

Audit and Advisory Services
401 Golden Shore
Long Beach, CA 90802-4210

562-951-4430
562-951-4955 (Fax)
lmandel@calstate.edu

March 19, 2020

Dr. Judy K. Sakaki, President
Sonoma State University
1801 E. Cotati Avenue
Rohnert Park, CA 94928

Dear Dr. Sakaki:

Subject: Audit Report 19-39, Health and Safety, Sonoma State University

We have completed an audit of *Health and Safety* as part of our 2019 Audit Plan, and the final report is attached for your reference. The audit was conducted in accordance with the Institute of Internal Auditors' *International Standards for the Professional Practice of Internal Auditing*.

I have reviewed the management response and have concluded that it appropriately addresses our recommendations. The management response has been incorporated into the final audit report, which has been posted to Audit and Advisory Services' website. We will follow-up on the implementation of corrective actions outlined in the response and determine whether additional action is required.

Any observations not included in this report were discussed with your staff at the informal exit conference and may be subject to follow-up.

I wish to express my appreciation for the cooperation extended by the campus personnel over the course of this review.

Sincerely,



Larry Mandel
Vice Chancellor and Chief Audit Officer

c: Timothy P. White, Chancellor

CSU Campuses

Bakersfield • Channel Islands • Chico • Dominguez Hills • East Bay • Fresno • Fullerton • Humboldt • Long Beach • Los Angeles • Maritime Academy • Monterey Bay
Northridge • Pomona • Sacramento • San Bernardino • San Diego • San Francisco • San José • San Luis Obispo • San Marcos • Sonoma • Stanislaus



HEALTH AND SAFETY
Sonoma State University

Audit Report 19-39
February 10, 2020

EXECUTIVE SUMMARY

OBJECTIVE

The objectives of the audit were to ascertain the effectiveness of operational and administrative controls related to health and safety (HS) and to ensure compliance with relevant federal and state regulations; Trustee policy; Office of the Chancellor (CO) directives; and campus procedures.

Additionally, the audit reviewed the status of recommendations made in the California State Auditor (CSA) Audit Report 2017-119, the state audit review of HS conducted in 2017 at four California State University (CSU) campuses, including Sonoma State University.

CONCLUSION

Based upon the results of the work performed within the scope of the audit, the operational and administrative controls for HS as of November 26, 2019, were unlikely to provide reasonable assurance that risks were being managed and objectives were met.

In June 2019, the CSA reviewed responses for the 17 recommendations that were issued to the campus. At the time of our audit, seven recommendations were fully implemented, seven were partially implemented, and three were pending implementation. We reviewed these responses and performed testing to determine whether the campus had adequately addressed the CSA's recommendations.

Overall, we found that the campus was making improvements to certain HS areas, with guidance and consultation provided by environmental health and safety (EH&S). However, we found that certain campus corrective actions did not adequately address CSA recommendations or needed improvement on student training, laboratory inspections, emergency eyewash and safety showers, and fire extinguishers. Our review also found that the campus did not always comply with campus and regulatory requirements, did not have campus-specific policies related to the purchasing and receiving of hazardous materials (HAZMAT), and procurement cards (P-cards) were used for chemical purchases even though these purchases were prohibited by campus policy. Also, the campus did not always document standard operating procedures (SOP), update chemical inventory listings, and maintain safety data sheets (SDS). Furthermore, the campus did not always properly label and store HAZMAT, hazardous waste (HAZWASTE), and universal waste or properly secure pressurized gas cylinders.

Specific observations, recommendations, and management responses are detailed in the remainder of this report.

OBSERVATIONS, RECOMMENDATIONS, AND RESPONSES

CSA Recommendation Status

The following are observations on the status of recommendations made in the CSA Audit Report 2017-119.

1. STUDENT TRAINING

OBSERVATION

The campus had not adequately addressed the CSA's recommendations regarding student training.

The CSA reviewed the adequacy of student training in laboratory settings and issued three related recommendations (48, 52, and 57 in Appendix A).

In June 2019, the CSA reviewed the one-year response submitted by the campus in April 2019 and marked as fully implemented the recommendation regarding developing student safety training acknowledgement forms (48). However, the recommendations regarding requirement of the form (52) and annual review process and compliance with retention procedures (57) remained pending. Although the campus provided evidence demonstrating that students required to wear PPE had signed safety training acknowledgement forms, it did not provide evidence that it consistently required departments to have those students sign the forms. Also, although the campus provided evidence demonstrating that it performed a review in April 2019 to ensure that departments were using the forms, it did not provide evidence that it planned to do so at least annually or that its review ensured that departments were complying with the retention requirement.

We conducted a review of campus responses to the CSA and the procedures implemented as a result of the CSA audit and found that:

- The campus did not meet the deadlines imposed by the CSA, and in some cases, did not meet the proposed extended implementation dates.
- The campus developed safety training acknowledgement forms and, in the CHP, documented the requirement for instructors to conduct the student safety training and retention requirement for student safety acknowledgement forms. However, the campus did not have procedures for the review process by EH&S. Also, we found that the campus did not complete or retain all the student training acknowledgement forms for all the appropriate students. Specifically, we reviewed the student safety training acknowledgement forms for five students in six courses and found that for two courses, student safety training acknowledgement forms were not completed or maintained.

Effective administration of student safety training helps to ensure that students are informed of potential hazards and necessary safety practices and that procedures will be used to reduce potential injuries, accidents, and liabilities to the campus.

RECOMMENDATION

We recommend that the campus:

- a. Document the procedures for the review of the completion of student acknowledgement forms by EH&S, including the frequency of the review. Such review should also include ensuring compliance with the retention requirements of the student acknowledgement forms as noted in the CHP.
- b. Complete and retain student training acknowledgement forms for all appropriate students.
- c. Communicate to all appropriate college administrators, staff, and faculty the procedures and expectations regarding HS training for students in a laboratory setting, including the proper timing, completion, and retention of student safety training acknowledgement forms.

MANAGEMENT RESPONSE

We concur. The campus will document the procedures for the review of the completed student acknowledgement forms by EH&S, including details for frequency of review and retention requirements. The campus will then complete and retain student training acknowledgement forms for all appropriate students. The campus will communicate the proper timing, completion, and retention of student safety training acknowledgement forms to appropriate college administrators, staff, and faculties.

We intend to implement these processes by August 31, 2020.

2. SELF-AUDITS

OBSERVATION

The campus had not adequately addressed the CSA’s recommendations regarding self-audits.

The CSA reviewed the campus processes for identifying and addressing safety concerns in its laboratories and recommended that the campus immediately begin following its policies for conducting departmental self-audits (71 in Appendix A).

In June 2019, the CSA reviewed the one-year response submitted by the campus in April 2019 and marked the above recommendation as partially implemented. Although the campus provided evidence demonstrating that it began following its policies to conduct departmental self-audits, it did not provide evidence demonstrating that it consistently performed the self-audits.

We conducted a review of campus responses to the CSA and the procedures implemented as a result of the CSA audit and found that the campus did not meet the deadline imposed by the CSA or the proposed extended implementation dates.

Additionally, we requested and reviewed the self-audit documents for 13 locations with HAZMAT, and we found that inspections were not performed and documented in accordance with the CHP. Specifically:

- For all 13 locations, semiannual inspections were not performed or documented by EH&S, as required by the CHP. At two locations, the inspections were only performed and documented for the fall 2019 semester.
- For all 13 locations, inspections were not performed and documented each semester by the faculty member or principal investigator (PI), as required by the CHP. At two locations, the inspections were performed and documented for the fall 2018 semester and spring 2019 semester, respectively.
- For five locations, inspections were not performed and documented each semester by the instructional support technician (IST), as required by the campus CHP.

Performing regular and systematic laboratory inspections helps to ensure compliance with campus and regulatory requirements, increases the likelihood of identifying unsafe conditions, and reduces the potential for accidents, injuries, and liabilities to the campus.

RECOMMENDATION

We recommend that the campus:

- a. Perform and document the inspections as noted in the CHP or evaluate the current process noted in the CHP for performing self-audits and revise the process as necessary to ensure that self-audits are performed and documented at all locations accordingly.
- b. Communicate the procedures and expectations regarding the regular performance and documentation of laboratory inspections to all appropriate college faculty and PI, the IST, and EH&S personnel, and provide training as needed.

MANAGEMENT RESPONSE

We concur. The campus will perform and document the inspections as noted in the CHP and revise our process to ensure self-audits are properly performed and documented at all locations. Additionally, the campus will communicate the procedures and expectations regarding the regular performance and documentation of laboratory inspections to appropriate college faculty and PI, the IST, and EH&S personnel and provide the necessary training deemed required.

We intend to implement these processes by July 31, 2020.

3. SAFETY EQUIPMENT MAINTENANCE AND INSPECTION

OBSERVATION

The campus had not adequately addressed the CSA's recommendations regarding emergency eyewashes, safety showers, and fire extinguishers.

The CSA reviewed the adequacy of emergency eyewashes, safety showers, and fire extinguishers and issued one related recommendation (65 in Appendix A).

In June 2019, the CSA reviewed the one-year response submitted by the campus in April 2019 and marked the above recommendations related to emergency eyewashes, safety showers, and fire extinguishers (65) as partially implemented. Although the campus provided some documentation showing that it performed inspections for safety showers and eyewash stations, it did not provide evidence of monthly inspection of fire extinguishers. However, the campus provided evidence demonstrating that self-audits reviewed whether timely flushes of eyewashes and safety showers stations had occurred.

We reviewed the campus responses to the CSA and the procedures implemented as a result of the CSA audit and found that the campus did not meet the deadlines imposed by the CSA and the proposed extended implementation date. Also, our review of emergency eyewash and safety showers at 17 locations and fire extinguishers at 21 locations with HAZMAT found that inspections were not consistently performed and documented. Specifically:

- At three locations, the monthly eyewash and safety shower inspections were not consistently performed and documented by facilities management, as required by the CHP.
- At four locations, fire extinguisher inspections were not consistently performed and documented monthly or annually, as required by 19 CCR §574, *Inspection Procedures*.
- At one location, the annual inspection of the fire suppression system was not performed and documented, as required by 19 CCR §574, *Inspection Procedures*.

Adequate and regular inspection of safety equipment helps to ensure that equipment is in good working condition and easily accessible and further ensures a healthy and safe environment for employees and students.

RECOMMENDATION

We recommend that the campus:

- a. Perform and document regular inspections as noted in the CHP.
- b. Remind facilities management personnel of the regulatory and campus requirements regarding safety equipment maintenance and inspections, and provide training as needed.

MANAGEMENT RESPONSE

We concur. The campus will perform and document regular inspections as noted in the CHP and communicate to facilities management personnel the regulatory and campus requirements for safety equipment maintenance and inspections. The campus will also provide the necessary training deemed required.

We intend to implement these processes by July 31, 2020.

Areas Reviewed Not Covered by CSA**4. LABORATORY AND WORKSPACE INSPECTIONS****OBSERVATION**

The campus did not always comply with campus and regulatory requirements.

We reviewed 17 locations with HAZMAT, and we found that:

- At eight locations, there was no National Fire Protection Association (NFPA) signage posted outside or inside the location, as required by the campus CHP.
- At six locations, spill kits or absorbent materials were not available, as required by 22 CCR §66265.32, *Required Equipment*.
- At five locations, emergency response guides and/or first aid kits were not available, as required by 19 CCR §3.09, *Emergency Planning and Information*, and 8 CCR §3400(c), *Medical Services and First Aid*.
- At four locations, refrigerators and/or freezers were not labeled appropriately indicating that they were for lab use only, as required by the campus CHP.
- At four locations, access to emergency eyewashes and safety showers was obstructed by an item and/or the dust cap covers were not closed, as required by 8 CCR §5162, *Emergency Eyewash and Shower Equipment* and the campus CHP.
- At three locations, microwaves were not appropriately labeled with a sign stating “Not for Food Use,” as required by 8 CCR §3368, *Consumption of Food and Beverages*.
- At two locations, food, drinks, or other consumable products stored in the lab were not labeled as “Not for Human Consumption,” as required by 29 CFR §1910.141, *Occupational Safety and Health Standards – Sanitation*, and the campus CHP.
- At two locations, there was no signage in the lab or outside the lab door to prohibit the consumption or storage of food and drinks inside the lab, as required by the campus CHP.

- At two locations, fume hoods were used for the storage of chemical bottles and/or HAZWASTE, which is prohibited by the campus CHP.
- At one location, the work area around the flammable cabinet was cluttered, which is prohibited by the campus CHP.
- At one location, an emergency eyewash and safety shower station was not present in the room or nearby, as required by 29 Code of Federal Regulations (CFR) §1910.141, *Sanitation*, and the campus CHP.

Adherence to campus and regulatory requirements increases the likelihood of identifying unsafe conditions, and reduces the potential for accidents, injuries, and liabilities to the campus.

RECOMMENDATION

We recommend that the campus:

- a. Move the obstructions away from the emergency eyewash and safety showers noted above to ensure adequate access to the equipment.
- b. Install an eyewash and safety shower station at the location noted above, or move covered activities to a space with adequate access to the equipment.
- c. Remind facilities management personnel of the regulatory and campus requirements regarding safety equipment maintenance and inspections, and provide training as needed.
- d. Provide training and guidance regarding regulatory and campus requirements to all personnel involved in handling HAZMAT, including, but not limited to, proper signage posting; proper labeling and storage of HAZMAT and equipment; and maintenance of emergency response guides, first aid kits, and spill kits.

MANAGEMENT RESPONSE

We concur. The campus will clear the obstructions from emergency eyewash and safety showers, install an eyewash and safety shower station as required, and communicate to facilities management personnel the regulatory and campus requirements for safety equipment maintenance and inspections. The campus will also provide the necessary training to all personnel involved in handling HAZMAT for safety equipment maintenance and inspections, as well as handling HAZMAT, including proper signage posting; proper labeling and storage of HAZMAT and equipment; and maintenance of emergency response guides, first aid kits, and spill kits.

We intend to implement these processes by July 31, 2020.

5. HAZARDOUS MATERIALS PROCUREMENT

OBSERVATION

The campus had not formally documented or implemented campus-specific policies and procedures for purchasing and receiving HAZMAT.

Additionally, in discussions with the EH&S director and managing director of contracts and accounts payable, we found that campus personnel were able to purchase HAZMAT using P-cards, which was prohibited by the campus *ProCard Handbook*.

Written procurement policies and procedures help to ensure consistent HAZMAT purchasing practices and reduce the potential liability to the campus.

RECOMMENDATION

We recommend that the campus:

- a. Document and implement policies and procedures to ensure proper HAZMAT purchasing and receiving and communicate and distribute the new policies and procedures to the appropriate campus employees.
- b. Evaluate the P-card policy regarding the purchase of HAZMAT using P-cards and update the campus P-card policy accordingly.

MANAGEMENT RESPONSE

We concur. The campus will document and implement policies and procedures to ensure proper HAZMAT purchasing and receiving and additionally communicate and distribute the new procedures to the appropriate campus employees. The campus will update the P-card handbook after evaluating the current policies and procedures for purchasing of HAZMAT using P-cards.

We intend to implement these processes by July 31, 2020.

6. STANDARD OPERATING PROCEDURES

OBSERVATION

The campus did not document SOPs for all high-hazard operations (HHO) or potentially hazardous operations (PHO) in the labs, as required by the campus CHP.

We reviewed 14 labs with HAZMAT and found that in six locations, the PIs or lab technicians did not document the lab-specific SOPs for all the HHOs or PHOs in each lab.

Per the campus CHP, written safe work practices procedures, also known as SOPs, are required for all HHOs or PHOs in labs.

Laboratory-specific SOPs promote safe practices with HAZMAT and reduce the risk of accidents and injuries from mismanagement of HAZMAT and potential liability to the campus.

RECOMMENDATION

We recommend that the campus develop a process to ensure documentation of laboratory-specific SOPs for all labs with certain hazardous chemicals, HHOs, and PHOs.

MANAGEMENT RESPONSE

We concur. The campus will develop a process to ensure documentation of laboratory-specific SOPs for all labs with certain hazardous chemicals, HHOs, and PHOs.

We intend to implement these processes by July 31, 2020.

7. INVENTORY AND SAFETY DATA SHEETS

OBSERVATION

The campus inventory of HAZMAT was not always completed or updated annually, and SDS were not always maintained for all HAZMAT, as required by campus policy.

We found that the campus did not have a method to centrally track and compile a complete campuswide chemical inventory. Additionally, the inventory listing included in the Hazardous Materials Business Plan (HMBP) was dated 2014 and, therefore, was not up-to-date and may not have accurately reflected the current inventory on campus.

We selected 67 chemicals in eight locations with HAZMAT, and we found that:

- 22 chemicals (33 percent) in eight locations were not included in the appropriate inventory listings.
- At six locations, the inventory listing was outdated.
- At one location, the inventory listings posted in the location were not dated and the contents listed on the posted listings did not agree with the inventory items included on the inventory listings provided.

We also reviewed 17 locations with HAZMAT, and we found that:

- At three locations, SDS were not available and the responsible party did not know whether the SDS were available online.
- At one location, the SDS were outdated and the responsible party did not know whether the SDS were available online.

A comprehensive inventory listing of HAZMAT and SDS help ensure the safe handling of the materials, as well as the ability of emergency responders to identify and remediate specific hazards when responding to emergency situations.

RECOMMENDATION

We recommend that the campus:

- a. Develop a method to centrally track and compile a comprehensive campuswide inventory listing of HAZMAT.
- b. Include the current inventory listing when filing HMBP.
- c. Remind appropriate college administrators, staff, and faculty of the requirement to complete an annual inventory of HAZMAT, including maintaining a complete and updated listing, and provide training as needed.
- d. Provide continued training and guidance to appropriate college administrators, staff, and faculty regarding SDS.

MANAGEMENT RESPONSE

We concur. The campus will develop a method to centrally track and compile a comprehensive campuswide HAZMAT inventory and include the current inventory listing when filing HMBP. In addition, the campus will communicate the requirement to complete an annual inventory of HAZMAT, including maintaining a complete and updated listing, and provide training as needed to appropriate campus personnel. The campus will also provide training and guidance to appropriate college administrators, staff, and faculty regarding SDS.

We intend to implement these processes by July 31, 2020.

8. LABELING AND STORAGE OF HAZMAT

OBSERVATION

Campus departments did not always properly label and store HAZMAT in accordance with campus and regulatory requirements.

We reviewed 17 locations with HAZMAT, and we found that:

- At five locations, some secondary containers were not labeled with the name, hazard warning, or a user-defined label that included an identification of the contents and information about the hazardous properties of the HAZMAT, as required by 8 CCR §5194, *Hazard Communication*.
- At four locations, HAZMAT containers were not stored in a sensible manner, as required by 8 CCR §5194, *Storage of Hazardous Substances*. Specifically, HAZMAT and HAZWASTE were stored in the same location without the use of secondary containers, or flammable

chemicals that were not being actively used were stored in the laboratory outside of the flammable cabinet.

- At four locations, some labels did not clearly display hazard warnings, as required by 8 CCR §5194, *Hazard Communication*.
- At three locations, some labels were not clear or legible, as required by 8 CCR §5194, *Hazard Communication*.

Proper labeling and storage of HAZMAT communicates potential danger, helps to ensure the safety of employees and students, and reduces the risk of accidents, injuries, and potential liability to the campus.

RECOMMENDATION

We recommend that the campus remind all personnel involved in handling HAZMAT of regulatory requirements regarding proper labeling of containers and storage of HAZMAT, and provide training as needed.

MANAGEMENT RESPONSE

We concur. The campus will communicate to personnel who work with HAZMAT the regulatory requirements regarding proper labeling of containers and storage of HAZMAT and provide training as needed.

We intend to implement these processes by July 31, 2020.

9. PRESSURIZED GAS CYLINDERS

OBSERVATION

Pressurized gas cylinders were not always properly secured in labs.

We reviewed eight locations with pressurized gas cylinders and found that at three locations, pressurized gas cylinders were not properly secured to prevent them from falling, as required by 8 CCR §4650, *Storage, Handling, and Use of Cylinders*.

Properly securing pressurized gas cylinders helps to ensure compliance with campus requirements and may reduce potential accidents, injuries, and liabilities to the campus.

RECOMMENDATION

We recommend that the campus provide training and guidance to all personnel involved in handling pressurized gas cylinders.

MANAGEMENT RESPONSE

We concur. The campus will provide training and guidance to all personnel involved in handling pressurized gas cylinders.

We intend to implement these processes by July 31, 2020.

10. HAZARDOUS AND UNIVERSAL WASTE**OBSERVATION**

Campus departments did not always properly label or store HAZWASTE and/or universal waste in accordance with regulatory and campus requirements.

We reviewed nine locations with HAZWASTE and ten locations with universal waste, and we found that:

- At seven locations, some universal waste containers were not labeled with the accumulation start date, as required by 22 CCR 66273.34, *Universal Waste – Labeling/Marking*. As such, we could not determine the accumulation period of the waste.
- At four locations, accumulation start dates were not noted on HAZWASTE labels, as required by 22 CCR §66262.34, *Hazardous Waste – Accumulation Time*. Therefore, we could not determine the accumulation period of the waste.
- At four locations, some HAZWASTE containers did not have proper labels that included the contents, accumulation start date, and hazard properties, as required by 22 CCR §66262.34, *Hazardous Waste – Accumulation Time*, (a)(2) and the campus CHP.
- At four locations, some universal waste containers were not labeled appropriately with the contents or identified as universal waste, as required by 22 CCR 66273.34, *Universal Waste – Labeling/Marking*.
- At two locations, universal waste was not always stored appropriately, as required by 22 CCR 66273.33, *Universal Waste Management Requirements for Batteries, Lamps, and Mercury-Containing Equipment*. For example, waste was not contained in a manner that would prevent breakage and release of components to the environment.

Proper labeling and storage of HAZWASTE and universal waste communicates potential danger and reduces the risk of accidents and injuries from mismanagement of waste and potential liability to the campus.

RECOMMENDATION

We recommend that the campus provide training and guidance regarding proper labeling and storage in accordance with regulatory and campus requirements to all personnel involved in the handling of HAZWASTE and universal waste.

MANAGEMENT RESPONSE

We concur. The campus will provide training and guidance regarding proper labeling and storage of HAZWASTE and universal waste in accordance with regulatory and campus requirements to all personnel involved in the handling of HAZWASTE and universal waste.

We intend to implement these processes by July 31, 2020.

11. ANNUAL REPORTING

OBSERVATION

The campus did not always provide an annual HS program report to the CO.

We found that the campus submitted the annual report for fiscal year (FY) 2015/2016. However, the annual reports for FY 2016/2017 and FY 2017/2018 were not submitted, as required by Executive Order (EO) 1039, *Occupational Health & Safety Policy*.

Annual HS reports provide the CO with the necessary information for providing systemwide oversight to campuses.

RECOMMENDATION

We recommend that the campus annually prepare and submit HS program reports to the CO.

MANAGEMENT RESPONSE

We concur. The campus will prepare and submit HS program reports to the CO as required.

We intend to implement these processes by July 31, 2020.

GENERAL INFORMATION

BACKGROUND

California state regulations require all employers, including the California State University (CSU), to provide a safe and healthy work environment. Each campus has a designated EH&S program administrator that is responsible for developing and maintaining a campus HS program.

All CSU campuses purchase HAZMAT for both instructional and research purposes, most prominently in colleges that focus on the sciences, fine arts, and liberal arts. In addition, campus maintenance departments such as custodial services, facilities, and auto shops may use materials that are known to have properties that are harmful to humans and the environment. Nearly all of the areas that use HAZMAT generate HAZWASTE that is subject to strict regulations for safe and proper storage, transport, and disposal.

California regulations relating to HS are primarily codified in the California *Health and Safety Code* (HSC) and in Titles 8 and 22 of the California Code of Regulations (CCR). California's Division of Occupational Safety and Health (Cal/OSHA) is primarily responsible for the enforcement of the state's occupational HS laws and regulations. Title 8 of the CCR addresses hazardous materials safety, including, but not limited to, training, communication, storage, and safety. Specific to laboratory environments, the *Occupational Exposure to Hazardous Chemicals in Laboratories* standard (8 CCR 5191) requires that the employer designate a chemical hygiene officer and have a written chemical hygiene plan that includes, among other things, provisions for worker training, criteria for the use of personal protective equipment and engineering controls, and standard operating procedures for handling hazardous materials. Title 22 of the CCR addresses hazardous materials waste management.

The primary CSU HS policy is EO 1039, *Occupational Health and Safety*. This policy requires campuses to develop, implement, and maintain a HS program and also addresses student HS training. EO 1069, *Risk Management and Public Safety*, delegates systemwide administration oversight and programmatic responsibility for environmental HS to Systemwide Risk Management.

At Sonoma State University (SSU), the responsibility for establishing and maintaining effective policies regarding EH&S resides with the campus president. Oversight and responsibility of the EH&S is delegated to the EH&S director, who reports to the senior director for risk management and safety services, who then reports to the vice president for finance and administrative services. EH&S oversees the HS program at the campus; works to promote environmental stewardship; protects the HS of the SSU faculty, staff, and students; and provides technical expertise and support through the development of EH&S programs, training, and consultations.

In 2017, due to HS concerns at two CSU campuses, the Joint Legislative Audit Committee directed the CSA to review HS compliance at four campuses (Channel Islands, Sacramento, San Diego, and Sonoma), as well as oversight by the CO. The review noted several issues, including observations relating to the annual evaluation of chemical plans; monitoring and documenting of student and employee HS training; and consistent and timely inspections of safety equipment. Based on the nature and trends of the observations noted in the CSA

review, Audit and Advisory Services informed the Board of Trustees that it would perform reviews at all CSU campuses in 2019.

SCOPE

We visited the SSU campus from September 30, 2019, through November 26, 2019. Our audit and evaluation included the audit tests we considered necessary in determining whether operational and administrative controls are in place and operative. The audit focused on procedures in effect from January 1, 2016, to November 26, 2019.

Specifically, we reviewed and tested:

- Implementation of recommendations from the 2017 CSA Audit Report related to oversight committees, chemical hygiene plan administration, employee and student safety training, maintenance of engineering controls, and laboratory inspections.
- Oversight and administration of the campus HS program, including clearly defined roles and responsibilities; appropriate safety and chemical committees; departmental self-audits and monitoring practices; and current policies and procedures.
- The adequacy and availability of safety equipment, including evaluation of the chemical hygiene plan; provision of personal protective equipment; and regular inspections and monitoring of key safeguards and engineering controls.
- Proper storage and safety of hazardous materials, including procurement; maintenance of accurate inventories; appropriate labeling and storage practices; and access controls.
- Communications and training processes, including evaluation of availability of material safety data sheets, standard operating procedures, and documentation and monitoring of student and employee training.
- Whether appropriate safety programs were in place, when applicable, for health facility operations and medical monitoring of employees.
- Appropriate identification, storage, and monitoring of accumulated hazardous waste.

As a result of changing conditions and the degree of compliance with procedures, the effectiveness of controls changes over time. Specific limitations that may hinder the effectiveness of an otherwise adequate system of controls include, but are not limited to, resource constraints, faulty judgments, unintentional errors, circumvention by collusion, and management overrides. Establishing controls that would prevent all these limitations would not be cost-effective; moreover, an audit may not always detect these limitations.

Our testing and methodology, which was designed to provide a review of key operational and administrative controls, included interviews, walkthroughs, and detailed testing on certain aspects of the HS program. The review was limited to gaining reasonable assurance that essential elements of the HS program were in place and did not examine all aspects of the program. We did not re-perform any testwork completed by the CSA in their 2017 audit of

SSU. Instead, for those areas tested by the CSA that are also included in the current audit scope, we reviewed the implementation of campus corrective actions for any noted issues.

CRITERIA

Our audit was based upon standards as set forth in federal and state regulations and guidance; Trustee policy; Office of the Chancellor directives; and campus procedures; as well as sound administrative practices and consideration of the potential impact of significant risks. This audit was conducted in conformance with the Institute of Internal Auditors' *International Standards for the Professional Practice of Internal Auditing*.

This review emphasized, but was not limited to, compliance with:

- 29 CFR Part 1910, *Occupational Safety and Health Standards*
- California HSC Division 20, *Miscellaneous Health and Safety Provisions*
- California State Auditor Report 2017-119 Recommendations
- CCR Title 8, *Industrial Relations*
- CCR Title 17, *Public Health*
- CCR Title 19, *Public Safety*
- CCR Title 22, Division 4.5, *Environmental Health Standards for the Management of Hazardous Waste*
- EO 1031, *Systemwide Records/Information Retention and Disposition Schedules Implementation*
- EO 1039, *California State University - Occupational Health & Safety Policy*
- EO 1069, *Risk Management and Public Safety*
- Collective Bargaining Agreement, Unit 6, Article 28, *Health and Safety*
- SSU *Injury and Illness Prevention Program*
- SSU *Chemical Hygiene Program*
- SSU *Procurement Handbook*
- SSU *Employee Safety Training Procedure*

AUDIT TEAM

Audit Manager: Caroline Lee
Senior Auditors: Christina Fennell and Elizabeth Um

APPENDIX A – CSA RECOMMENDATIONS

Recommendation	Description
14	To ensure that it receives feedback from employee representatives on conditions associated with their work environments and that it develops appropriate interventions, Sonoma should ensure that its joint committee meets and fulfills its responsibilities in accordance with the bargaining agreement. If such committee does not exist, it should work with the union to form it by September 2018.
18	To ensure that it receives feedback from employee representatives on conditions associated with their work environments and that it develops appropriate interventions, Sonoma should ensure that its joint committee records meeting minutes and provides copies of the minutes and other information to the systemwide joint committee, as requested.
22	To increase oversight of chemical safety, Sonoma should, by June 2018, specify in its chemical plan how often its chemical committee should meet.
23	To increase oversight of chemical safety, Sonoma should ensure that its chemical committee meets as frequently as required and that it proactively addresses issues related to chemical hygiene and safety on campus.
24	To increase oversight of chemical safety, Sonoma should ensure that its chemical committee records its meeting minutes and makes those minutes available to all employees.
28	To more effectively provide oversight of its chemical plan, Sonoma should annually evaluate its chemical plan for effectiveness and document the results of that evaluation, including its discussions of any recommended revisions.
31	To ensure that its chemical plan is updated to reflect current practices and changes to how the campus may have evolved, Sonoma should immediately update its chemical plan.
35	To ensure the health and safety of employees working with hazardous materials, Sonoma should, by June 2018, review the training records of all employees who are required to take trainings related to laboratory safety, hazardous waste, hazard communication, or bloodborne pathogens and identify those who have not taken these trainings.

39	To ensure the health and safety of employees working with hazardous materials, Sonoma should, by December 2018, make the required trainings available to employees and establish procedures for ensuring that the employees have received all required trainings.
43	To ensure the health and safety of employees working with hazardous materials, Sonoma should, going forward, regularly monitor employee training records to ensure that all employees have received the required trainings.
48	To ensure the health and safety of students in a laboratory setting, Sonoma should work with appropriate faculty to develop student safety training acknowledgement forms by June 2018.
52	To ensure the health and safety of students in a laboratory setting, beginning in the Fall 2018 semester, Sonoma should require departments to have those students required to wear PPE sign the student safety training acknowledgement forms to demonstrate that they have received proper laboratory safety training.
57	To ensure the health and safety of students in a laboratory setting, beginning in the Fall 2018 semester, Sonoma should perform reviews at least annually to ensure that all departments are using the student training acknowledgement forms and are complying with the retention requirement.
65	Sonoma should continue to implement and adhere to its plan to ensure that it flushes showers and eyewashes and that it inspects fire extinguishers monthly as state regulations require.
66	Sonoma should add preventative maintenance work orders to its work order system by September 2018 to ensure that it completes fume hood and biosafety cabinet inspections annually as state regulations require.
71	Sonoma should immediately begin following its policies to conduct departmental self-audits to identify and address safety concerns in its laboratories. Further, Sonoma should ensure that its self-audits review whether timely flushes of eyewashes and showers have occurred. As part of self-audits, Sonoma's departments should ensure that fume hoods have received annual inspections. Finally, Sonoma's EH&S department should regularly review whether departments are conducting self-audits.