



UCSB Audit and Advisory Services

Internal Audit Report

Environmental Health & Safety – Safety Training

September 17, 2018

Performed by:

Antonio Mañas-Melendez, Acting Associate Director

Irene Camargo, Senior Auditor

Stacy Stone, Audit Analyst

Approved by:

Ashley Andersen, Audit Director

Report No. 08-18-0012

This page intentionally left blank.



AUDIT AND ADVISORY SERVICES
SANTA BARBARA, CALIFORNIA 93106-5140
Tel: (805) 893-2829
Fax: (805) 893-5423

September 17, 2018

To: John Sterritt, Director
Environmental Health & Safety

Distribution

Re: **Environmental Health & Safety – Safety Training
Audit Report No. 08-18-0012**

As part of the 2017-18 annual audit services plan, Audit and Advisory Services has completed an audit of Environmental Health & Safety (EH&S) on safety training. Enclosed is the report detailing the results of our work.

The primary purpose of this review was to assess whether EH&S has implemented appropriate processes and procedures to ensure campus departments complete safety training requirements in accordance with University of California (UC) and University of California, Santa Barbara (UCSB) policies, and federal and state regulations.

The limited scope of our audit included a review to ensure controls and procedures are in place to identify, develop, and monitor safety training defined by EH&S during fiscal year 2017-18. Our review was limited to the following campus organizations: Facilities Management (FM), Department of Recreation, Residential Dining Services, and Transportation Fleet Shop.

The result of our work found that EH&S has developed processes and procedures to assist campus departments in following University policy and regulation requirements in safety training. However, we identified a need to:

- Assist and monitor department accountability to comply with safety training requirements.
- Evaluate implementing a safety training framework for campus departments to adequately identify, implement, and monitor training.
- Evaluate a method of delivering and tracking safety training.

Detailed observations and management corrective actions are included in the following sections of the report. The management corrective actions indicate that each audit observation was given thoughtful consideration, and positive measures have been taken or planned in order to implement the management corrective actions.

John Sterritt, Director, Environmental Health & Safety
September 17, 2018
Page 2

We greatly appreciate the assistance on this project provided by EH&S, FM, Department of Recreation, Residential Dining Services, and Transportation Fleet Garage personnel. If you have any questions, please contact me.

Respectfully submitted,



Ashley Andersen
Director
Audit and Advisory Services

Enclosure

Distribution

Design, Facilities & Safety Services

Renee Bahl, Associate Vice Chancellor, Design, Facilities, & Safety Services
David McHale, Director, Facilities Management

Housing, Dining & Auxiliary Enterprises

Wilfred Brown, Associate Vice Chancellor, Housing, Dining & Auxiliary Enterprises
Melissa Jarnagin, CFO/Director Business & Financial Planning

Department of Recreation

Jeff Huskey, Director, Recreation

cc: Chancellor Henry Yang
Assistant Chancellor for Finance and Resource Management Chuck Haines
UCSB Audit Committee
Senior Vice President and Chief Compliance and Audit Officer Alexander Bustamante

PURPOSE

The primary purpose of this review was to assess whether the Environmental Health & Safety (EH&S) department has implemented appropriate processes and procedures to ensure campus departments complete safety training requirements, in accordance with University of California (UC) and University of California, Santa Barbara (UCSB) policies, and federal and state regulations.

SCOPE, OBJECTIVES AND METHODOLOGY

The limited scope of our audit included reviewing whether controls and procedures are in place to identify, develop, and monitor safety training defined by EH&S during fiscal year 2017-18. Our review was limited to the following organizations: Facilities Management (FM), Department of Recreation, Residential Dining Services, and Transportation Fleet Shop.

The objective of our review was to determine whether:

- Roles and responsibilities are clearly defined to identify, document, and track safety training.
- Safety training attendance is adequately tracked and documented.
- Departments complied with the Injury Illness and Prevention Program (IIPP) Safety Training and self-evaluation requirements.

To accomplish our objectives, we:

- Researched and reviewed relevant UC and UCSB audits and advisory work related to the safety training. Table 1 lists relevant audit reports.
- Researched and reviewed UC and UCSB policies, regulations, best practices, and other guidance relevant to the scope of the audit. The following includes the most relevant policies:
 - University of California Policy: *Management of Health, Safety and the Environment*, effective date October 28, 2005.
 - University of California Policy: *Personal Protective Equipment*, dated March 31, 2014.
 - University of California Santa Barbara, UCSB Policy 5400: *Environmental Health and Safety*.(UCSB Policy 5400)
 - University of California Santa Barbara, Policy 5430, *Hazard Communication Program*. (UCSB Policy 5340)
 - Occupational Safety and Health Administration, U.S. Department of Labor, *Training Requirements in OSHA Standards*, 2015.
- Gained an understanding of the tracking, reporting, and documentation processes for safety training of select campus departments based on a greater level of exposure to safety risks.
- Conducted interviews with key personnel to better understand the department's safety training processes.
- Reviewed employee safety training reporting and documentation procedures to obtain a better understanding of the reporting and documentation process.

- Performed a risk analysis that considered policies and regulations, roles and responsibilities, training reporting, and tracking documentation.
- On a sample basis, selected specific safety training by job description and general safety training sessions to determine whether FM employee’s attendance is adequately documented and tracked.
- Evaluated IIPP documentation for three departments to ensure compliance with the required Employee Safety Checklist, annual Safety Self-inspection and retention of related records for the required three year time period.

This audit was conducted in conformance with the *International Standards for the Professional Practice of Internal Auditing*.

Table 1 Relevant UC Audit and Advisory Reports		
Report Name	Year	Campus
EH&S Risk Assessment	2017	UC Santa Barbara
Lab Safety: Settlement Compliance	2016	UC Santa Barbara
Lab Chemical Safety & Management Project	2017	UC San Francisco
Laboratory and Field Safety Practices	2015	UC Merced
Emergency Management Program	2014	Lawrence Berkley National Laboratory
Laboratory Safety Self Assessments	2012	UC Riverside

Source: Auditor analysis.

BACKGROUND¹

Environmental Health and Safety

The EH&S promotes a safe and healthful environment for research, instruction and the campus community. EH&S provides guidance and services to the campus community to promote the integration of health, safety, and environmental stewardship into all University activities. The goal of EH&S is to sustain focus on safety culture transformation by enhancing partnerships with the academic, facilities and administrative communities to drive down the frequency and severity of injuries using metrics to prioritize intervention efforts. Through education, auditing and monitoring, technical consultation, and the provision of direct services, EH&S assists the campus in meeting its obligations for compliance with state and federal health, safety and environmental regulations.

EH&S is responsible for developing safety education and monitoring programs to ensure compliance with campus environmental health and safety policy. EH&S is tasked with establishing, coordinating, and maintaining programs to educate and provide training to the campus community. EH&S programs address specialized areas, as well as more general topical issues. EH&S provides guidelines for compliance with regulations, and with published standards of recognized professional health and safety organizations.

¹ Source: Environmental Health and Safety website; Environmental Health & Safety: IIPP, UCSB Health & Safety Binder, and UCSB Policy 5400.

UCSB Health and Safety Binder

EH&S has assembled a binder to serve as the foundation health and safety resource for campus administrators – chairs, faculty, directors, supervisors, business officers, and department safety representative (DSR). It is intended to aid them in recognizing their health and safety responsibilities and in building their local programs to meet those responsibilities. However, it is also intended to serve as a resource for all employee work areas and should be maintained by each DSR in a location known to all staff.

Although each work area is unique, EH&S has developed a generic onboarding Employee Safety Training Checklist and annual Self-inspection Checklist for the following areas: offices, shops/trades areas, and laboratories. These checklists can be found in the appendices to the IIPP in the UCSB Health and Safety binder. Supervisors should use these checklists as a starting point to develop an applicable and effective training program. In addition to the generic issues addressed in the checklists, workers must also be informed of specialized campus policies, procedures, and manuals applicable to their workplace.

Department supervisors are responsible for ensuring departments complete IIPP requirements and maintain a copy for three years in the UCSB Health and Safety binder for viewing by department employees and California Occupational Safety and Health Administration (Cal/OSHA). Record keeping as a means of demonstrating compliance is essential. All documentation must be filed and maintained by the departments. Departments may also choose to maintain centralized copies of these records with employee signatures. Electronic safety training records are sufficient documentation with employee's log-in credentials when using the Learning Management System (LMS).

Campus Safety Training Responsibilities

The vice chancellors are responsible for ensuring that units under their authority comply with the campus environmental health and safety policy. Deans, unit heads, principal investigators, and supervisors are accountable for establishing and maintaining programs to ensure compliance within their areas and which will provide a safe and healthy environment. Department supervisors, both faculty and staff, are responsible for:

- Analyzing jobs to determine the qualifications needed to perform the activity safely and for establishing a system for training on health and safety matters. EH&S can assist through its regularly scheduled training programs (website: training schedules), videos for checkout, or customized consultation/training. Employees and students must be trained by their supervisor:
 - When first hired or introduced to the workplace.
 - When given a new assignment for which previous training is not applicable.
 - Whenever new categories of potential hazards are introduced in the workplace.
 - Whenever the supervisor becomes aware of a new potential hazard.
- Documenting who conducted the self-inspections, dates, any unsafe conditions/practices found, and corrective actions taken. Records must be maintained for three years and be available for EH&S or Cal/OSHA on demand.
- Documenting who was trained, who did the training, when the training occurred, and what was taught.

Occupational Safety and Health Administration (OSHA) and Cal/OSHA²

Under the Occupational Safety and Health Act of 1970, employers are responsible for providing a safe and healthful workplace. OSHA’s mission is to ensure the protection of workers and prevent work-related injuries, illnesses, and deaths by setting and enforcing standards, and by providing training, outreach, education and assistance. See Table 2 for selected safety training classifications defined by EH&S.

Table 2	Safety Training Classifications Defined by EH&S
Job Categories	Job Classification
Fire Prevention Plan	All employees should know how to prevent and respond to fires and are responsible for adhering to company policy regarding fire emergencies. Management determines the University fire prevention and protection policies.
Hazard Communication	All employers with hazardous chemicals in their workplaces must prepare and implement a written hazard communication program, and must ensure that all containers are labeled, employees are provided access to material safety data sheets, and a program is conducted for all potentially exposed employees.
Hearing Conservation	Employees should use protective equipment to lower exposures to less than 85 dBA TWA until feasible administrative or engineering controls are implemented. A hearing conservation program shall be implemented whenever employee noise exposures equal or exceed an 8-hour time-weighted average (TWA) sound level of 85 decibels (dBA).
Asbestos Awareness	Employees shall be trained for the identification, communication, recordkeeping, monitoring, and overall management of asbestos-containing materials in buildings.
Bloodborne Pathogens	Employers must have a policy that pertains to spills of blood or other body fluids. It is not a first aid/emergency response procedure. This policy is specific to clean-up of such fluids.
Ladder Safety	Employers must apply rules to all stairways and ladders used in construction, alteration, repair, painting, decorating and demolition of worksites covered by OSHA's construction safety and health standards.
Lead Awareness	Employers must adhere to regulations designed to protect workers involved in construction activities from the hazards of lead exposure.
Lockout/Tagout	Employees must be able to address lockout/tagout practices and procedures necessary to disable machinery or equipment, thereby preventing the release of hazardous energy while employees perform servicing and maintenance.
Personal Protective Equipment	Employers must ensure personal protective equipment, commonly referred to as "PPE", is worn to minimize exposure to hazards that cause serious workplace injuries and illnesses. These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards.
Respirator Protection	Employers must establish and maintain an effective respiratory protection program to protect against workplace hazards. In addition, employers must train employees in all aspects of the respiratory protection program.

Source: Environmental Health & Safety.

Many OSHA standards include explicit safety and health training requirements to ensure that workers have the required skills and knowledge to safely do their work. These requirements reflect on OSHA’s belief that training is an essential part of every employer’s safety and health program for protecting workers from injuries and illnesses. Researchers conclude that those who are new on the job have a higher rate of injuries and illnesses than more experienced workers.

² Source: Occupational Safety and Health Administration, U.S. Department of Labor, *Training Requirements in OSHA Standards*, 2015.

Training is the safe way for workers to do their jobs well, is an investment that will pay back over and over again in fewer injuries and illnesses, provides better morale, lowers insurance premiums, and more. A record of all safety and health training documentation answers the first questions an OSHA incident investigator will ask: “Did the employee receive adequate training to do the job?”

Cal/OSHA protects workers from health and safety hazards on the job in almost every workplace in California through its research and standards, enforcement, and consultation programs.

Injury Illness and Prevention Program (IIPP)³

The IIPP is one of the most important health and safety regulations/programs on campus and in California. IIPP is administered by the Cal/OSHA. This law requires employers to establish the following foundation safety program elements that apply to all workers regardless of their particular job duties:

- Ensure that workers are trained in, and comply with, safe work practices.
- Inspect for and correct unsafe/unhealthy work conditions as soon as possible.
- Maintain documentation of all training and inspections.
- Encourage workers to report unsafe conditions without fear of reprisal.
- Communicate safety issues in a way that is understandable to all workers.
- Report and investigate all occupational injuries.

As with all campus worker safety programs, the primary implementers of the IIPP are supervisors, faculty, and department administrators. The role of EH&S is to inform the campus administrators of their IIPP responsibilities and to provide them appropriate tools to assist with implementation. These tools include:

- A written IIPP program template. The written plan should be maintained by the Department Safety Representative (DSR).
- Health and Safety binder. All employees have the right to see their written program upon request.
- Each employee must be aware of their employer’s IIPP and their responsibilities under their plan. Appropriate online training sessions are made available for:
 - Office supervisors
 - Physical laborer supervisor
 - Non-supervisor (All employees in non-supervisory role)
 - Laboratory workers

Supervisors are responsible to ensure that:

- All employees are notified of safety training and fulfill this requirement.
- Employees that miss the required training attend a make-up training scheduled twice a year, in December and June.
- Documentation is in the form of sign-in sheets with employee's signature attesting to attending the safety training or through the electronic LMS using their log-in credentials.

EH&S developed and provided FM with a job classification matrix as a safety training compliance guide for supervisors to ensure employees are trained according to their job duties. Additionally, EH&S facilitated general Injury Prevention Program safety training meetings scheduled in advance for the fiscal year.

³ Source: Environmental Health & Safety website: Injury & Illness Prevention Program.

SUMMARY OPINION

The result of our work found that EH&S has developed and facilitated safety programs and is assisting campus departments in following University policy and regulation requirements in safety training. However, we identified a need to:

- Assist and monitor campus departments comply with safety training requirements.
- Evaluate implementing a safety training framework for campus departments to adequately identify, implement, and monitor training.
- Evaluate a method of delivering and tracking safety training.

Audit observations and management corrective actions are detailed in the remainder of the audit report.

DETAILED OBSERVATIONS AND MANAGEMENT CORRECTIVE ACTIONS

A. Governance

Our audit found EH&S is assisting campus departments in following University policy and regulation requirements for safety training needs, including implementing a safety training framework for FM and completing one for Housing, Dining, and Auxiliary Enterprises (HDAE). However, we did identify opportunities for EH&S to assist campus departments in identifying, developing, and monitoring safety training needs.

While EH&S assists and administers general safety training programs for the campus, developing a more active role and extending current FM initiatives to other campus departments could help to improve governance, guidance, oversight, and mitigate risks associated with safety training.

B. Monitoring Safety Training Attendance

As mentioned before, FM has formalized and implemented a framework that clearly aligns safety training needs with job classification based on Cal/OSHA requirements. This initiative has put FM ahead of other campus departments implementing safety training needs. We tested the monitoring process in FM because FM employees have one of the highest probabilities of safety injuries on campus based on the type of work performed.

Our review of FM department safety training attendance based on job classification and generic safety training sessions found a need to adequately track employee’s safety training to ensure compliance with mandatory safety training requirements.

1. Safety Training by Job Classification

Table 3		Safety Training by Job Classification		
Department	Job Classification	Identification	Attendance	Comments*
Facilities Management	Skilled Trades	✓	Partial	36% of employees (37 of 58) did not attend all training listed in the training matrix framework.
	Custodial Services	✓	Partial	38% of employees (43 of 69) did not attend all training listed in the training matrix framework.
	Grounds Maintenance	✓	Partial	48% of employees (31 of 60) did not attend all training listed in the training matrix framework.
Department of Recreation	N/A	N/A	N/A	Training matrix framework in progress or has not been developed. Not included in the sample testing.
Residential Dining Services				
Transportation Fleet Garage				

Source: Auditor analysis.

✓: Compliance with criteria. Departments have identified needed safety training by job classification.

Partial: Partial compliance with criteria. Some employees did not complete required safety training.

N/A: Not tested.

We found, based on documented training attendance, that an average of only 59% of FM personnel have successfully completed required safety training based on the EH&S developed safety training matrix by job classification. We tested three employee groups including skilled trades, custodial services, and grounds maintenance, hired from June 2013 to March 2017 for initial and annual training requirements. Due to variations in training frequency, it is difficult to manage training that is unique to specific employee job categories and some that require a one-time initial training or a training certification, while other training requirements are annual. See Table 4 for our results.

2. General Injury Prevention Safety Training

We found that during fiscal year 2016-17, an average of only 60% of FM personnel had successfully attended the scheduled Injury Prevention Program general safety meetings for Fire Safety & Fire Operations and the Protective Personal Equipment & Back Safety. Furthermore, employees who missed the required training did not attend make-up safety training sessions scheduled for December 2016 and June 2017. See Table 5 for our results.

Table 4		General Injury Prevention Safety Training		
Department	Safety Training	Identification	Attendance	Comments*
Facilities Management	Fire Safety & Fire Operations	✓	Partial	27% employees (four of 15) did not attend training or make-up safety training sessions.
	Personal Equipment & Back Safety Training	✓	Partial	53% employees (eight of 15) did not attend training or make-up safety training sessions.
Department of Recreation	N/A			Training matrix framework in progress or has not been developed. Not included in the sample testing.
Residential Dining Services				
Transportation Fleet Garage				

Source: Auditor analysis.

✓: Compliance with criteria. Departments have identified general safety training.

Partial: Partial compliance with criteria. Some employees did not complete required safety training.

N/A: Not tested.

C. IIPP Tracking Documentation

In addition to our review of safety training attendance, we also looked at a sample of departments for compliance with IIPP requirements. It is the department supervisor's responsibility to monitor and manage safety requirements outlined by Cal/OSHA and retain required documents. We evaluated whether:

- The Employee Safety Training Checklist was completed as part of the employee's onboarding process during the last three years.
- The annual Self-inspection Checklist was completed in the last three years.

Our review found that selected departments have an IIPP binder to serve as the foundation health and safety resource for each department's safety representative with above mentioned checklists.

However, two of the three departments were unaware that they have to complete and retain required IIPP checklists. See Table 6 for our results.

Table 5		UCSB IIPP Tracking Documentation	
Organizations	Employee Safety Checklist	Annual Self-Evaluation	Comments
Facilities Management	N/A	N/A	Not included in the sample testing.
Department of Recreation	x	x	Unaware of the required IIPP employee and annual safety checklists.
Residential Dining Services	x	x	Unaware of the required IIPP employee and annual safety checklists.
Transportation Fleet Garage	Partial	Partial	Employees signed the form in excess of six months after being hired or in some cases did not sign the form altogether. The annual self-inspection checklist was completed for two of the three years tested.

Source: Auditor analysis.
 x: Non-compliance with criteria. Retain documentation for three years.
 Partial: some requirements met. See comments.
 N/A: Not tested.

We found Transportation Fleet Garage was aware of IIPP requirements. However,

- Three of the five employees signed the form months after being hired, whereas the other two did not sign the form.
- The annual self-inspection checklist was completed for two of the three years tested.

D. Methods of Delivering and Tracking Training

In addition, we found there are opportunities to improve existing tools used to track and document safety training, including new hire training and extending safety training to campus departments. Plans are being considered to utilize the LMS as a resource to track employee training. We were informed that not all staff has access to a computer. Also, some training is not in written format and conducted as a demonstration on how to use specific equipment.

To ensure that safety training is properly identified, developed, and monitored to comply with state and federal regulations and University policies, we recommend Environmental Health & Safety define a plan to:

- Assist and monitor campus departments in complying with IIPP program requirements, including employee safety training and self-inspection requirements. A more active role by EH&S could help provide regular reporting and guidance to campus departments and formalize roles and responsibilities.
- Complete the implementation of the HDAE safety training framework and assess the need to extend a safety training framework to other campus departments to ensure safety needs are identified, implemented, and monitored.
- Assist FM in adhering to IIPP requirements, including ensuring employees attend required safety training, completing self-inspections, and assuring compliance programs are adequately monitored. Evaluate whether there is a need to extend this action plan to other

campus departments.

- Assist Department of Recreation, Residential Dining Services, and Transportation Services in adhering to IIPP requirements, including ensuring completion of the Employee Safety Training Checklist as part of their onboarding process and retention of supporting documentation for three years. Evaluate whether there is a need to extend this action plan to other campus departments.
- Assist Department of Recreation, Residential Dining Services, and Transportation Services in adhering to IIPP requirements, including ensuring completion of the annual Self-inspection Checklist and retention of the supporting documentation for three years. Evaluate whether there is a need to extend this action plan to other campus departments.
- Evaluate alternatives to develop methods and/or tools for delivering, documenting, and tracking safety training.

Management Corrective Actions

Environmental Health & Safety agrees to define a plan to:

- Assist and monitor campus departments in complying with IIPP program requirements, including employee safety training and self-inspection requirements. A more active role by EH&S could help provide regular reporting and guidance to campus departments and formalize roles and responsibilities.
- Complete the implementation of the HDAE safety training framework and assess the need to extend a safety training framework to other campus departments to ensure safety needs are identified, implemented, and monitored.
- Assist FM in adhering to IIPP requirements, including ensuring employees attend required safety training, completing self-inspections, and assuring compliance programs are adequately monitored. Evaluate whether there is a need to extend this action plan to other campus departments.
- Assist Department of Recreation, Residential Dining Services, and Transportation Services in adhering to IIPP requirements, including ensuring completion of the Employee Safety Training Checklist as part of their onboarding process and retention of the supporting documentation for three years. Evaluate whether there is a need to extend this action plan to other campus departments.
- Assist Department of Recreation, Residential Dining Services, and Transportation Services in adhering to IIPP requirements, including ensuring completion of the annual Self-inspection Checklist and retention of the supporting documentation for three years. Evaluate whether there is a need to extend this action plan to other campus departments.
- Evaluate alternatives to develop methods and/or tools for delivering, documenting, and tracking safety training.

Audit and Advisory Services will follow up on the status of this issue by November 30, 2018.