

**OCCUPATIONAL HEALTH
CALIFORNIA STATE UNIVERSITY,
SAN MARCOS**

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ABBREVIATIONS

CCR	California Code of Regulations
CI/CE	Center for Internships/Cooperative Education
CSU	California State University
DSC	Department Safety Coordinators
EH&S	Environmental Health and Safety
EMMP	Employee Medical Monitoring Program
GISO	General Industrial Safety Orders
IIPP	Injury and Illness Prevention Program
MSDS	Material Safety Data Sheets
RISO	Research and Instructional Safety Office

INTRODUCTION

PURPOSE

Our overall audit objective was to determine the effectiveness of existing policies and procedures that relate to both employee and student health and safety and mitigation of real and potential hazards in the workplace.

Within the overall audit objective, specific goals included determining whether:

- ▶ the campus had developed and distributed a written IIPP to all departments;
- ▶ the campus had developed a satisfactory system for communicating pertinent IIPP and other safety and health information to all affected employees;
- ▶ selected departments had implemented procedures for both scheduled and unscheduled inspections which includes the filing of reports with distribution to appropriate department chairs and the office on environmental health and safety;
- ▶ the campus had implemented procedures for investigation, recording and reporting accidents;
- ▶ the campus had identified training requirements applicable to specific classes of employees and provided adequate training to students whose study areas take them into places where potential workplace hazards are located;
- ▶ the campus had developed procedures and materials to assure that employees and students are provided training in a timely manner;
- ▶ the campus had developed procedures for recording training to employees and students; and
- ▶ the campus has developed a medical monitoring program and identified those employees who should be included.

SCOPE AND METHODOLOGY

This review emphasized but was not limited to compliance with state laws, Board of Trustee policies, and Office of the Chancellor and campus policies, letters and directives. The primary directive for this review involves Title 8, §3203, *Injury and Illness Prevention Program (IIPP) of the California Code of Regulations (CCR)*. In addition, Office of the Chancellor and campus generated manuals were used to measure compliance with selected health and safety issues. January 1996 to date was the primary period of review.

Our focus involved appropriate health and safety related records and procedures within the campus Environmental Health and Safety Office and three departments: Biology, Chemistry and Physical Plant. We selected ten employees from each of the three departments and two spring 1997 classes from each of the two academic departments. We reviewed available records related to health and safety training and information for both the selected employees and students within the selected classes.

Specifically, we reviewed and tested the following areas:

- ▶ development, implementation and communication of the campus IIPP;
- ▶ health and safety inspections;
- ▶ employee health and safety training;
- ▶ student health and safety training; and
- ▶ employee medical monitoring.

BACKGROUND

Senate Bill 198: Injury and Illness Prevention Program (IIPP) was passed and chaptered into the Insurance and Labor Codes on October 2, 1989. Regulations amending the General Industrial Safety Orders (GISO) in the California Code of Regulations were adopted on December 13, 1990 and incorporated in GISO §3203, Injury and Illness Prevention Program. Beginning July 1, 1991, §3203 required employers to establish, implement, and maintain a written Injury and Illness Prevention Program with specified elements including substantial compliance criteria for use in evaluating an employer's injury prevention program.

The California State University developed and distributed a model Injury and Illness Prevention Program (IIPP) to each campus. This model (IIPP) was designed to serve as an umbrella that incorporates the elements of the myriad of individual health and safety programs required by state and federal law. It has also been designed to integrate existing campus health and safety regulations and future safety-related mandates that may arise.

The intent of the model IIPP was to facilitate: identification and evaluation of workplace hazards; correction of unsafe conditions; communications between the university and its employees, students and the general public on matters concerning health and safety; education and training of employee; development of compliance strategies; documentation/recordkeeping of safety and health related activities; and identification of the person responsible for administering the program.

OPINION

We visited the California State University, San Marcos campus from September 22 through October 2, 1997 and audited the procedures in effect at that time.

We found that, except for the items noted in the Executive Summary and in the details of the report, compliance with state, CSU and campus policies and procedures was satisfactory. The comments that follow are based on an effort to identify and mitigate issues that detract from the overall effectiveness of the existing campus health and safety program.

EXECUTIVE SUMMARY

The purpose of this section is to provide management with an overview of conditions requiring their attention. Areas of review not mentioned in this section were found to be satisfactory. Numbers in brackets [] refer to page numbers in the report.

HEALTH AND SAFETY INSPECTIONS [5]

The campus health and safety inspection process was in need of improvement with respect to: timeliness and documentation of inspections; distribution of inspection reports; and documentation on follow-up activities to points raised on previously conducted inspections. By establishing full implementation of existing campus inspection policies and procedures, the campus will reduce the risk of injuries and illnesses, subsequent civil and criminal litigation and citations/fines by various regulatory agencies.

EMPLOYEE HEALTH AND SAFETY TRAINING [6]

Employee health and safety training procedures were in need of improvement with respect to identification of individual employee training requirements and timely training of all employees. Assuring full implementation of training procedures reduces campus exposure to injuries and illnesses, subsequent civil and criminal litigation, and citations/fines by various regulatory agencies.

STUDENT HEALTH AND SAFETY TRAINING [8]

Health and safety training and information procedures for students were incomplete with respect to both on- and off-campus educationally related activities. Establishing a more comprehensive and uniform process of providing students with applicable training and information regarding both on- and off-campus activities reduces the risk of both injuries and illnesses to students and subsequent civil litigation.

EMPLOYEE MEDICAL MONITORING [9]

The campus had neither identified all employees who should be included in their Employee Medical Monitoring Program (EMMP) nor provided timely medical monitoring to those currently in the EMMP. Identifying those employees who should be included in the EMMP and assuring they receive appropriate and timely medical monitoring reduces the risk of work related illnesses going undetected.

OBSERVATIONS, RECOMMENDATIONS, AND CAMPUS RESPONSES

HEALTH AND SAFETY INSPECTIONS

The campus health and safety inspection process was in need of improvement with respect to: timeliness and documentation of inspections; distribution of inspection reports; and documentation on follow-up activities to points raised on previously conducted inspections.

We found that:

- ▶ Selected H&S inspections (quarterly lab, annual fume hoods and monthly eyewash and shower equipment) were not occurring (October 96 – July 97) within the established frequencies.
- ▶ There was inadequate documentation regarding inspections occurring in non-academic areas (physical plant).
- ▶ Written inspection follow-up procedures had not been developed. The EHOS office was in the process of developing those procedures during the course of the review.
- ▶ There was inadequate documentation regarding follow-up action that may have been taken on inspection findings.
- ▶ Inspection oversight procedures (IIPP Committee) had not been implemented. *At the conclusion of the audit, the EHOS director indicated that the IIPP committee, after discussion with the president and staff, would not be implemented.*

The CSU Model Injury and Illness Prevention Program (IIPP) among others, addresses the inspection requirements contained in California Code of Regulations (CCR) title 8, §3203, Injury and Illness Prevention Program. The campus version of the IIPP addresses specific inspection requirements in both §IV and the Executive Summary.

The EHOS director indicated the primary factor contributing to the inspection deficiencies was due to a temporary vacancy in his office between December 1996 and July 1997.

By not assuring full implementation of inspection procedures, the campus is exposed to an increased risk of injuries and illnesses, subsequent civil and criminal litigation and citations/fines by various regulatory agencies.

Recommendation 1

We recommend that the campus review and strengthen its existing health and safety inspection procedures related to timeliness of inspections, inspection report distribution and follow-up activities to points raised during previously conducted inspections.

Campus Response

We concur with this recommendation and will implement recommended changes.

We believe that the existing staffing pattern is sufficient to meet the timeliness of inspections identified during the audit. With regard to inspection report distribution and follow-up, annual inspection surveys will be conducted on all university areas by EH&OS personnel. Inspection reports will be distributed through appropriate oversight committees to the appropriate Dean, Director, or Administrative Officer. If subsequent surveys indicate repeat discrepancies, the reports will be forwarded again to the appropriate Dean, Director, or Administrative Officer with a request to implement corrective action. This procedure will be fully implemented by the beginning of the 1998/99 fiscal year.

Your concerns regarding inspection oversight procedures through the implementation of an IIPP Committee has been resolved. A Public Safety Advisory Committee was initiated this term and charged with the responsibility for gathering information from the campus community regarding public safety issues including police, fire, emergency services, and environmental health and occupational safety concerns. The Committee is designed to serve as the appropriate forum for discussions of policy issues, training needs, and communication issues as they relate to Public Safety. The Public Safety Advisory Committee has been organized and charged and will have its initial meeting on April 22, 1998.

EMPLOYEE HEALTH AND SAFETY TRAINING

Employee health and safety training procedures was in need of improvement with respect to identification of individual employee training requirements and timely training of all employees.

We found that:

The campus had not developed formal training profiles for each of its employees. Employee training profiles provide greater assurance each employee will receive required training.

Campus records indicated that a significant amount of training was provided to the 10 selected employees in Facility Services. However, without a training profile indicating the type of training needed, it was not possible to determine whether all required training had been provided to individual employees.

Documented training provided faculty within both the biology and chemistry departments was negligible. Some amount of training occurs in staff meetings and off-campus training but it is not documented satisfactorily nor routinely included in the employees training file.

The campus does not have procedures in place to assure that employees who miss required training are identified and rescheduled for training.

The CSU Model Injury and Illness Prevention Program (IIPP) among others, addresses employee training requirements contained in California Code of Regulations (CCR) title 8, §3203, Injury and Illness Prevention Program. The campus version of the IIPP addresses employee training requirements in both §V and the Executive Summary.

The CSU Sample Environmental Health and Safety Training Program, April 1997, recommends the use of Job Evaluation Profiles as a tool to help managers and supervisors identify which safety training courses their employees should be provided.

The EHOS director indicated that a combination of factors contributed to the issues noted above including; EHOS is not provided lists of newly hired employees so that appropriate training files and training can be scheduled timely. In addition, the CSU Sample Environmental Health and Safety Training Program was not published until April 1997.

By not assuring full participation by all employees in health and safety training the campus is exposed to an increased risk of injuries and illnesses, subsequent civil and criminal litigation and citations/fines by various regulatory agencies.

Recommendation 2

We recommend that the campus strengthen their existing health and safety training procedures to assure timely training of all their employees.

Campus Response

We concur with this recommendation and will strengthen our existing Health and Safety Training Program.

A “Safety Training Profile” was established in September 1997, which outlined required training elements and frequencies of training within each potential hazard area for each employee class. Supervisors will identify each employee under their supervision who may be exposed to a hazard and ensure that they receive the necessary training. In the event an employee misses a scheduled training session, the supervisor will be responsible for scheduling a made-up session in consultation with EH&OS. To assist EH&OS monitoring the training requirements of the campus, HRM will provide a list of new employees to EH&OS on a monthly basis. With respect to training of faculty and staff in the sciences, EH&OS will continue to provide formal training for these employees and will monitor their “Safety Training Profiles” to ensure that training is current. This procedure will be fully implemented by the beginning of the 1998/99 fiscal year.

STUDENT HEALTH AND SAFETY TRAINING

Health and safety training and information procedures for students were incomplete with respect to both on- and off-campus educationally related activities.

We found that:

- ▶ Procedures were not in place to assure that Biology students who missed lab safety training during the first session received the training at a later date. Nine of the seventeen students receiving a letter grade in one (BIO 353-02) of two labs tested had not been included on the signed student class rosters indicating receipt of lab health and safety training.
- ▶ There was no record that lab H&S training had been provided to the students enrolled in one (BIO 202-1) of the two selected lab classes conducted by the biology department.
- ▶ Procedures were not in place in the biology department to assure that records reflecting health and safety training provided to students were collected from the faculty and forwarded to EHOS.
- ▶ The campus had developed a draft Student Travel Policy document during September 1997. It had not been implemented at the time of our review.

There is no comprehensive and uniform state or CSU policy regarding student health and safety training for both on- and off-campus educationally related activities. However, the campus has been proactive in this area by independently developing interim procedures for student lab safety training and information; internships - Risk Management Student Field Placements – Interim Procedure; and a draft Student Travel Policy document.

By not providing students with applicable training and information regarding both on- and off-campus educational activities, there is an increased risk of both injuries and illnesses to students with subsequent civil litigation.

Recommendation 3

We recommend that the campus strengthen existing procedures to assure timely and complete health and safety training and information to students involved in both on- and off-campus activities.

Campus Response

We concur with this recommendation and will strengthen our existing procedures to ensure timely and complete health and safety training for our students in laboratory classes.

EH&OS has provided safety training to students in the past. In recent years, this training has been assumed by the faculty. In order to ensure compliance with this recommendation, EH&OS will work

with the Dean of the College of Arts and Sciences to ensure that faculty-led training is timely and appropriate, that there are make-up sessions for students who miss the initial training, and that all training is documented with copies forwarded to EH&OS. This training will be fully implemented in the fall 1998 semester.

EMPLOYEE MEDICAL MONITORING

The campus had neither identified all employees who should be included in their Employee Medical Monitoring Program (EMMP) nor provided timely medical monitoring to those currently in the EMMP.

We found that:

- ▶ The campus employee medical monitoring program (EMMP) did not include any faculty among the 31 employees within the program. Yet the lab technicians for both the biology and chemistry departments were included in the program.
- ▶ EHOS subsequently indicated that two faculty members were receiving physicals through the campus diving program. However, they were not included on the medical monitoring list provided to us due to an oversight.
- ▶ HRM records indicated employees in the medical monitoring program were not receiving physicals timely.
- ▶ HRM and EHOS were both maintaining records of EMMP physicals and there were some inconsistencies between the two.

Specific employee medical monitoring programs are contained within the CSU Sample Employee Medical Monitoring Program (EMMP) Manual and the CSUSM Medical Surveillance/Physical Examination Program.

Employees are required to be given a baseline physical before being assigned to areas containing potentially hazardous or OSHA regulated substances. Subsequent periodic physicals for these employees are required and the frequency depends upon that required by the attending physician or pertinent regulation.

Section 2.2 of the CSU EMMP Manual contains the following information regarding faculty.

...In general, faculty members have minimal contact with hazardous agents or chemicals, and minimal potential for exposure. Faculty members from the following departments may have potential for a significant biological, physical or radiological exposure: Chemistry, Biological Sciences, Art, Industrial Arts, Chemical Engineering, Ornamental Horticulture and Plant and Soil Science...

The EHOS director indicated the majority of these problems were primarily due to a combination of factors including: EHOS is not provided lists of newly hired employees so that appropriate medical monitoring activities can be scheduled timely; funding shortfalls that resulted in certain job categories being rescheduled to different medical monitoring frequencies; and ambiguities in medical monitoring responsibilities between EHOS and HRM.

By not identifying those employees who should be included in the EMMP and assuring they receive appropriate and timely monitoring, the risk of work related illnesses going undetected is increased.

Recommendation 4

We recommend that the campus strengthen existing procedures to assure:

- a. All appropriate employees are identified for inclusion in the EMMP; and,
- b. All employees in the EMMP are provided appropriate and timely medical monitoring.

Campus Response

We concur with Recommendation 4 and will strengthen campus procedures to ensure that all appropriate employees are identified and enrolled in our EMMP, and that all employees in the program will be provided appropriate and timely medical monitoring. The EMMP will be reviewed and adjusted to ensure that these goals are met by the beginning of our fall 1998 semester.

APPENDIX A: PERSONNEL CONTACTED

Name

Title

Alexander Gonzalez	Interim President
Thomas Blair	Director, Facilities Services
Richard Bray	Program Director, Biology Department
Sally Divis	Instructional Support Technician, Biology
Michael Grogan	EHOS Hazardous Materials Coordinator
Richard Karas	Vice President for Academic Affairs
Linda Leiter	Assistant to the Executive Vice President
J. Stephen Orsak	Director, EHOS
Judith Taylor	Director, Human Resources Management
Jacqueline Trischman	Professor, Chemistry Department
Arnold Trujillo	Director, Public Safety
Steven Welch	Program Director, Chemistry Department
Christina Wilde	Instructional Support Technician, Chemistry
Ernest Zomalt	Executive Vice President