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February 11, 2020

Dr. Robert S. Nelsen, President
California State University, Sacramento
6000 J Street
Sacramento, CA 95819

Dear Dr. Nelsen:

Subject: Audit Report 19-53, Health and Safety, California State University, Sacramento

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

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The California State University
Audit and Advisory Services

HEALTH AND SAFETY

California State University, Sacramento

Audit Report 19-53
January 14, 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 California State University, Sacramento (Sacramento State).

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 21, 2019, taken as a whole, provided reasonable assurance that risks were being managed and objectives were met.

Overall, the campus had an effective framework for HS in which the environmental health and safety (EH&S) department provided guidance to the colleges and departments. We found that the campus' corrective actions to address the CSA's recommendations had been implemented and adequately addressed the recommendations. However, we noted that the policies and procedures implemented to address the recommendations related to employee and student safety training could be further improved. Moreover, we found that preapprovals for procurement card purchases were not obtained as required by the campus' *Procurement Card Manual*. Furthermore, we identified opportunities for improvement related to hazardous waste (HAZWASTE) management and maintenance of hazardous material (HAZMAT) inventories.

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. EMPLOYEE SAFETY TRAINING

OBSERVATION

The procedures implemented in response to CSA observations regarding employee HS training needed improvement.

The CSA reviewed the campus method of providing training to employees and the steps taken to monitor employee completion of required training and issued three related recommendations (33, 37, and 41 in Appendix A). The CSA first recommended that the campus identify all employees required to take specialized HS training and those who had not yet completed the training. It further recommended that the campus make required training available to employees and establish procedures for ensuring that the employees had received all required training. Additionally, the CSA recommended that the campus regularly monitor employee training records to ensure that all employees had received the required training. The CSA set a completion date of June 2018 for the identification of untrained employees and December 2018 for making required training available to employees. The recommendation for monitoring employee training records was to be implemented as of the report's release date in April 2018.

In June 2018, the CSA reviewed the 60-day response submitted by the campus in the same month and marked the recommendation related to identifying all employees who had not completed required HS training (33) as fully implemented. Additionally, in April 2019, the CSA reviewed the one-year responses submitted by the campus in January 2019 and marked recommendations regarding provision of training programs (37) and monitoring of training completion (41) as fully implemented.

We reviewed the campus response to the CSA and the procedures implemented as a result of the CSA audit and found that the campus used two training software programs, SumTotal and LearnerWeb, to identify, assign, and provide safety training to employees through the use of learning tracks based on occupational exposure to hazards. However, due to the limitations of these software programs, monitoring of training completion was limited to EH&S' manual review of departments with higher risk of exposure to HAZMAT. As a result, this review did not include the full population of employees that were assigned safety-related training, and we found that not all employees completed required HS training. Specifically, we reviewed training records for 27 employees and found that:

- Two employees did not complete all assigned HS training.
- Three employees had not timely completed HS training.
- Two employees did not complete required HS refresher training.

Effective administration of HS training helps to ensure compliance with training requirements, increases safety awareness, and reduces potential injuries, accidents, and liabilities to the campus.

RECOMMENDATION

We recommend that the campus reassess and update existing monitoring practices to ensure that all employees timely complete required HS training and to notify employees when training is overdue or incomplete.

MANAGEMENT RESPONSE

We concur. The campus has a process to regularly monitor employee training records to ensure that employees timely complete required HS training and to notify relevant departments when training is overdue or incomplete. The campus will reassess the process and update it as needed to ensure that it captures the full population of employees assigned safety-related training and to notify employees when training is overdue by June 30, 2020.

2. STUDENT SAFETY TRAINING

OBSERVATION

The procedures implemented in response to CSA observations regarding student HS training needed improvement.

The CSA reviewed the adequacy of training provided to students in laboratory settings and issued five related recommendations (45, 47, 50, 53, and 55 in Appendix A). The CSA recommended that the campus develop a campuswide student safety training policy and student safety training acknowledgement forms and require students in laboratory settings to sign the forms acknowledging that they have received proper HS training. It further recommended that the campus direct responsible departments to maintain these forms for a retention period of three years and that the campus perform annual reviews to confirm compliance with documentation and retention requirements. The CSA directed the campus to develop the student safety policy and acknowledgment form by June 2018, implement the acknowledgment form and monitoring procedures by the fall 2018 semester, and set a May 2018 deadline for written directives regarding form retention.

In June 2018, the CSA reviewed the 60-day responses submitted by the campus in May 2018 and marked as fully implemented the recommendations related to developing a student training policy (45) and directing departments to retaining acknowledgment forms (53). Additionally, in April 2019, the CSA reviewed the one-year responses submitted by the campus in the same month and marked as fully implemented the recommendations regarding developing and requiring the student training acknowledgment form (47 and 50) and the annual review process (55).

We reviewed the campus response to the CSA and the procedures implemented as a result of the CSA audit and noted that ADM-0135, *Student Safety Training*, was created. ADM-0135 clearly outlines responsibilities for providing and documenting student safety training, states that students performing any academic activity requiring the use of personal protective

equipment (PPE) receive proper safety training prior to engaging in the activity, requires that the training be documented using the Student Safety Training Acknowledgement Form (SSTAF), and requires departments to retain SSTAFs for three years after the end of the class.

We assessed the implementation of the student safety training policy by reviewing the documentation of training provided to 30 students enrolled in six different courses in which students were required to use PPE. Although we noted that SSTAFs were mostly used for students in laboratory courses and retained by the departments, alternate methods were used to document student PPE training for two non-laboratory courses. Specifically, we found that:

- For three students, documentation of student safety training was not available.
- For two courses, instructors used sign-in/attendance logs to document student attendance of the sessions in which safety training was provided, instead of using SSTAFs as required by ADM-0135.

Proper administration of student safety training increases safety awareness and reduces potential injuries, accidents, and liabilities to the campus.

RECOMMENDATION

We recommend that the campus:

- a. Review ADM-1035 and determine whether it should be revised to allow flexibility, or an alternative method other than the SSTAF, to document student training for non-laboratory courses that require students to use PPE.
- b. Communicate to appropriate campus personnel the requirements for providing and documenting student safety training for courses that require the use of PPE.

MANAGEMENT RESPONSE

We concur.

- a. The campus has reviewed ADM-1035 and determined that it should be revised to allow flexibility, or an alternative method other than the SSTAF, to document student training for courses that require students to use PPE. The campus will update ADM-1035 consistent with this determination by June 30, 2020.
- b. The campus will communicate to appropriate campus personnel the requirements for providing and documenting student safety training for courses that require the use of PPE by June 30, 2020.

Areas Reviewed Not Covered by CSA

3. PROCUREMENT OF HAZARDOUS CHEMICALS

OBSERVATION

Purchases of hazardous chemicals did not always align with requirements in the campus *Procurement Card Manual*.

We noted that the *Procurement Card Manual* was updated in April 2019 to include chemicals as an allowable purchase with restrictions and to require justification and approval by the procurement and contract services department prior to purchase.

In our review of procurement card purchases, we identified five instances where hazardous chemicals were purchased using a campus procurement card after April 2019. We reviewed these purchases for compliance with the campus *Procurement Card Manual* and found that none of the purchases had obtained pre-approval as required.

Consistent enforcement of campus hazardous chemicals procurement procedures allows for improved oversight and monitoring of hazardous chemicals present on campus.

RECOMMENDATION

We recommend that the campus:

- a. Evaluate the current requirements and procedures for procurement of hazardous chemicals using procurement cards for adequacy and update them as needed.
- b. Remind procurement cardholders and transaction approvers of campus requirements regarding the purchase of hazardous chemicals with procurement cards.

MANAGEMENT RESPONSE

We concur. The campus will take the following actions by June 30, 2020:

- a. Evaluate the current requirements and procedures for procurement of hazardous chemicals using procurement cards for adequacy and update them as needed.
- b. Remind procurement cardholders and transaction approvers of campus requirements regarding the purchase of hazardous chemicals with procurement cards.

4. HAZARDOUS WASTE

OBSERVATION

Campus HAZWASTE management procedures needed improvement.

We reviewed eight locations with HAZWASTE, including both satellite and central accumulation areas, and found that the campus generally complied with storage, labeling, and accumulation requirements for HAZWASTE. However, although the campus conducted regular HAZWASTE disposals that would limit the risk of containers exceeding accumulation limits, at one central accumulation area we found that the campus did not have an adequate process to document or track when HAZWASTE containers were moved to central storage and ready for disposal.

Proper documentation of storage and timely disposal of HAZWASTE reduces the risk of non-compliance with regulatory and campus requirements.

RECOMMENDATION

We recommend that the campus implement a written process to track movement of HAZWASTE containers between accumulation areas to further ensure compliance with regulatory and campus requirements.

MANAGEMENT RESPONSE

We concur. The campus will implement a written process to track movement of HAZWASTE containers between accumulation areas to further ensure compliance with regulatory and campus requirements by June 30, 2020.

5. HAZARDOUS MATERIALS INVENTORY

OBSERVATION

Campuswide HAZMAT inventory processes needed improvement.

We noted that the campus used RSS Inventory (RSS) software to track and monitor HAZMAT for the College of Natural Sciences and Mathematics (NSM). Other locations were responsible for maintaining their own HAZMAT inventory separately.

We reviewed the HAZMAT inventories for seven locations and found that at one location outside the NSM, the inventory lacked sufficient detail to determine whether it was complete and current.

A complete and detailed inventory of HAZMAT improves campus oversight and monitoring of HAZMAT activities and allows emergency responders to identify and remediate hazards when responding to emergency situations.

RECOMMENDATION

We recommend that the campus:

- a. Communicate campus inventory requirements to appropriate campus personnel.
- b. Maintain a complete and current inventory for all locations with HAZMAT.

MANAGEMENT RESPONSE

We concur. The campus will take the following actions by June 30, 2020:

- a. Communicate campus inventory requirements to appropriate campus personnel.
- b. Maintain a complete and current inventory for all locations with HAZMAT.

GENERAL INFORMATION

BACKGROUND

California state regulations require all employers, including the 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 HAZMAT 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 HAZMAT. Title 22 of the CCR addresses HAZMAT waste management.

The primary CSU HS policy is Executive Order (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 Sacramento State, the office of EH&S is responsible for establishing and maintaining effective policies regarding HS. EH&S works to ensure safe environments for all segments of the campus population through programs of information and education, workplace evaluation and inspections, and technical expertise and support. EH&S is also responsible for developing programs to ensure compliance with applicable state and federal health, safety and environmental regulations, and campus policies on HS. The director of EH&S reports to the associate vice president of risk management services, who reports to the vice president of administration and business affairs. EH&S collaborates with university colleges, departments, and organizations to help develop and implement initiatives to create a safe work environment.

In 2017, due to HS concerns at two CSU campuses, the Joint Legislative Audit Committee directed the California State Auditor (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 Sacramento State campus from October 14, 2019, through November 22, 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 22, 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 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, regular inspections and monitoring of key safeguards and engineering controls.
- Proper storage and safety of HAZMAT, including procurement; maintenance of accurate inventories; appropriate labeling and storage practices; and access controls.
- Communications and training processes, including asbestos signage; and documentation and monitoring of student and employee training.
- Appropriate identification, storage, and monitoring of accumulated HAZWASTE.

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 Sacramento State. 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:

- 10 Code of Federal Regulations (CFR) Part 20, *Standards for Protection Against Radiation*
- 29 CFR Part 1910, *Occupational Safety and Health Standards*
- CSA Report 2017-119 Recommendations
- California HSC Division 20, *Miscellaneous Health and Safety Provisions*
- 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*
- Sacramento State *Chemical Hygiene Plan*
- Sacramento State *Hazard Communication Program*
- Sacramento State *Procurement Card Manual*
- Sacramento State ADM-0135, *Student Safety Training*

AUDIT TEAM

Audit Manager: Jennifer Rethwisch
Internal Auditor: Elston Wyatt

APPENDIX A – CSA RECOMMENDATIONS

Recommendation	Description
33	To ensure the health and safety of employees working with hazardous materials, Sacramento 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.
37	To ensure the health and safety of employees working with hazardous materials, Sacramento should, by December 2018, make the required trainings available to employees and establish procedures for ensuring that the employees have received all required trainings.
41	To ensure the health and safety of employees working with hazardous materials, Sacramento should, going forward, regularly monitor employee training records to ensure that all employees have received the required trainings.
45	To ensure the health and safety of students in a laboratory setting, Sacramento should, by June 2018, develop campuswide policies to ensure that its departments are accountable for providing student training on laboratory safety.
47	To ensure the health and safety of students in a laboratory setting, Sacramento should work with appropriate faculty to develop student safety training acknowledgement forms by June 2018.
50	To ensure the health and safety of students in a laboratory setting, beginning in the Fall 2018 semester, Sacramento 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.
53	To ensure the health and safety of students in a laboratory setting, by May 2018, Sacramento should remind all departments to retain student training acknowledgment forms for at least three years after the end of classes.
55	To ensure the health and safety of students in a laboratory setting, beginning in the Fall 2018 semester, Sacramento 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.