

HAZARDOUS MATERIALS MANAGEMENT

SAN DIEGO STATE UNIVERSITY

Report Number 00-14

July 26, 2000

Members, Committee on Audit

Frederick W. Pierce, IV, Chair
Harold Goldwhite, Vice Chair
Murray L. Galinson Shailesh J. Mehta
Neel I. Murarka Stanley T. Wang

Staff

University Auditor: Larry Mandel
Senior Director: Janice Mirza
Audit Manager: Nate Clark

BOARD OF TRUSTEES

THE CALIFORNIA STATE UNIVERSITY

CONTENTS

INTRODUCTION

Purpose.....	1
Scope and Methodology.....	2
Background	2
Opinion.....	4
Executive Summary.....	4

OBSERVATIONS, RECOMMENDATIONS, AND CAMPUS RESPONSES

Hazardous Materials Administration.....	6
Hazardous Awareness Coordinator Function	6
Hazard Control Program Documentation	9
Hazardous Materials Communication, Reporting, and Training.....	10
Hazardous Materials Awareness Training.....	10
Business Plan Certification and Update	12

APPENDICES

APPENDIX A:	Personnel Contacted
APPENDIX B:	Campus Response
APPENDIX C:	Chancellor's Acceptance

ABBREVIATIONS

CCR	Californian Code of Regulations
CSU	California State University
EH&S	Environmental Health & Safety
EPA	Environmental Protection Agency
HAZCOMM	Hazard Awareness and Communication Program
HAZMAT	Hazardous Material(s)
HMMD	Hazardous Materials Management Division
H&SC	Health & Safety Code
HWMG	Hazardous Waste Management Guide
IIPP	Injury and Illness Prevention Program
MSDS	Material Safety Data Sheet(s)
PCB	Polychlorinated Biphenyls
PI	Principle Investigator
RCRA	Resource Conservation and Recovery Act
SAM	State Administrative Manual
SDSU	San Diego State University
TSD	Transfer, Storage and Disposal

INTRODUCTION

PURPOSE

Our overall audit objective was to ascertain the effectiveness of policies and procedures concerning Hazardous Materials Management (HMM), determine the adequacy of controls over hazardous materials and waste, and ensure compliance with related governmental regulations.

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

- ▶ administration and management of the HMM program provide clear lines of organizational authority and responsibility, include maintenance of required registrations and permits, and ensure compliance with the key regulatory reporting requirements;
- ▶ hazardous materials (HAZMAT) and waste management policies and procedures are adequately documented;
- ▶ HAZMAT purchasing and receipt processing are conducted in a controlled environment, and material safety data sheets (MSDS) are obtained and readily accessible to employees;
- ▶ a comprehensive HAZMAT communication program has been established, and effective emergency and contingency plans are in place;
- ▶ inventory records are properly maintained for HAZMAT purchases, and HAZMAT safety and equipment inspections are conducted;
- ▶ HAZMAT maintained in containers and tanks are properly labeled and adequately controlled;
- ▶ hazardous waste transfer, storage, and disposal (TSD) agreements exist between the University and TSD contractors and require the contractors to maintain adequate liability insurance;
- ▶ hazardous waste identification procedures are adequately implemented, and waste transportation and disposal processes are in compliance with governmental regulations;
- ▶ employees who handle HAZMAT or generate waste are adequately trained; and
- ▶ hazardous, biomedical and universal waste is properly labeled and not accumulated on-site for greater than the allowable time.

SCOPE AND METHODOLOGY

This review emphasized but was not limited to compliance with state and federal laws and campus hazardous materials (HAZMAT) policies, letters and directives. The audit review period was June 1999 to date. At San Diego State University (SDSU), the Department of Environmental Health and Safety (EH&S) has overall responsibility for hazardous materials management (HMM).

Our primary focus involved the internal administrative, compliance, and operational controls over the management of the campus HMM function and included visits to three campus units: Biology, Physical Plant and Art. Specifically, we reviewed and tested:

- ▶ procedures for HAZMAT purchasing, receiving and storage;
- ▶ the use and availability of material safety data sheets (MSDS);
- ▶ HAZMAT communication and training programs, emergency and contingency planning, and related documentation;
- ▶ HAZMAT inventory record keeping practices;
- ▶ procedures for performing HAZMAT safety and equipment inspections;
- ▶ HAZMAT and waste labeling and other forms of required warnings;
- ▶ hazardous waste identification, permit, registration, and manifesting procedures; and
- ▶ the hazardous waste disposal program.

BACKGROUND

As a result of a systemwide risk assessment conducted by the Office of the University Auditor during the last quarter of 1999, the Board of Trustees, at its January 2000 meeting, directed that *Hazardous Materials Management* be reviewed.

The proposed scope of such audits as presented in Attachment B, Agenda Item 3 of the January 25-26, 2000 meeting of the Committee on Audit, stated that the review would include the systems and procedures for controlling the purchase, generation, storage, treatment, use and disposal of hazardous materials (HAZMAT) and wastes and responding to hazardous spills. Potential impacts include environmental damage, adverse publicity, excessive costs and legal liabilities, facilities with inordinate health risks, regulatory fines and sanctions, and the inability to identify HAZMAT in emergency situations. *Hazardous Materials Management* was previously audited in 1992 and a follow-up review was completed in 1996. In 1976, the Federal Resource Conservation and Recovery Act (RCRA) was enacted to address solid waste

generated nationwide and the growing public concern regarding HAZMAT health risks; waste generation, and waste disposal. RCRA initiated the “cradle to grave” tracking and management of hazardous waste – that is, from the generator to transporter to treatment, storage or disposal. RCRA regulations addressed, but were not limited to, the following management issues: a) generation of hazardous waste, b) hazardous waste treatment, transportation, storage, and disposal, c) federal and state reporting, d) federal, state, or local permits/registration, and e) waste minimization.

RCRA provided the federal government with the authority to authorize states to develop, implement and enforce their own HAZMAT and waste management regulations. However, the state programs must be as stringent or broader in scope than the federal regulations. In 1992, California received such authority from the Environmental Protection Agency (EPA). Most of the California regulations are codified in the Health & Safety Code (H&SC) and the California Code of Regulations (CCR); specifically, Titles eight and twenty-two. The California Department of Toxic Substances Control is responsible for enforcing the enacted codes and administrative laws.

All CSU campuses purchase some amount of HAZMAT that result in the generation of hazardous waste. To limit regulatory compliance risks and control waste processing costs, the campuses enter into contracts with waste transfer, treatment, storage and disposal companies. For the most part, campus Environmental Health and Safety (EH&S) departments are responsible for developing, implementing, and monitoring programs that assure compliance with state and federal hazardous materials and waste regulations. Other services provided by EH&S include, but are not limited to, waste consulting and pick-up; transfer, treatment, storage, and disposal coordination; waste tracking and record keeping; employee and student communication and training; and emergency/contingency planning.

The systemwide report related to the 1992 Office of the University Auditor review, identified several HAZMAT and waste management topics that required further attention. Specifically, concerns were expressed over training, inspections, waste manifesting, material safety data sheets (MSDS), inventory record keeping, and the monitoring of contractors for adequate insurance and current registration. As a result, the Chancellor’s Office developed a sample Hazardous Waste Management Guide (HWMG) to assist the campus administrators in understanding and complying with applicable health, safety and environmental laws and regulations. The HWMG covered the basic elements involved in understanding hazardous materials management but was not designed to serve as a policy and procedure manual. The HWMG was intended to be a sample document that could be tailored to, and serve, local campus needs.

OPINION

We visited the San Diego State University (SDSU) campus from February 29, 2000, through April 7, 2000, and audited the procedures in effect at that time.

In our opinion, the administration and management of the Hazardous Materials Management (HMM) program provided reasonable assurance that SDSU was in compliance with applicable regulations and, for the most part, the HMM function operated effectively. Areas in need of improvement are referenced in the executive summary.

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.

HAZARDOUS MATERIALS ADMINISTRATION [6]

HAZARDOUS AWARENESS COORDINATOR FUNCTION [6]

Controls over the hazard awareness coordinator function needed improvement. Maintenance of a consistent and pro-active Hazard Awareness Coordinator function ensures compliance with the SDSU Hazardous Awareness And Communication program and reduces the risk of noncompliance with state regulations.

HAZARD CONTROL PROGRAM DOCUMENTATION [9]

The SDSU Hazard Control Program was not being maintained on a current basis. Current operating and control policies and procedures provide assurance that employees are performing only necessary work that addresses the relevant risks and controls associated with hazardous materials and waste.

HAZARDOUS MATERIALS COMMUNICATION, REPORTING, AND TRAINING [10]

HAZARDOUS MATERIALS AWARENESS TRAINING [10]

Controls over employee hazardous materials (HAZMAT) training were not adequate. This is a repeat finding from our last HAZMAT audit. Properly trained employees reduce job related injuries and ensure an appropriate response in the event of an emergency or release of hazardous substances in the work place.

BUSINESS PLAN CERTIFICATION AND UPDATE [12]

Documentation was not on file to certify that the Business Plan for hazardous materials (HAZMAT) was reviewed every three years and an updated inventory form had been submitted the San Diego County Hazardous Materials Management Division (HMMD). Maintaining adequate documentation strengthens internal controls over the business plan and inventory review processes, ensures compliance with state regulations, and reduces the likelihood of fines.

OBSERVATIONS, RECOMMENDATIONS, AND CAMPUS RESPONSES

HAZARDOUS MATERIALS ADMINISTRATION

HAZARDOUS AWARENESS COORDINATOR FUNCTION

Controls over the Hazard Awareness Coordinator function needed improvement.

The SDSU Hazard Awareness and Communication (HAZCOMM) Program requires that each college or department that utilizes hazardous chemicals appoint a hazard awareness coordinator to work with departmental supervisors and Environmental Health and Safety (EH&S) to ensure that all requirements of the HAZCOMM program are met. Our review disclosed the following instances where the hazardous awareness coordinator had not ensured compliance with the HAZCOMM program:

- ▶ EH&S was not routinely contacted in the event that material safety data sheets (MSDS) could not be located. We selected 35 materials that required a MSDS from the Physical Plant, Biology, and Art departments and found that 17 (49%) of the forms were not on file or readily accessible. All the MSDS were subsequently obtained within 24 hours.
- ▶ MSDS were not maintained in an organized manner in several of the physical plant trade shops. Consequently, it was difficult to expediently locate a number of the MSDS selected for review.
- ▶ The physical plant hazard awareness coordinator did not have the latest version of the HAZCOMM program.
- ▶ We were unable to locate any supporting documentation to show that periodic work place hazardous materials (HAZMAT) inspections were completed by physical plant personnel as required.

CCR Title 8 §5194(e), states that employers shall develop and implement a written hazard communication program for their employees which at least describes how the criteria specified in sections 5194(f), (g), and (h) for labels and other forms of warning, MSDS, and employee training will be met. At SDSU, this document is known as HAZCOMM.

CCR Title 8 §5194(g) states that employers shall have a MSDS for each hazardous substance that they use.

The SDSU HAZCOMM states that principal investigators or area supervisors are responsible for assuring that MSDS are obtained and readily available for every HAZMAT they are responsible for.

CCR Title 8 §3203(a)(4) and (b)(1) states that every employer shall establish, implement and maintain an effective Injury and Illness Prevention Program (IIPP). The program shall be in writing and include, at a minimum, procedures for identifying and evaluating work place hazards including

scheduled periodic inspections to identify unsafe conditions and work practices. Inspections shall be made to identify and evaluate hazards. In addition, records of scheduled and periodic inspections should be maintained, including person(s) conducting the inspections, the unsafe conditions and work practices that have been identified, and actions taken to correct the identified unsafe conditions and work practices. This documentation shall be maintained for one year.

The SDSU IIPP encourages each department to implement regularly scheduled work place safety surveys. Although department management is responsible for setting the frequency of the surveys, the IIPP suggests that surveys be conducted more frequently (e.g., semi-annual) by departments that handle HAZMAT.

The EH&S director stated that the compliance work performed by hazard awareness coordinators is secondary to their primary duties. As a result, their primary duties will occasionally take a higher priority.

Failure to maintain a consistent and pro-active Hazard Awareness Coordinator function increases the risk of non-compliance with both the SDSU HAZCOMM and with state regulations.

Recommendation 1

We recommend that the campus:

- a. develop and implement appropriate hazard awareness coordinator training to clarify responsibilities and to ensure that the HAZCOMM program is operating as intended;
- b. monitor the use of the hazard awareness coordinator checklist to ensure compliance with key HAZCOMM policy issues, including MSDS record keeping and periodic inspections;
- c. provide all college and department hazard awareness coordinators with a current copy of the HAZCOMM program; and
- d. review and modify existing procedures at each college or department that handles HAZMAT or generates hazardous waste to ensure that all MSDS are maintained on file and readily accessible to employees.

Campus Response

We concur and will comply.

- a. As the hazard communication coordinator position is a suggested one rather than mandatory, not all departments/colleges have an individual named as coordinator. Some department managers or college deans find it more effective within their operations to retain direct responsibility for hazard materials management issues or to delegate it to others than a single named coordinator, e.g., to

principal investigators. However, in compliance with the focus of the recommendation, i.e., "that the HAZCOM program is operating as intended," the following will be accomplished: By October 1, 2000, Deans and Directors will be forwarded a memorandum outlining the results of the audit in this area and providing clarification of responsibilities of the HAZCOM program. They will be asked to respond by October 15 with the name of the individual(s) in their area who have been designated with those responsibilities. If they do not reply, they will be deemed responsible. By November 1, those individuals will be queried, in writing, to determine their level of understanding of the HAZCOM program and the need for training, meetings with Environmental Health and Safety (EH&S) staff, documentation or other materials, etc. Their responses will be documented. By December 1, notice of training availability will be given to those individuals indicating a need (or having been assessed as such by EH&S staff).

- b. The checklist is a useful tool, but as its consistent use cannot be assumed, reliance upon the checklist to achieve the objective of compliance with HAZCOM policy would be misplaced. Furthermore, ultimate responsibility for issues rests with EH&S, not at the departmental level. While EH&S relies on several mechanisms to fulfill that responsibility, the primary tool is periodic inspections that are inclusive of hazardous materials issues. These inspections are internally conducted -- in accordance with the campus Injury Illness Prevention Program -- or externally conducted, by cognizant agencies. Therefore, to address the recommendation, the following will be done. By December 1, a matrix of inspections will be prepared, showing dates and hazardous materials issues covered. Based on an assessment of risk (considering the expertise of the individuals in each area and the types and amounts of hazardous materials located in an area) a plan for inspections will be developed.
- c. All currently named hazard awareness coordinators have been provided with a current copy of the HAZCOM program that includes the latest revisions as of April 2000. Other identified individuals (as discussed above in point a) will be provided copies of the HAZCOM program by October 20, 2000.
- d. As the recommendation states, MSDSs must be accessible to employees. At SDSU, the campus repository for MSDSs is EH&S, where 80,000 hard copies are on file. Clearly few, if any, departments have the capability to acquire, retain and manage even a small fraction of that number within the department (one of the reasons that campus departments are considered local, not primary repositories).

Any employee can get MSDS information from EH&S on an immediate basis. EH&S also has links on its home page to manufacturer sites for current MSDS information. Finally, EH&S already has distributed a MSDS information sheet (attached) that explains MSDS access. However, in furtherance of meeting the objective of the recommendation, all responsible individuals will be given updated instructions clearly outlining MSDS access methods and resources. This memorandum will be issued by October 20, 2000.

HAZARD CONTROL PROGRAM DOCUMENTATION

The SDSU Hazard Control Program was not being maintained on a current basis.

Several of the policies and procedures related to the Hazard Control Program had not been updated since the early 1990's. As a result, the program was not reflective of current practices. We noted that:

- ▶ Although waste determination was an Environmental Health and Safety (EH&S) function, the Hazard Awareness and Communication documentation (Part I, Section D) stated that hazardous waste determination was the responsibility of the principle investigator and department supervisor.
- ▶ All areas that use hazardous materials did not maintain an inventory as specified in the Hazard Awareness and Communication documentation (Part II, Hazardous Material Control & MSDS, Section G). However, it was not the practice of EH&S to require that inventory documents be maintained for areas with moderate to low levels of hazardous materials (e.g., Physical Plant). EH&S monitored inventory purchases and use during inspections and hazardous waste pick-ups.
- ▶ SDSU had disposed of eight underground tanks within the last few years in response to regulatory mandates and replaced them with two modern underground tanks. However, corresponding policies and control procedures, notably the Underground Storage Tank Management Program, had not been updated to reflect new automated controls and monitoring techniques.
- ▶ SDSU had reduced the amount of PCB (Polychlorinated biphenyls) equipment because of campus infrastructure modernization. However, the PCP Equipment Management Plan was last revised in 1992 when the campus environment generated PCB waste above the regulated threshold.

SAM §20003 states that one symptom of a deficient internal control system is policy and procedural or operational manuals that are either not currently maintained or are nonexistent.

The EH&S director stated that due to other priorities, time constraints and limited staff resources, the Hazard Control Program had not been completely updated in a number of years, and the department had not allocated the time to review and update all policies and procedures that make up the Hazard Control Program.

The absence of current operating and control policies and procedures could lead to employees performing unnecessary work, allocating time to risks that are minimal or do not exist, and poor control over hazardous materials and waste.

Recommendation 2

We recommend that the campus review and update the existing Hazard Control Program.

Campus Response

We concur and will comply. The Hazard Control Program Manual is periodically reviewed and revised whenever regulations or statutes change. The revisions will be completed and forwarded by the end of December 2000.

HAZARDOUS MATERIALS COMMUNICATION, REPORTING, and TRAINING

HAZARDOUS MATERIALS AWARENESS TRAINING

Controls over employee hazardous materials (HAZMAT) training were not adequate. This is a repeat finding from our last HAZMAT audit. We noted that:

- ▶ Biology principle investigators (PI's) and physical plant area supervisors did not maintain records of HAZMAT orientation training.
- ▶ Training records for 15 biology employees disclosed that 1998 and/or 1999 training had not been completed by seven (47%) of the employees.
- ▶ A review of targeted HAZMAT training showed that five of the eighteen (28%) physical plant employees (grounds keepers) did not complete the 1999 Pesticide Handling training.

The SDSU Hazard Awareness and Communication Program (HAZCOMM) states that supervisory personnel (including PI's) are required to provide employees with information regarding hazardous substances through college/departmental training programs. Employees are to receive comprehensive training as part of their initial orientation, when new hazardous substances are introduced, or when significantly revised material safety data sheets (MSDS) are received. A record of all training programs shall be maintained at the departmental level and be forwarded to Environmental Health and Safety (EH&S). Primary responsibility for this training rests with the PI or area supervisor.

CCR Title 8 §5194(h)(1) requires that employers provide employees with information and training on hazardous substances in their work area at the time of their initial assignment, and whenever a new hazard is introduced into their work area. Information and training may relate to general classes of hazardous substances to the extent appropriate and to reasonably foreseeable exposures on the job.

The SDSU Biology Department Injury and Illness Prevention Program (IIPP) states that refresher training is to be provided on an annual basis. In addition, a SDSU Physical Plant department directive stated that all grounds personnel who will be handling, mixing, or applying pesticides (grounds workers, gardeners, leads, and student assistants) are required to attend an annual Pesticide Handling Training Program.

The EH&S director stated that although she was confident that orientation training was taking place, the PI's and supervisors were not maintaining a record of the events as required in HAZCOMM. She

further stated that a roster of training participants was not used as a sign-in sheet; consequently, there was not an easy means to identify employees who did not attend training. The physical plant associate director stated that a pesticide make-up class was not scheduled, which resulted in several employees not completing the 1999 training.

Failure to ensure that all employees attend required HAZMAT training increases the risk of job related injuries and inappropriate responses in the event of an emergency or release of hazardous substances in the work place.

Recommendation 3

We recommend that the campus:

- a. develop and implement an employee acknowledgement form to record completion of HAZMAT orientation training;
- b. establish procedures to use attendance rosters with pre-printed names of expected attendees as a means to quickly identify employees who have not participated in required training; and
- c. establish procedures to provide at least one make-up training class for those employees who were unable to attend the originally scheduled training.

Campus Response

We concur and will comply.

- a. Employee acknowledgement form is attached. Also note that new-employee orientation sessions for Physical Plant staff include hazardous materials issues.
- b. A copy of the pre-printed attendance sheet used at the most recent training sessions is attached.
- c. The most recent hazard awareness and communication training for physical plant employees occurred 06/23/2000, 06/26/2000, and 07/25/2000. A make-up session was held 08/31/2000.

BUSINESS PLAN CERTIFICATION and UPDATE

Documentation was not on file to certify that the Business Plan for hazardous materials (HAZMAT) was reviewed every three years and an updated inventory form had been submitted to the San Diego County Hazardous Materials Management Division (HMMD).

Health & Safety Code (H&SC) §25505(c), *Review of business plan; modification of operation and plan; periodic review*, states that the handler shall, at least once every three years, determine if a revision is needed and shall certify to the administering agency that the review was made and that any necessary changes were made to the plan. A copy of these changes shall be submitted to the administering agency as a part of this certification.

H&SC §25505(d) states that any business that handles a hazardous material shall annually submit a completed inventory form to the administering agency of the county or city in which the business is located.

The EH&S director stated that it was the practice of EH&S to provide San Diego County HMMD representatives with business plan and inventory updates during their annual HAZMAT inspections. She further stated that the HMMD had not provided evidence of receiving the tri-annual review certifications or the plan/inventory updates.

Inadequate documentation weakens internal controls over the business plan and inventory review processes, increases the risk of non-compliance with state regulations, and could result in the assessment of fines.

Recommendation 4

We recommend that the campus obtain an acknowledgement from the San Diego County HMMD when a business plan certification/update or HAZMAT inventory has been submitted, or, at a minimum, maintain internal documentation to evidence compliance with the H&SC.

Campus Response

We concur and will comply. SDSU will send all business plan revisions to HMMD return receipt requested or request documentation from the county inspector accepting business plan alterations during the inspection.

APPENDIX A: PERSONNEL CONTACTED

<u>Name</u>	<u>Title</u>
Dr. Stephen L. Weber	President
Johnny Eddy	Chief, Custodian Services
Terry Gee	Associate Director & Hazardous Waste Manager
Ellene Gibbs	Director of Business Information Systems and Internal Review
Martin Holzman	Director, Physical Plan
M.C. Hull	Director, Environmental Health & Safety
Alison Hunter	Tax & Audit Coordination
Gretchen Jones	Associate Director, Physical Plant
David Palmer	Hazardous Material Specialist
Lawrence Peralez	Director, Business Services
Sally F. Roush	Vice President, Business & Financial Affairs
Donna Scarsciotti	Biology Grant Administrator
Helen Shirk	Professor, Art Department
Joe Stahley	Assistant Director, Physical Plant
Charlene Weidell	Graduate Student, Art Department
Bruce Wingerd	Business Manager, Biology



A Century Of Learning 1897•1997
THE PRESIDENT

APPENDIX B - Page 1 of 4
San Diego State University
5500 Campanile Drive
San Diego CA 92182•8000
619•594•5201
FAX: 619•594•8894
E-mail: steve.weber@sdsu.edu

September 19, 2000

RECEIVED
University Auditor

SEP 05 2000

**The California State
University**

Mr. Larry Mandel
University Auditor
The California State University
401 Golden Shore
Long Beach, California 90802

Dear Mr. Mandel:

The following is San Diego State University's response to the Trustee's audit report Hazardous Materials Management, Report Number 00-14, 26 July 2000. For ease of reference, the recommendations and responses have been included.

Recommendation 1

We recommend that the campus:

- a) Develop and implement appropriate hazard awareness coordinator training to clarify responsibilities and to ensure that the HAZCOM program is operating as intended;
- b) Monitor the use of the hazard awareness coordinator checklist to ensure compliance with key HAZCOM policy issues, including MSDS record keeping and periodic inspections;
- c) Provide all college and department hazard awareness coordinators with a current copy of the HAZCOM program; and
- d) Review and modify existing procedures at each college or department that handles hazardous materials or generates hazardous waste to ensure that all MSDS are maintained on file and readily accessible to employees.

Campus Response

We concur and will comply.

Campus Status

- a) As the hazard communication coordinator position is a suggested one rather than mandatory, not all departments/colleges have an individual named as coordinator. Some department managers or college deans find it more effective within their operations to retain direct responsibility for hazard materials management issues or to delegate it to others than a single named coordinator, e.g., to principal investigators. However, in compliance with the

focus of the recommendation, i.e., "that the HAZCOM program is operating as intended," the following will be accomplished: By October 1, 2000, Deans and Directors will be forwarded a memorandum outlining the results of the audit in this area and providing clarification of responsibilities of the HAZCOM program. They will be asked to respond by October 15 with the name of the individual(s) in their area who have been designated with those responsibilities. If they do not reply, they will be deemed responsible. By November 1, those individuals will be queried, in writing, to determine their level of understanding of the HAZCOM program and the need for training, meetings with Environmental Health and Safety (EH&S) staff, documentation or other materials, etc. Their responses will be documented. By December 1, notice of training availability will be given to those individuals indicating a need (or having been assessed as such by EH&S staff).

b) The checklist is a useful tool, but as its consistent use cannot be assumed, reliance upon the checklist to achieve the objective of compliance with HAZCOM policy would be misplaced. Furthermore, ultimate responsibility for issues rests with EH&S, not at the departmental level. While EH&S relies on several mechanisms to fulfill that responsibility, the primary tool is periodic inspections that are inclusive of hazardous materials issues. These inspections are internally conducted -- in accordance with the campus Injury Illness Prevention Program -- or externally conducted, by cognizant agencies. Therefore, to address the recommendation, the following will be done. By December 1, a matrix of inspections will be prepared, showing dates and hazardous materials issues covered. Based on an assessment of risk (considering the expertise of the individuals in each area and the types and amounts of hazardous materials located in an area) a plan for inspections will be developed.

c) All currently named hazard awareness coordinators have been provided with a current copy of the HAZCOM program that includes the latest revisions as of April 2000. Other identified individuals (as discussed above in point a) will be provided copies of the HAZCOM program by October 20, 2000.

d) As the recommendation states, MSDSs must be accessible to employees. At SDSU, the campus repository for MSDSs is EH&S, where 80,000 hard copies are on file. Clearly few, if any, departments have the capability to acquire, retain and manage even a small fraction of that number within the department (one of the reasons that campus departments are considered local, not primary repositories).

Any employee can get MSDS information from EH&S on an immediate basis. EH&S also has links on its home page to manufacturer sites for current MSDS information. Finally, EH&S already has distributed a MSDS information sheet (attached) that explains MSDS access. However, in furtherance of meeting the objective of the recommendation, all responsible individuals will be given updated instructions clearly outlining MSDS access methods and resources. This memorandum will be issued by October 20, 2000.

Hazardous Materials Management, Report 00-14
September 19, 2000
Page 3

Recommendation 2

We recommend that the campus review and update the existing Hazard Control Program.

Campus Response

We concur and will comply.

Campus Status

The Hazard Control Program Manual is periodically reviewed and revised whenever regulations or statutes change. The revisions will be completed and forwarded by the end of December 2000.

Recommendation 3

We recommend that the campus:

- a) Develop and implement an employee acknowledgement form to record completion of hazardous materials orientation training.
- b) Establish procedures to use attendance rosters with pre-printed names of expected attendees as a means to quickly identify employees who have not participated in required training; and
- c) Establish procedures to provide at least one make-up training class for those employees who were unable to attend the originally scheduled training.

Campus Response

We concur and will comply.

Campus Status

- a) Employee acknowledgement form is attached. Also note (per attachment) that new-employee orientation sessions for Physical Plant staff include hazardous materials issues.
- b) A copy of the pre-printed attendance sheet used at the most recent training sessions is attached.
- c) The most recent hazard awareness and communication training for physical plant employees occurred 06/23/2000, 06/26/2000, and 07/25/2000. A make-up session was held 08/31/2000. Supporting documentation is attached.

Recommendation 4

We recommend that the campus obtain an acknowledgement from the San Diego County HMMMD when a business plan certification/update or hazardous materials inventory has been

Hazardous Materials Management, Report 00-14
September 19, 2000
Page 4

submitted, or, at a minimum, maintain internal documentation to evidence compliance with the H&SC.

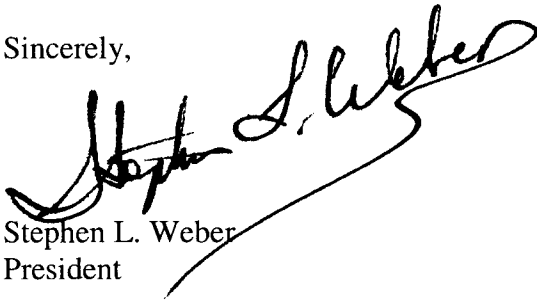
Campus Response

We concur and will comply.

Campus Status

SDSU will send all business plan revisions to HMMD return receipt requested or request documentation from the county inspector accepting business plan alterations during the inspection.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen L. Weber", written over a horizontal line.

Stephen L. Weber
President

SLW/ach

Attachments

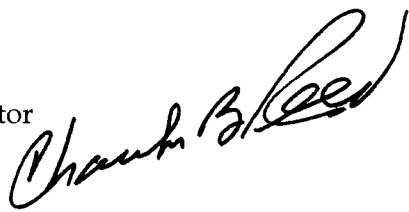
THE CALIFORNIA STATE UNIVERSITY
OFFICE OF THE CHANCELLOR

BAKERSFIELD
CHANNEL ISLANDS
CHICO
DOMINGUEZ HILLS
FRESNO
FULLERTON
HAYWARD
HUMBOLDT
LONG BEACH
LOS ANGELES
MARITIME ACADEMY
MONTEREY BAY
NORTHRIDGE
POMONA
SACRAMENTO
SAN BERNARDINO
SAN DIEGO
SAN FRANCISCO
SAN JOSE
SAN LUIS OBISPO
SAN MARCOS
SONOMA
STANISLAUS

October 16, 2000

MEMORANDUM

TO: Larry Mandel
University Auditor

FROM: Charles B. Reed 

SUBJECT: Draft Final Report Number 00-14 on *Hazardous Materials Management*,
San Diego State University

In response to your memorandum of October 9, 2000, I accept the response as submitted with the draft final report on Hazardous Materials Management, San Diego State University.

CBR/cw

Enclosure

cc: Dr. Stephen L. Weber, President