September 12, 2019

Dr. Ellen N. Junn, President  
California State University, Stanislaus  
One University Circle  
Turlock, CA 95382

Dear Dr. Junn:

Subject: Audit Report 19-03, Health and Safety, California State University, Stanislaus

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

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HEALTH AND SAFETY

California State University, Stanislaus

Audit Report 19-03
August 13, 2019
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.

CONCLUSION

Based upon the results of the work performed within the scope of the audit, the operational and administrative controls for HS as of June 7, 2019, were unlikely to provide reasonable assurance that risks were being managed and objectives were met.

The campus had a framework for HS in which safety and risk management (SRM) provided consultation and guidance to the colleges and departments. We found that campus HS policies and procedures, plans, and programs did not always include all required elements and were not reviewed annually for effectiveness. Also, the campus did not have an effective HS training program to ensure that initial and refresher training was assigned and completed as required. Additionally, the campus did not consistently perform and monitor inspections of all laboratories and workplaces with exposure to hazardous materials (HAZMAT) and hazardous waste (HAZWASTE). Further, the campus did not consistently perform maintenance and inspection of safety equipment. In addition, the campus did not always properly label and store HAZMAT and HAZWASTE; did not always maintain inventories of hazardous substances, and did not perform workplace hazard assessments to determine necessary protective equipment requirements. We further found that the campus did not always post proper hazard warning requirements for areas storing radioactive materials or using lasers. Also, the campus was not in compliance with its policies regarding oversight of HAZMAT and hazardous equipment purchases and did not always submit an annual HS program report to the CO.

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

1. HEALTH AND SAFETY PLAN MONITORING AND REVIEW

OBSERVATION

Campus HS policies and procedures, plans, and programs did not always include all required elements and were not reviewed annually for effectiveness.

We reviewed all of the campus regulatory-required HS plans, and we found that:

- The campus Hazard Communication Plan (HAZCOM) did not include a listing of hazardous chemicals known to be present or reference an explanation of the inventory system, as required by California Code of Regulations (CCR), Title 8, §5194, Hazard Communication.

- The campus Bloodborne Pathogen Exposure Control Plan did not address or include procedures for gathering the information required by 8 CCR §5193, Bloodborne Pathogens.

- The campus Chemical Hygiene Plan (CHP) did not include a clear designation of the chemical hygiene officer, as required by 8 CCR §5194, Chemical Hygiene Plan.

- The campus Respiratory Protection Program did not address or include procedures for the proper use of a respirator in routine and reasonably foreseeable emergency situations; training in respiratory hazards; or a statement that medical evaluations would be provided at no cost to the employee, as required by 8 CCR §5144 Respiratory Protection.

- The campus had not maintained evidence that any of the plans, including the Injury and Illness Prevention Plan (IIPP) and the Employee Medical Monitoring Program, had been reviewed annually for effectiveness, as required.

Current and complete HS policies and procedures, plans, and programs improve compliance with regulatory requirements and promote a healthy and safe environment for employees and students.

RECOMMENDATION

We recommend that the campus:

a. Review and update the HAZCOM, Bloodborne Pathogens Exposure Control Plan, CHP, and Respiratory Protection Program to include the elements noted above.

b. Review and update the policies and procedures and plans noted above annually for effectiveness, and maintain evidence of the review.

c. Communicate and distribute updated policies and procedures, plans, and programs to appropriate campus administrators, staff, and faculty.
MANAGEMENT RESPONSE

We concur. The campus will review and update the HAZCOM, Bloodborne Pathogens Exposure Control Plan, CHP, and Respiratory Protection Program to include the required elements noted in the observation above. The campus will review and update the policies and procedures and plans noted above annually for effectiveness and maintain evidence of the review. The campus will communicate and distribute updated policies and procedures, plans, and programs to appropriate campus administrators, staff, and faculty.

Expected completion date: February 3, 2020

2. EMPLOYEE HEALTH AND SAFETY TRAINING

OBSERVATION

The campus did not always identify employees required to take initial and refresher HS training, did not have a process to ensure that all required training was assigned and completed, and did not maintain or monitor training records.

We noted that the campus IIPP and CHP assigned responsibility for most of the HS training program to the campus departments. Additionally, training records were required to be documented in writing and kept in each department, with copies provided to SRM. However, in our discussions with six departments, we noted that none were retaining documentation or providing records to SRM, and there was no other monitoring in place to ensure training was being assigned and completed.

Additionally, we reviewed the records of 16 employees hired between January 2018 and March 2019 to determine whether they were assigned to and completed required initial IIPP training. We found that:

- Four employees were assigned the training but did not complete it.
- Two employees with March 2019 start dates had not been assigned the training.

Furthermore, we obtained and reviewed a campus employee training matrix used to assign required training, and we noted that it had not been updated since 2008 and listed training requirements that were not consistent with regulations. We used this matrix to review the training records of four custodians to verify that the campus was following its own policy and found that:

- None of the four completed refresher HAZWASTE training in 2017. Additionally, one did not receive refresher HAZWASTE training in 2016.

- There was no documentation to verify that any of the four received refresher biohazard training in 2016 and 2017.

- There was no documentation to verify that any of the four received refresher bloodborne pathogens training in 2017. Additionally, one did not receive refresher bloodborne pathogens training in 2016.
• There was no documentation to verify that any of the four received refresher hearing conservation training in 2016, 2017, or 2018.

• One custodian did not receive refresher fall protection training in 2017 and 2018.

• There was no documentation to verify that any of the four received refresher small vehicle safety training in 2017 and 2018. Additionally, two custodians did not receive the training in 2016.

• Two custodians did not receive refresher heat illness prevention training in 2016. Additionally, one custodian did not receive this training in 2018, and another custodian did not receive it in 2017.

• Two custodians did not receive refresher personal protective equipment training in 2018.

Effective administration of the HS training program provides greater assurance of compliance with program provisions, increases safety awareness, and reduces potential injuries, accidents, and liabilities to the campus.

RECOMMENDATION

We recommend that the campus:

a. Develop and implement an effective training program that instructs employees about HS; identifies all employees who are required to take initial and refresher HS training, including specialized training; tracks and notifies employees with overdue or incomplete training; and documents and maintains training records.

b. Update the employee training matrix to reflect current regulatory requirements and campus standards for topics and frequency of required training.

MANAGEMENT RESPONSE

We concur. The campus will develop and implement an effective training program that instructs employees about HS; identifies all employees who are required to take initial and refresher HS training, including specialized training; tracks and notifies employees with overdue or incomplete training; and documents and maintains training records. The campus will update the employee training matrix to reflect current regulatory requirements and campus standards for topics and frequency of required training.

Expected completion date: January 15, 2020

3. LABORATORY AND WORKSPACE INSPECTIONS

OBSERVATION

The campus did not consistently perform and monitor inspections of laboratories and other instructional workspaces.
We found that the campus IIPP required each department to conduct regular and systematic inspections of its respective areas, and the campus CHP required principal investigators and/or area supervisors to complete safety inspections every semester. Additionally, the IIPP stated that SRM would conduct periodic unscheduled inspections to help ensure the maintenance of a safe and healthful workplace.

We reviewed six departments, and we found that five did not complete their own inspections during the audit scope period, while one performed inspections but did not formally document them. SRM did not conduct HS inspections at any of the six departments.

Further, we reviewed 21 locations with HAZMAT and found that:

- At three locations, specific chemical safety data sheets (SDS) were not always readily available.
- At four locations, specific chemical SDS were not always included in the SDS binder.
- At three locations, secondary containers storing HAZMAT did have proper labels identifying the chemicals being stored.
- At one location, several unwashed chemical containers were cluttering the lab work area.

Performing regular and systematic inspections helps to ensure compliance with the campus IIPP; increases the likelihood of identifying unsafe conditions; and reduces potential accidents, injuries, and liabilities to the campus. Additionally, proper labeling and storage of HAZMAT communicates potential danger, and maintaining current SDS printouts or access to the online SDS database helps to ensure the safety of employees and students who encounter HAZMAT.

**RECOMMENDATION**

We recommend that the campus:

a. Monitor and document laboratory and other instructional workspace training as required by the campus IIPP and CHP.

b. Provide training to the appropriate campus administrators, staff, and faculty to properly label and store HAZMAT, maintain a clean work area, and maintain current SDS in accordance with regulatory and campus requirements.

**MANAGEMENT RESPONSE**

We concur. The campus will monitor and document laboratory and other instructional workspace training as required by the campus IIPP and CHP. The campus will provide training to the appropriate campus administrators, staff, and faculty to properly label and store HAZMAT, maintain a clean work area, and maintain current SDS in accordance with regulatory and campus requirements.

Expected completion date: February 3, 2020
4. SAFETY EQUIPMENT MAINTENANCE AND INSPECTIONS

OBSERVATION

The campus did not always conduct regular maintenance and inspections of the working conditions of safety equipment.

We reviewed 25 locations with HAZMAT or other laboratory hazards and found that:

- At seven locations, fire extinguishers were not consistently inspected on a monthly basis.
- At 11 locations, emergency shower stations were not consistently inspected on a monthly basis.
- At five locations, emergency eyewash stations were not consistently inspected on a weekly basis.
- In four locations, workers would not be able to reach plumbed eyewashes within ten seconds.
- At three locations, spill control kits were not always readily available.

Regular inspection of safety equipment helps to ensure that equipment is in good working condition and helps to ensure a healthy and safe environment for employees and students.

RECOMMENDATION

We recommend that the campus:

a. Remind applicable personnel of the proper regulatory and campus requirements to inspect safety equipment, and provide training as needed.

b. Install plumbed emergency eyewashes and showers in areas where required, or move hazardous activities to a space with adequate access to the equipment.

MANAGEMENT RESPONSE

We concur. The campus will remind applicable personnel of the proper regulatory and campus requirements to inspect safety equipment and provide training as needed. The campus will install plumbed emergency eyewashes and showers in areas where required or move hazardous activities to a space with adequate access to the equipment.

Expected completion date: February 3, 2020
5. HAZARDOUS AND UNIVERSAL WASTE

OBSERVATION

The campus did not always properly label HAZWASTE and universal waste.

We reviewed 15 locations storing HAZWASTE and found that:

- At three locations, HAZWASTE containers were not labeled.
- At one location, biological waste was not stored in the proper container or labeled correctly.
- At one location, HAZWASTE had accumulated past the appropriate time period.

We also reviewed four locations with universal waste and found that:

- At two locations, universal waste containers were not labeled.
- At one location, universal waste container labels did not include the accumulation start date.

Proper labeling, storage, and timely disposal of HAZWASTE and universal waste reduces the likelihood of accidents, injuries, and potential liability to the campus.

RECOMMENDATION

We recommend that the campus train employees involved in handling HAZWASTE and universal waste on the importance of proper labeling and timely disposal in accordance with regulatory requirements.

MANAGEMENT RESPONSE

We concur. The campus will train employees involved in handling HAZWASTE and universal waste on the importance of proper labeling and timely disposal in accordance with regulatory requirements.

Expected completion date: December 6, 2019

6. HAZARDOUS MATERIALS INVENTORY

OBSERVATION

The campus HAZMAT inventory was not completed as required by campus policy.

We found that all of the major HS plans on campus, including the CHP, the IIPP, and the Hazardous Materials Management Plan, designated the responsibility for maintaining HAZMAT inventories to the respective deans, directors, department chairs, and coordinators
of each department working with HAZMAT. The plans also required departments to provide their HAZMAT inventories to SRM.

In our review of six departments, we found that:

- Four departments did not maintain an annual inventory of HAZMAT present in all work areas.
- SRM was not receiving inventories from all departments and did not have a method to centrally track the process or compile a campuswide inventory.

An adequate inventory of HAZMAT supports campus plans to ensure safety in the 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 policies and procedures to standardize and enforce the decentralized HAZMAT inventory process, and provide training to key personnel.

b. Develop a campuswide HAZMAT inventory.

MANAGEMENT RESPONSE

We concur. The campus will develop policies and procedures to standardize and enforce the decentralized HAZMAT inventory process and provide training to key personnel. The campus will develop a campuswide HAZMAT inventory.

Expected completion date: February 3, 2020

7. HAZARD ASSESSMENTS

OBSERVATION

The campus had not performed a written hazard assessment for all campus workplaces that required the use of personal protective equipment (PPE).

8 CCR §3380 Personal Safety Devices and Safeguards requires employers to assess the workplace to determine whether hazards that necessitate the use of PPE are present, and to ensure provision of appropriate PPE if hazards are present.

A written hazard assessment of campus workplaces helps to ensure that hazards and corresponding PPE are identified and communicated to faculty and staff.
**RECOMMENDATION**

We recommend that the campus establish and implement a written hazard assessment for all campus workplaces that require the use of PPE and develop procedures to ensure provision of appropriate PPE if hazards are present.

**MANAGEMENT RESPONSE**

We concur. The campus will establish and implement a written hazard assessment for all campus workplaces that require the use of PPE and develop procedures to ensure provision of appropriate PPE if hazards are present.

Expected completion date: February 3, 2020

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**8. HEALTH AND SAFETY NOTIFICATIONS**

**OBSERVATION**

The campus did not comply with all notification requirements regarding radiation hazards.

We found that:

- The campus did not comply with all requirements for radiation hazard posting. We reviewed two locations where radioactive materials were stored or machines generating ionizing radiation were housed and found that neither had posted a current copy of 17 CCR §30255, *Standards for Protection Against Radiation*, or a notice of where the policy may be examined.

- At one location where radioactive substances were stored, we found that a current copy of Department Form RH-2364 (Notice to Employees) was not posted conspicuously, and at another location, the posted form was not current.

Proper notification of radiation decreases the risk that employees will be exposed to radiation and decreases the risk of potential injuries, accidents, and liabilities to the campus.

**RECOMMENDATION**

We recommend that the campus establish and implement a written process to ensure that radiation hazard postings meet all regulatory requirements.

**MANAGEMENT RESPONSE**

We concur. The campus will establish and implement a written process to ensure that radiation hazard postings meet all regulatory requirements.

Expected completion date: October 15, 2019
9. LASER SAFETY

**OBSERVATION**

Oversight of laser safety needed improvement.

Specifically, we found that the campus did not have a written laser safety program and had not designated a laser safety officer.

Additionally, we selected two locations where lasers were stored and found that:

- At one location, lasers did not have proper laser warning signs posted in accordance with the American National Standards Institute (ANSI).

- At one location, the laser’s maximum output was not labeled.

A written and comprehensive laser safety program, including a designated laser safety officer and proper warning signage and equipment labeling, reduces the risk of injuries associated with the use of lasers.

**RECOMMENDATION**

We recommend that the campus:

a. Develop and implement a written laser safety program, including the designation of a laser safety officer, and communicate the program to appropriate personnel.

b. Post proper laser warning signs in equipment locations in accordance with ANSI.

c. Properly label the output on the laser noted above, and ensure that all other lasers are labeled.

**MANAGEMENT RESPONSE**

We concur. The campus will develop and implement a written laser safety program, including the designation of a laser safety officer, and communicate the program to the appropriate personnel. The campus will post proper laser warning signs in equipment locations in accordance with ANSI. The campus will properly label the output on the laser noted above and ensure that all other lasers are labeled.

Expected completion date: January 15, 2020

10. HAZARDOUS MATERIALS PROCUREMENT

**OBSERVATION**

The campus did not comply with policies and procedures for purchasing HAZMAT.
We found that the campus IIPP stated that when ordering HAZMAT or hazardous equipment, departments are responsible to notify SRM. Further, the campus CHP stated that preapproval must be obtained when HAZMAT is purchased using a procurement card (P-card).

We interviewed parties involved in purchasing HAZMAT and reviewed 19 P-card transactions, and we found that:

- SRM was not notified when departments ordered HAZMAT or hazardous equipment.
- P-card purchases for HAZMAT were not subject to any preapproval process.

Effective procurement policies and procedures help to ensure consistent practices for the purchase of HAZMAT and reduce the potential liability to the campus.

**RECOMMENDATION**

We recommend that the campus review policies and procedures for purchasing HAZMAT to ensure that they are current and accurate, and implement procedures to better assure compliance and enforcement.

**MANAGEMENT RESPONSE**

We concur. The campus will review policies and procedures for purchasing HAZMAT to ensure that they are current and accurate and implement procedures to better assure compliance and enforcement.

Expected completion date: January 15, 2020

11. ANNUAL REPORTING

**OBSERVATION**

The campus did not always submit an annual HS program report to the CO and campus president.

We found that the campus did not submit the required annual HS program report to the systemwide Office of Risk Management and campus president in 2017.

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

**RECOMMENDATION**

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

We concur. The campus will annually prepare and submit HS program reports to the campus president and the CO.

Expected completion date: December 16, 2019
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 environmental health and safety 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 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 CHP 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 California State University, Stanislaus (Stanislaus State), the responsibility and authority to develop and maintain the campus IIPP and environmental compliance programs are delegated to the director of SRM. SRM reports to the vice president for business and finance within the Administration and Finance division. The staff includes four environmental health and safety specialists, three student assistants, and the director. Stanislaus State SRM collaborates with all university colleges, departments, and organizations to assist them in the development and implementation of initiatives to create a safe and healthful 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 Stanislaus State campus from April 15, 2019, through June 7, 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 June 7, 2019.

Specifically, we reviewed and tested:

- 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 HAZMAT, including procurement; maintenance of accurate inventories; appropriate labeling and storage practices; and access controls.

- Communications and training processes, including evaluation of the hazard communication plan; availability of material safety data sheets; asbestos notifications and signage; and documentation and monitoring of student and employee training.

- Whether appropriate safety programs were in place, when applicable, for radiation sources; laser safety; bloodborne pathogens; respiratory protection; and spill containment.

- 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.

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*
- 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*
- Stanislaus State *Chemical Hygiene Plan*
- Stanislaus State *Injury & Illness Prevention Program*
- Stanislaus State *Respiratory Protection Program*
- Stanislaus State *Hazard Communication Plan*
- Stanislaus State *Bloodborne Pathogen Exposure Control Plan*
- Stanislaus State *Hazardous Materials Management Program*
- Stanislaus State *Employee Medical Monitoring Program*
- Stanislaus State College of Science, Chemistry *Chemical Hygiene Health & Safety Plan*
- Stanislaus State College of Science, Biological Sciences *Chemical Hygiene H&S Plan*
- Stanislaus State College of Science, Physics, Geology, and Physical Sciences *Chemical Hygiene H&S Plan*
- Stanislaus State *ProCard Program Manual*
- Stanislaus State *Standard Operating Procedures for Maintaining Emergency Eyewash and Shower Stations*

**AUDIT TEAM**

Audit Manager: Ann Hough  
Internal Auditor: Cinthia Santamaria