HAZARDOUS MATERIALS MANAGEMENT

CALIFORNIA STATE UNIVERSITY NORTHRIDGE

Report Number 00-17
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BOARD OF TRUSTEES
THE CALIFORNIA STATE UNIVERSITY

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ABBREVIATIONS

CCR	California Code of Regulations
CSU	California State University
CSUN	California State University, Northridge
EH&OS	Environmental Health & Occupational Safety
EH&S	Environmental Health & Safety
EPA	Environmental Protection Agency
HAZCOMM	Hazard Awareness and Communication Program
HAZMAT	Hazardous Material(s)
HMM	Hazardous Materials Management
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
PPM	Physical Plant Management
RCRA	Resource Conservation and Recovery Act
SAM	State Administrative Manual
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 July 1, 1999 to June 30, 2000. At California State University, Northridge (CSUN), the Department of Environmental Health and Occupational Safety (EH&OS) 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, Chemistry, and Physical Plant. 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 CSU, Northridge campus from May 30, 2000, through June 30, 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 CSUN 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]

MATERIAL SAFETY DATA SHEET ADMINISTRATIVE CONTROLS [6]

MSDS administrative controls were in need of strengthening. MSDSs that are included with HAZMAT purchases and readily accessible to employees enhance the university's ability to appropriately and expeditiously respond to an emergency.

WASTE TRANSPORTERS [7]

The relationship between the campus and four of the five hazardous waste transporters was not governed by the CSU model contract, and two transporters did not provide the campus with proof of liability insurance coverage prior to the start of service. CSU insurance risk and liability exposure is reduced when HAZMAT contractors maintain adequate insurance coverage and agreements are governed by model contracts.

HAZARDOUS WASTE DETERMINATION, STORAGE, TRANSPORTATION AND DISPOSAL [8]

Labeling practices for Biology and PPM hazardous waste were not adequately controlled. Proper labeling of hazardous substances reduces the risk that operational mishaps and/or job-related injuries will occur.

HAZARDOUS MATERIALS COMMUNICATION, REPORTING AND TRAINING [9]

EMERGENCY EYEWASH AND SHOWER EQUIPMENT [9]

The campus was not in full compliance with emergency eyewash and shower installation and inspection regulations. Compliance with such regulations increases the likelihood that emergency facilities will operate effectively in the event of an accident.

NEW EMPLOYEE AND ANNUAL REFRESHER TRAINING [10]

Controls over Chemistry, Biology and PPM employee HAZMAT orientation and refresher training were not adequate. Trained employees are better equipped to appropriately respond in the event of an emergency or release of hazardous substances.

HAZARDOUS MATERIALS SYSTEMS CONTROL [12]

Access to data on the EH&OS server was not adequately controlled. Adequate systems security ensures that only authorized individuals gain access to EH&OS computerized information.

OBSERVATIONS, RECOMMENDATIONS, AND CAMPUS RESPONSES

HAZARDOUS MATERIALS ADMINISTRATION

MATERIAL SAFETY DATA SHEET ADMINISTRATIVE CONTROLS

MSDS administrative controls were in need of strengthening. The College of Science MSDS documentation files were maintained in the Biology and Chemistry storerooms rather than the laboratories.

Title 8 §5194 (g) (2) (8) requires employers to maintain copies of material safety data sheets for each hazardous substance in the workplace and ensure that they are readily accessible during each work shift to employees when they are in their work area(s).

CSUN's Hazardous Communication Manual specifies that copies of MSDSs are to be kept by the area supervisor and be available to all employees to review in their work areas.

The director, EH&OS, stated that, in his opinion, CSUN's current MSDS maintenance and storage practices were in compliance with the regulations.

MSDSs that are not readily accessible to employees could negatively impact the university's ability to appropriately and expeditiously respond to an emergency.

Recommendation 1

We recommend that the campus review and modify existing procedures to ensure that all MSDSs are readily available to employees in their work areas, which may include instructing employees on how to obtain MSDS data on-line via personal computers within the laboratories.

Campus Response

Agree. The campus has implemented administrative controls that ensure MSDSs are readily available to all employees. As for the centralized storage practices in the Biology and Chemistry departments separated from laboratories, CSUN's Director of Environmental Health and Occupational Safety (EH&OS) contacted Cal-OSHA in July 2000 to ensure our system of centrally maintained MSDSs met the regulatory requirements of CCR Title 8 §5194. The compliance officer indicated that she believed our storage system clearly met the requirements of providing "immediate access" to MSDSs. We believe our storage system complies with required regulations.

In addition, our centralized storage system separate from the laboratories provides safe, expeditious, and appropriate access to MSDSs in the event of any potential hazardous materials emergencies in laboratories. In November 2000, CSUN's Manager of Environmental Compliance contacted the Los Angeles County Fire Department, the agency responsible for enforcing chemical emergency response,

to ensure compliance with MSDSs storage requirements. The agency indicated a preference for centralized storage separate from the area containing hazardous materials (e.g. labs) to enable safe, expeditious, and available access to the MSDSs in the event of a hazardous materials incident.

The necessary corrective action is implemented.

WASTE TRANSPORTERS

The relationship between the campus and four of the five waste transporters was not governed by the CSU model contract and two transporters did not provide the campus with proof of liability insurance coverage prior to the start of service.

The CSU Policy Manual for Contracting & Procurement (412.07 - Contracts Involving Hazardous Materials) states that contracts involving the handling, removal or disposal of hazardous materials shall be developed in accordance with the CSU model contract for hazardous material removal, and comply with all State and Federal requirements.

SUAM §2520.03.01. states that "Contractor shall furnish the...University a certificate of insurance with a combined single limit of not less than $500,000 per occurrence."

The environmental compliance manager did not believe that contracts were required for the types of waste being removed from the campus.

Failure to contractually protect the university and require evidence of liability insurance coverage could result in the CSU sharing responsibility for failures or oversights of hazardous waste transporters.

Recommendation 2

We recommend that, with regard to waste transporters, the campus:

a. execute written contracts for the removal of waste materials;

b. obtain copies of certificates of insurance for all waste transporters; and

c. ensure that all waste transporters maintain the required minimum liability insurance coverage.

Campus Response

Agree. At the time of the audit, all campus generated hazardous wastes were transported by one company. There was an appropriate written contract, certificates of insurance, and required liability insurance since the inception of the contract with the company in 1998.

In addition, the campus also generates four non-hazardous waste streams that are transported off-campus for reclamation or disposal including medical waste, spent photographic solution, used automotive batteries, and animal remains. We now have written contracts, certificates of insurance, and appropriate liability insurance for each non-hazardous waste transporter.

The necessary corrective action is implemented.

HAZARDOUS WASTE DETERMINATION, STORAGE, TRANSPORTATION AND DISPOSAL

Labeling practices for Biology and PPM hazardous waste were not adequately controlled.

During our inspection of hazardous waste containers, we noted the following:

- In the biology department, there were six waste containers with incorrect label dates. A few of the container labels dated back to 1997.

- In the PPM Grounds department, there were two waste containers that were incompletely labeled.

CSUN's Hazard Communication Manual requires each department to ensure that hazardous substance containers are properly labeled, tagged, and/or marked.

Title 22 §66262.34 (e) allows a generator to accumulate hazardous waste if the initial date of waste accumulation is clearly marked and visible for inspection on each container used for accumulation of hazardous waste.

Title 22 §66262.31 requires that before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator shall label each package in accordance with the applicable Department of Transportation regulations.

The manager of technical services and safety stated that the biology waste containers were moved from the normal pick-up locations; consequently, they were out of view of the environmental compliance manager during his walk-throughs.

Failure to properly label hazardous substances could result in accidents and/or job-related injuries.

Recommendation 3

We recommend that the campus re-emphasize the importance of compliance with hazardous waste labeling policies and regulations and include specific labeling compliance during the IIPP inspections.

Campus Response

Agree. The campus has addressed the issue of hazardous waste labeling. The campus has always included and continues to include reviews of labeling compliance during IIPP inspections.

Upon discovery, the campus dated the six containers located in the Biology Department and completely labeled the two containers in PPM Grounds. The six containers were shipped off site for disposal approximately July 10, 2000 while the two containers were quickly moved to the waste storage area and subsequently shipped off site October 2000. EH&OS provided hazardous waste training to PPM Grounds employees on July 20, 2000 and August 29, 2000.

The necessary corrective action is implemented.

HAZARDOUS MATERIALS COMMUNICATION, REPORTING AND TRAINING

EMERGENCY EYEWASH AND SHOWER EQUIPMENT

The campus was not in full compliance with emergency eyewash and shower installation and inspection regulations.

We noted that:

- an emergency eyewash and shower installed in Shipping and Receiving had never been inspected; and

- several emergency eyewash and shower units in the biology area were not functioning due to the water line connection not being completed.

CCR Title 8 §5162 states that emergency eyewash and shower equipment shall be provided at all work areas where, during routine operations or foreseeable emergencies, the eyes of an employee may come into contact with a substance which can cause corrosion, severe irritation or permanent tissue damage or which is toxic by absorption. Further, eyewash and shower equipment shall be activated at least monthly to flush the line and verify proper operation.

The director, EH&OS indicated that the campus had already identified the eyewash/shower equipment deficiencies and at the time of the audit was in the process of taking the necessary corrective action.

Non-compliance with eyewash and shower equipment regulations and failure to perform monthly inspections increase the risk that emergency equipment will not operate effectively in the event of an accident.

Recommendation 4

We recommend that the campus:

a. take appropriate actions to ensure that eyewash and shower equipment is installed and working as required by CCE Title 8 §5162; and

b. establish formalized procedures to ensure monthly inspections of eyewash and shower equipment and maintain up-to-date inspection records.

Campus Response

Agree. The campus began work in June 2000 to appropriately install additional eye wash and safety showers in the departments of Biology and Chemistry. The installations are finished. In addition, the campus implemented formal documented procedures for conducting monthly inspections of eye wash and safety showers in July 2000.

The necessary corrective action is implemented.

NEW EMPLOYEE AND ANNUAL REFRESHER TRAINING

Controls over Chemistry, Biology and PPM employee HAZMAT orientation and refresher training were not adequate.

We found that:

- Three of six new employees in the Biology department did not receive orientation training within the first week of employment.

- HAZMAT orientation training was not provided to shipping and receiving employees.

- Five of twenty-six PPM employees did not complete a timely certification indicating that they had received and read the IIPP Employee Guide.

- The campus had not determined the frequency to be used for the various HAZMAT refresher training.

Title 8 §5194(h)(1) requires employers to provide employees with information and training on hazardous substances in their work area at the time of their initial assignment. CCR Title

8§5191(f)(2), *Occupational Exposure to Hazardous Chemicals in Laboratories*, states that the frequency of refresher information and training shall be determined by the employer.

The CSUN Illness and Prevention Program (IIPP) Employee Guide requires that supervisors provide job specific training to their staff at the time of initial hire and whenever a new hazard is introduced. In addition, the IIPP Employee Guide requires employees to certify that they have received and read the Guide prior to the start of their job assignment.

The manager of technical services and safety stated that the Biology department did not always receive a timely notification from Human Resources when faculty members are hired. In addition, he indicated that faculty are reluctant to participate in annual refresher training that is similar to their regular course offerings. The manager of technical services and safety believed that EH&S was responsible for determining the frequency of annual refresher training. The chemical hygiene officer indicated that he wanted to first get the Chemistry department faculty completely caught up with all of the safety requirements before establishing a refresher frequency schedule. The environmental compliance manager indicated that orientation training is not really required for shipping and receiving since hazardous materials are packaged so there is a very low risk of accidents. The PPM safety coordinator indicated that these were long term employees hired prior to his appointment that were inadvertently left out of annual HAZMAT refresher training but he will include them in the next training cycle.

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 5

We recommend that the campus:

a. strengthen procedures and controls to ensure that employees handling hazardous materials receive the required HAZMAT orientation training; and

b. determine and transmit to employees refresher training expectations and frequency requirements for the Biology and Chemistry departments.

Campus Response

Agree. EH&OS has implemented an updated record keeping system to track each employee and their completion of required training. The system allows timely identification of employees who require initial orientation or refresher training. In addition, EH&OS appropriately identifies required training for applicable new employees and records the requirements in the system. EH&OS also has implemented a method to list each applicable topic with associated employees requiring training.

EH&OS, in cooperation with the departments of Biology and Chemistry, determined the training requirements for each applicable employee. In addition, the requirements were communicated through meetings with the department chairs and written memorandum sent to each employee in the departments.

The necessary corrective action is implemented.

HAZARDOUS MATERIALS SYSTEMS CONTROL

Access to data on the EH&OS server was not adequately controlled.

We found that:

- system access was not automatically disabled after prolonged system inactivity; and
- the system did not prompt users to periodically change their passwords.

SAM §20003 requires, in part, that there be a plan that limits access to State agency assets to authorized personnel who require these assets in the performance of their assigned duties.

SAM §4819.31 requires state agencies to protect the integrity of its information management capabilities and databases and ensure the security and confidentiality of information it maintains.

SAM §4989.7 requires that information maintained in a workgroup computing configuration must be subjected to the same degree of management control and verification of accuracy provided for information in other automated files.

The EH&OS director indicated that additional security precautions were unnecessary since there was no network capability or sharing of database files, and access to confidential information in the system was limited.

Inadequate system security could result in unauthorized access to campus systems.

Recommendation 6

We recommend that EH&OS strengthen system and server controls by enabling the available automated system access control features.

Campus Response

Agree. EH&OS has implemented appropriate system controls that require individuals to enter a password prior to access, change their passwords at least once every ninety days, and enable automatic log off by the system after thirty minutes of inactivity.

The necessary corrective action is implemented.

APPENDIX A:
PERSONNEL CONTACTED

Name	Title
Dr. Jolene Koester	President
Dana Archer	Corporal, Public Safety
Cynthia Bohannan	Storekeeper, Physical Plant Management
Scott Byars	Supervisor, Paint Shop
William Cooper	Director of Purchasing and Logistical Services
Dudley D'Apremont	Manager, Receiving/Stores
Peter Dinauer	University Internal Auditor
Nancy Edwards	Manager, Payroll Services
Benjamin Elisondo	Safety Coordinator, Physical Plant Management
Hildo Hernandez	Director, Physical Plant Management
Nicki Keller	Health and Safety Specialist, EH&S
Robert Kiddoo	Assistant Vice President/University Controller
William Krohmer	Manager of Technical Services and Safety, Biology Dept
William Kupfer	Environmental Compliance Manager
Irving Langworthy	Supervisor, Auto Shop
William Lee	Chemical Hygiene Technician, Chemistry Dept
Jan Loritz	Assistant Director for Administration, Student Health Center
Ronald Norton	Director, EH&OS
Mohammed Qayoumi	Vice President and Chief Fiscal Officer
Sandor Reichman	Chair, Chemistry Department
Mary Sosa	Contracts Administrator, Purchasing
Elizabeth Soto	Assistant Controller, University Corp
Tom Tindall	Director, Facilities Planning

California State University, Northridge
Response to Hazardous Materials Management Audit Report 00-17

Audit Recommendation 1

The campus review and modify existing procedures to ensure that all MSDSs are readily available to employees in their work areas, which may include instructing employees on how to obtain MSDS data on-line via personal computers within the laboratories.

Campus Response 1: Agree. The campus has implemented administrative controls that ensure MSDSs are readily available to all employees. As for the centralized storage practices in the Biology and Chemistry departments separated from laboratories, CSUN's Director of Environmental Health and Occupational Safety (EH&OS) contacted Cal-OSHA in July 2000 to ensure our system of centrally maintained MSDSs met the regulatory requirements of CCR Title 8 §5194. The compliance officer indicated that she believed our storage system clearly met the requirements of providing "immediate access" to MSDSs. We believe our storage system complies with required regulations.

In addition, our centralized storage system separate from the laboratories provides safe, expeditious, and appropriate access to MSDSs in the event of any potential hazardous materials emergencies in laboratories. In November 2000, CSUN's Manager of Environmental Compliance contacted the Los Angeles County Fire Department, the agency responsible for enforcing chemical emergency response, to ensure compliance with MSDSs storage requirements. The agency indicated a preference for centralized storage separate from the area containing hazardous materials (e.g. labs) to enable safe, expeditious, and available access to the MSDSs in the event of a hazardous materials incident.

The necessary corrective action is implemented.

Audit Recommendation 2

With regard to waste transporters, the campus:

a. execute written contracts for the removal of waste materials;

b. obtain copies of certificates of insurance for waste transporters; and

c. ensure that waste transporters maintain the required minimum liability insurance coverage.

Campus Response 2: Agree. At the time of the audit, all campus generated hazardous wastes were transported by one company. There was an appropriate written contract, certificates of insurance, and required liability insurance since the inception of the contract with the company in 1998.

In addition, the campus also generates four non-hazardous waste streams that are transported off-campus for reclamation or disposal including medical waste, spent photographic solution, used automotive batteries, and animal remains. We now have written contracts, certificates of insurance, and appropriate liability insurance for each non-hazardous waste transporter.

The necessary corrective action is implemented.

California State University, Northridge
Response to Hazardous Materials Management Audit Report 00-17

Audit Recommendation 3

The campus re-emphasize the importance of compliance with hazardous waste labeling policies and regulations and include specific labeling compliance during the IIPP inspections.

Campus Response 3: Agree. The campus has addressed the issue of hazardous waste labeling. The campus has always included and continues to include reviews of labeling compliance during IIPP inspections.

Upon discovery, the campus dated the six containers located in the Biology Department and completely labeled the two containers in PPM Grounds. The six containers were shipped off site for disposal approximately July 10, 2000 while the two containers were quickly moved to the waste storage area and subsequently shipped off site October 2000. EH&OS provided hazardous waste training to PPM Grounds employees on July 20, 2000 and August 29, 2000.

The necessary corrective action is implemented.

Audit Recommendation 4

The campus:

a. take appropriate action to ensure that eye wash and shower equipment is installed and working as required by CCE Title 8 §5162; and

b. establish formalized procedures to ensure monthly inspections of eye wash and shower equipment and maintain up-to-date inspection records.

Campus Response 4: Agree. The campus began work in June 2000 to appropriately install additional eye wash and safety showers in the departments of Biology and Chemistry. The installations are finished. In addition, the campus implemented formal documented procedures for conducting monthly inspections of eye wash and safety showers in July 2000.

The necessary corrective action is implemented.

Audit Recommendation 5

The campus:

a. strengthen procedures and controls to ensure that employees handling hazardous materials receive the required HAZMAT orientation training; and

b. determine and transmit to employees refresher training expectations and frequency requirements for the Biology and Chemistry departments.

California State University, Northridge
Response to Hazardous Materials Management Audit Report 00-17

Campus Response 5: Agree. EH&OS has implemented an updated record keeping system to track each employee and their completion of required training. The system allows timely identification of employees who require initial orientation or refresher training. In addition, EH&OS appropriately identifies required training for applicable new employees and records the requirements in the system. EH&OS also has implemented a method to list each applicable topic with associated employees requiring training.

EH&OS, in cooperation with the departments of Biology and Chemistry, determined the training requirements for each applicable employee. In addition, the requirements were communicated through meetings with the department chairs and written memorandum sent to each employee in the departments.

The necessary corrective action is implemented.

Audit Recommendation 6

EH&OS strengthen system and server controls by enabling the available automated system access control features.

Campus Response 6: Agree. EH&OS has implemented appropriate system controls that require individuals to enter a password prior to access, change their passwords at least once every ninety days, and enable automatic log off by the system after thirty minutes of inactivity.

The necessary corrective action is implemented.

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Commitment and approval of corrective action plan to continue and improve the adequacy and effectiveness of CSUN's system of internal control.

Jolene Koester
President

12-7-00
Date

Louanne Kennedy
Provost and Vice President for Academic Affairs

12-6-00
Date

Mo Qayoumi
Vice President for Administration and Finance
and Chief Financial Officer

12-6-00
Date

Tom Tindall
Associate Vice President for Facilities Management

12/6/2000
Date

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January 10, 2001

MEMORANDUM

TO: Larry Mandel
University Auditor

FROM: Charles B. Reed
Chancellor

SUBJECT: Draft Final Report Number 00-17 on *Hazardous Materials Management,* California State University, Northridge

In response to your memorandum of January 10, 2001, I accept the response as submitted with the draft final report on Hazardous Materials Management, California State University, Northridge.

CBR/nk

Enclosure

cc: Dr. Jolene Koester, President

401 GOLDEN SHORE • LONG BEACH, CA 90802-4210 • (562) 951-4700 • Fax (562) 951-4986 • creed@calstate.edu