pathogenic agents associated with sewage.

2.0 SCOPE

2.1 CSUB employees who respond to sewage spills;

2.2 Facilities Management employees and Safety and Risk Management (S&RM) personnel;

2.3 Indoor and outdoor discharges

3.0 Responsibility

Safety and Risk Management – SRM will be responsible for providing the following required response training: 1) Hazardous Materials Communication and its application to Sewage Spill Clean-up and/or 2) Confined Space Entry. S&RM will be responsible for providing public agency notifications as required by Environmental Health and Safety Codes and/or Regulations.

Facilities Management (FM) – Facilities Management personnel are primary responders to sewage spills. Responsibilities include proper cleanup and disposal of spilled sewage and issuance of permits for spill clean-up efforts in confined spaces.

FM Supervisors – Facilities Management supervisors will be responsible for ensuring that response personnel are trained prior to engaging in sewage spill clean-up efforts and for ensuring that sewage spill clean-up efforts are done in accordance with this Procedure.

4.0 Health Hazards of Sewage

4.1 Pathogens and Disease

Numerous disease-causing agents are potentially present in raw sewage. These organisms include amoebas, protozoa, bacteria, viruses, mold spores, etc. In the U.S., most illnesses associated with raw sewage exposure produce mild to severe flu-like or cold-like symptoms. more Hepatitis A, a more serious illness, can be contracted through contact (mouth, eyes, nose, and ears) with raw sewage. It is recommended that worked who frequently come in contact with raw sewage are given a Hepatitis A vaccination.

With respect to HIV (AIDS) and HBV (Hepatitis B), the Division of Occupational Safety and Health (DOSH) have stated, in their Frequently Asked Questions for Blood borne 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, care should be taken, and appropriate personal protective equipment (PPE) utilized, when the potential for direct contact with raw sewage is possible.

4.2 Hygiene

Do not touch fecal matter or raw sewage with bare hands. Wear waterproof gloves and use an instrument such as tongs or a spade for removing, collecting, or transferring raw sewage. 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 encountering the material.

Clean everything, including clothes, tools, and footwear, that met the fecal matter or raw sewage. Use Morning Mist Neutral Disinfectant Cleaner or its equivalent to wash down contaminated surfaces and "clean-up" equipment.

Wash your hands thoroughly even if you were wearing gloves the whole time. Use plenty of soap, scrub for at least 30 seconds, and rinse thoroughly with warm water. The California Department of Health Services states: "frequent, routine hand washing is the most important safeguard in preventing infection by agents present in sewage."

Sanitize all equipment with a 10% bleach or ammonium chloride-based sanitizer upon completion of work. Be sure to permit sanitizer sufficient retention time (a minimum of 2 minutes if not specified on product instructions) before rinsing from equipment.

4.3 Exposure and First Aid

An employee who believes they have received an exposure to raw sewage, that it has come into direct contact with eyes, mouth, ears, nose, or a cut, abrasion, puncture, etc., should immediately, and thoroughly, wash the exposed area with copious amounts of soap and water. If the employee has not previously received the Hepatitis A vaccine, the employee should be referred to a Health Center Occupational Physician for possible medical treatment or advice.

5.0 Personal Protective Equipment (PPE) & Clean-Up Equipment

The following equipment or equivalent is recommended for use, when cleaning up fecal matter or raw sewage spills:

| | |
|----------------------|--------------------------------|
| Waterproof gloves | Mops |
| Face Shield | Tongs |
| Impervious Coveralls | Hudson Sprayer |
| Buckets | Fans/blowers |
| Wet/Dry Vacuum | Confined Space Entry Equipment |

6.0 INITIAL RESPONSE procedure

Isolate the area from the general public using barrier tape.

Protect storm drain inlets by using drain mats

Determine source/cause of sewer backup

Determine exposure level of the area around the sewer backup and to the campus storm water system.

Isolate campus storm water, if necessary, from exiting campus system

Develop a mitigation plan for removing any potential contamination in the general area of the sewer backup and for decontaminating the campus storm water system.

Implement mitigation plan

Report sewer spill overflow (SSO) to SRM who will report to State Water Resources Board

This is a general process, but each incident may have additional steps required depending on the scope/breadth. The procedure does not include any steps regarding internal communications/notifications or any local agency requirements (i.e. public works). Even though this is primarily a facilities issue in terms of response, there are still regulatory issues that make it important for S&RM to be involved in the process.

7.0 Clean-up procedure

Secure area against unauthorized entry.

Investigate the potential for electrical hazards and de-energize electrical circuits as necessary.

Review Section Good Hygiene, of this document before beginning any clean-up activities.

Acquire all appropriate Personal Protective Equipment (PPE) as specified in Section 5. of this document.

Prepare Morning Mist Neutral Disinfectant Cleaner, in bucket(s) and/or Hudson Sprayer(s), in accordance with the manufacturer's directions.

Put on appropriate PPE

Remove all furniture, loose rugs, and so on from the area.

Saturated wall-to-wall carpeting (and the pad) usually cannot be adequately cleaned. They should be removed, wrapped in plastic, and taken to a transfer station or sanitary landfill. If you decide 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 Morning Mist Neutral Disinfectant Cleaner. Let the surface air-dry.

Upholstered furniture, loose rugs, drapery, and so on 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, clean as you would a hard surface, but do not saturate the plaster.

Clean sinks, rinse basins, and/or other plumbing fixtures that have had sewage back-up, with Morning Mist Neutral Disinfectant Cleaner.

Collect and dispose of raw sewage and/or fecal matter into an active sewer system.

If the spill is inside, increase air circulation to reduce the potential for 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 clothes separately. Disinfect "clean-up" mops, brooms, shovels, tongs, brushes, etc. with Morning Mist Neutral Disinfectant Cleaner.

If you have any questions or concerns regarding the clean-up and disposal of fecal matter and/or raw sewage, please contact the Office of Safety and Risk Management at 661-654-6022 or 661-654-6320. Internal contact phone numbers are listed below.

RAPID SEWER SPILL OVERFLOW (SSO) RESPONSE PROCEDURE

1. WEAR PPE: glasses, rubber boots, gloves, disposable coveralls.
2. STOP the flow.
3. NOTIFY S&RM and Supervisor.
4. ISOLATE and SECURE the area: barriers, signs.
5. MINIMIZE damage: CONTAIN spill. Vacuum, Mop. Use GFCI.
6. SANITIZE. 30 minutes sit time.
7. MOP with clean water. (Repeat #6 and #7.)
8. DECONTAMINATE equipment.
9. S&RM inspect, sample, and/or clear site.
10. RE-OPEN

| Department | Contact Hours | Telephone |
|--|--------------------------------|------------------------------|
| University Police Dispatcher | 24 hours | 661-654-2111 |
| University Police | Monday-Friday 8:00am-5:00pm | 661-654-2211 |
| Martin Williams | After Hours | 661-654-2111 |
| CFMS Office, AVP | Monday-Friday 8:00am-5:00pm | 661-654-2211 |
| Joe Hedges | | |
| FM Ops Office, Director | Monday-Friday 8:00am-5:00pm | 661-654-3283 |
| Paula Bray | | |
| FM Ops Office, Manager | Monday-Friday 8:00am-5:00pm | 661-654-2522 |
| Scott Wells | | |
| Business and Administrative Services BAS Office, Vice President | Monday-Friday 8:00am-5:00pm | 661-654-2287 |
| Thom Davis | | |
| AVP, HR | Monday-Friday 8:00am-5:00pm | 661-654-2266 |
| Lori Blodorn | | |
| Safety and Risk Management | Monday-Friday 8:00am-5:00pm | 661-654-2066 |
| Tim Ridley, Director, CIH | | |
| Adam Turner, EH&S Manager | After Hours | 661-654-6320 661-703 2130 |

APPENDIX C ANNUAL CHECKLIST

| Goals | Yes | No | Needs Revision |
|--|-------------------------------------|--------------------------|--------------------------|
| Are the goals stated in the SSMP clear and measurable? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| Organization | Yes | No | Needs Revision |
|--|-------------------------------------|--------------------------|--------------------------|
| Is the Key Staff Contact Information current? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is the SSO responder telephone list current? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is SSO reporting and response "Chain of Communication" current? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are the position descriptions an accurate portrayal of staff responsibilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| Legal Authority | Yes | No | Needs Revision |
|--|-------------------------------------|--------------------------|--------------------------|
| Does the SSMP cite the City's legal authority to: | | | |
| Prevent illicit discharges? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Require proper design and construction of sewer and connections? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the City? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Limit discharge of fats, oil, and grease? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Enforce any violation of its sewer ordinances? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Require the installation of grease removal equipment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Provide access for inspection of grease dischargers? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| Measures and Activities | Yes | No | Needs Revision |
|--|-------------------------------------|-------------------------------------|--------------------------|
| Are the maps of the sanitary sewer up-to-date? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is the required information shown on the maps? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are the current budget structures documented in the SSMP? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Were there adequate fiscal resources for effective operation, maintenance, and repair of the sanitary sewer systems in the past year? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewer lines? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are preventive maintenance activities sufficient and effective in minimizing SSOs and blockages? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Does the SSMP list the major equipment currently used in the operation and maintenance of the sanitary sewer systems and does it document the procedures for inventory management? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| Measures and Activities | Yes | No | Needs Revision |
|--|-------------------------------------|-------------------------------------|--------------------------|
| Is the status of the inventory up-to-date? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Have all members of the email distribution list been contacted regarding the status of the SSMP? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is an up-to-date copy of the SSMP on the CSUB website? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Were there any overflows to private property in the last year? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Did the plan facilitate a satisfactory response? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Have there been any changes in the organizational structure? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Has there been additional staff members hired to operate and maintain the system? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Is the training calendar current? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Does the SSMP document current training expectations and programs? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are records (such as work orders) available to indicate that the routine inspections and maintenance activities specified? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| Design and Performance Provisions | Yes | No | Needs Revision |
|--|-------------------------------------|--------------------------|--------------------------|
| Does the SSMP contain current design and construction standards for the installation of new sanitary sewer systems, pump stations, and other appurtenances and for the rehabilitation and repair of existing sanitary sewer systems? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Does the SSMP document current procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and the rehabilitation and repair of existing sewer lines? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| Monitoring, Measurement, and Plan Modifications | Yes | No | Needs Revision |
|---|-------------------------------------|--------------------------|--------------------------|
| Does the SSMP accurately portray the methods of tracking and reporting selected performance indicators? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is S&RM able to sufficiently evaluate the effectiveness of SSMP elements based on relevant information? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| Overflow Emergency Response Plan (OERP) | Yes | No | Needs Revision |
|---|-------------------------------------|--------------------------|--------------------------|
| Does the OERP establish procedures for the emergency response, notification, and reporting of SSOs? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are staff and contractor personnel appropriately trained on the procedures of the OERP? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is the OERP effective in handling SSOs to safeguard public health and the environment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| Overflow Emergency Response Plan (OERP) | Yes | No | Needs Revision |
|--|-------------------------------------|--------------------------|------------------------------|
| In the event of a SSO: (if applicable) N/A | | | |
| Were appropriate actions implemented to contain overflow? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> N/A |
| Were the appropriate materials available for spill response? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If contractors were required to respond to a SSO, was the response satisfactory? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> N/A |
| Were SSOs responded to within a half hour from the first call? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> N/A |
| Were there any issues with the functioning of the alarm system in the last year? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> N/A |
| Were the appropriate agencies contacted? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> N/A |
| Were the necessary records maintained? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| Fats, Oils, and Grease (FOG) Control Program | Yes | No | Needs Revision |
|--|-------------------------------------|-------------------------------------|--------------------------|
| Does FOG Control Program include efforts to educate employees on the proper handling and disposal of FOG? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Does the FOG Control Program identify sections of the sanitary sewer system subject to FOG blockages, establish a cleaning schedule and address source control measures to minimize these blockages? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are requirements for grease removal devices, best environmental management practices (BEMP), record keeping, and reporting established in the FOG Control Program? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is the current FOG Control Program effective in minimizing blockages of sewer lines resulting from discharges of FOG to the system? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If new grease traps or interceptors were installed, were their locations added to the maps? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Are the inspection and cleanout schedules accurate? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are the records available for review? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| System Evaluation and Capacity Assurance Plan | Yes | No | Needs Revision |
|--|-------------------------------------|--------------------------|--------------------------|
| Does the hydraulic capacity evaluation identify deficiencies in the sanitary sewer systems, establish sufficient design criteria and recommend both short-term and long-term capacity enhancement and improvement projects? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Does the capital improvement program (CIP) establish a schedule of completion dates for both short-term and long-term improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity accomplishment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| SSMP Program Audits | Yes | No | Needs Revision |
|---|-------------------------------------|--------------------------|--------------------------|
| Did SRM conduct SSMP audits and utilize the information from the audits to improve the performance of the SSMP? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| Time Schedule/Communication | Yes | No | Needs Revision |
|---|-------------------------------------|--------------------------|--------------------------|
| SRM will communicate with the campus community regarding the development, implementation, and performance of the SSMP. The Plan will be posted on the CSUB SRM website for the campus community to review and comment on. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The SSMP will be updated every five (5) years to describe any significant changes in proposed actions or implementation schedules. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Comments:

I certify the information above is correct and accurate to my knowledge.

Date: 03/23/2023



Signature:

Print: Timothy Ridley

APPENDIX D ABBREVIATIONS

| | |
|---------|---|
| BMP | Best Management Practices |
| Cal EMA | California Emergency Management Agency |
| CBWD | City of Bakersfield Industrial Wastewater Division |
| CBWTP | City of Bakersfield Wastewater Treatment Plant |
| CSUB | California State University, Bakersfield |
| CVRWQCB | Central Valley Regional Water Quality Control Board |
| CFMS | Capital and Facilities Management Services |
| FM Ops | Facilities Management and Operations |
| FOG | Fats, Oils, and Grease |
| HR | Human Resources |
| KCDPH | Kern County Department of Public Health |
| KCEHS | Kern County Office of Environmental Health and Safety |
| LO/TO | Lock out / Tag out |
| OERP | Overflow Emergency Response Plan |
| PPE | Personal Protective Equipment |
| RWQCBR | Regional Water Quality Control Board |

| | |
|--------|--|
| SRM | Safety and Risk Management |
| SSMP | Sewer System Management Plan |
| SSO | Sanitary Sewer Overflow |
| SWRCB | State Water Resources Control Board |
| UP | University Police |
| VP BAS | Vice President, Business and Administrative Services |
| WDR | Waste Discharge Requirement |