Environmental Health and Safety Audit
Campus Safety and Security

September 2015

The University of Texas at Austin
Office of Internal Audits
UTA 2.302
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This report has been distributed to Internal Audit Committee members, the Legislative Budget Board, the State Auditor’s Office, the Sunset Advisory Commission, the Governor’s Office of Budget and Planning, and The University of Texas System Audit Office for distribution to the Audit, Compliance, and Management Review Committee of the Board of Regents.

Environmental Health and Safety Audit
Project Number: 15.019
September 24, 2015

President Gregory L. Fenves
The University of Texas at Austin
Office of the President
P.O. Box T
Austin, Texas 78713

Dear President Fenves,

We have completed our audit of Environmental Health and Safety (EHS). Our scope included reviewing EHS’s safety and monitoring functions of Controlled Substances and Ionizing Radiation at The University of Texas at Austin (UT Austin) for fiscal year 2014.

Based on audit procedures performed, we conclude that EHS’s safety programs and monitoring processes are generally in compliance with UT Austin policies and state and federal statutes. However, opportunities for improvement were noted: one priority finding regarding Controlled Substances and three findings that are considered minor in significance. Our audit report provides detailed observations for each area under review. Suggestions are offered throughout the report for improvement in the existing control structure.

We appreciate the cooperation and assistance of Environmental Health and Safety staff throughout this audit and hope that the information presented herein is beneficial.

Sincerely,

Michael W. Vandervort, CPA
Director

cc: Internal Audit Committee Members
Dr. Patricia Clubb, Vice President for University Operations
Dr. Gerald Harkins, Associate Vice President, Campus Safety and Security
Mr. John Salsman, Director, Environmental Health and Safety
Ms. Patricia Ohlendorf, Vice President for Legal Affairs
Mr. Jeff Treichel, Associate Director, Office of Internal Audits
TABLE OF CONTENTS

Executive Summary .............................................................................................................1
Background ..........................................................................................................................2
Scope, Objectives, and Procedures ......................................................................................3
Audit Results ........................................................................................................................3
Conclusion ...........................................................................................................................6
Appendix ..............................................................................................................................8
EXECUTIVE SUMMARY

Conclusion
Based on audit procedures performed, it appears that the audited areas of Environmental Health and Safety’s (EHS) safety programs and monitoring processes are generally in compliance with The University of Texas at Austin (UT Austin) policies and state and federal statutes. Specific strengths identified during the audit include an overall excellent safety record, an effective radiation safety program, and annual inspections of 1,700+ labs with limited staff. However, four recommendations, including one priority finding, were made to improve compliance with state requirements and UT Austin policies.

Summary of Recommendations
Each issue has been ranked according to The University of Texas System Administration (UT System) Audit Issue Ranking guidelines. Please see the Appendix for ranking definitions. Internal Audits identified one notable issue (priority) which led to the following recommendation:

- As the Memorandum of Understanding concerning Controlled Substances\(^1\) is directed toward institutions of higher education, UT Austin’s Senior Management, Legal Affairs, and EHS should work together to develop a Controlled Substances Policy. (Audit Issue Ranking: Priority)

Three additional recommendations are provided, but are considered minor in significance.

Audit Scope and Objective
The scope of this audit included reviewing the safety and monitoring functions of Controlled Substances and Ionizing Radiation in fiscal year 2014. The objective was to review the functions of EHS and determine whether safety programs and monitoring processes were in compliance with UT Austin policies and state and federal statutes.

Background Summary
The primary function of EHS is to assist the UT Austin community in meeting health and safety responsibilities, to prevent or reduce accidents, and to identify and eliminate environmental hazards and dangerous conditions. EHS is responsible for planning, implementing, and administering UT Austin’s health and safety program. In addition, EHS provides support, training, investigation, and inspections to ensure departments are in compliance with federal, state, and UT Austin policies.

To determine areas of high risk, Internal Audits consulted with EHS’s director. As a result, Ionizing Radiation and Controlled Substances were chosen as areas of focus for this audit.

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\(^1\) Memorandum of Understanding between the Texas Department of Public Safety and the Texas Higher Education Coordinating Board: [http://www.thecb.state.tx.us/reports/PDF/1210.PDF](http://www.thecb.state.tx.us/reports/PDF/1210.PDF)
BACKGROUND

The primary function of Environmental Health and Safety (EHS) is to assist The University of Texas at Austin (UT Austin) community in meeting health and safety responsibilities, to prevent or reduce accidents, and to identify and eliminate environmental hazards and dangerous conditions. EHS is responsible for planning, implementing, and administering UT Austin’s health and safety program. In addition, EHS provides support, training, investigation, and inspections to ensure departments are in compliance with federal, state, and UT Austin policies.

To determine areas of high risk, the Office of Internal Audits (Internal Audits) consulted with EHS’s director. As a result, Ionizing Radiation and Controlled Substances were chosen as areas of focus for this audit.

The Radiation Safety section of EHS is responsible for implementing safety programs for the use of radioactive materials and radiation producing machines. These programs include regular inspections, audits, and evaluations of laboratories to ascertain compliance with the Texas Department of State Health Services as well as the proper removal and disposal of radioactive waste. Training is provided in these areas and the Radiation Safety section provides assistance in response to incidents involving radioactive materials.2

Controlled substances are materials containing any quantity of a substance with a stimulant, depressant, or hallucinogenic effect on the higher functions of the central nervous system, and having the tendency to promote abuse or physiological or psychological dependence. Due to their abuse potential, items identified by the U.S. Department of Justice, Drug Enforcement Administration (DEA) and the Texas Department of Public Safety (DPS) are subject to licensing, registration, storage, security, use, and disposal requirements. Principal Investigators (PI) desiring to use controlled substances in their labs must be registered with the DEA and licensed with DPS.3 In 2006, DPS and the Texas Higher Education Coordinating Board (THECB) entered into a Memorandum of Understanding pertaining to Controlled Substances4 to establish responsibilities within institutions of higher education. Currently, EHS’s role is limited to requesting annual self-evaluations for each PI that works with controlled substances and assisting with disposal.

This audit was conducted as part of our Fiscal Year 2015 Audit Plan.

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2 Radiation Safety Program description: https://www.utexas.edu/safety/ehs/about/
3 EHS’s DEA Controlled Substances website: https://www.utexas.edu/safety/ehs/lab/dea_substances.html
4 Memorandum of Understanding between the Texas Department of Public Safety and the Texas Higher Education Coordinating Board: http://www.thecb.state.tx.us/reports/PDF/1210.PDF
SCOPE, OBJECTIVES, AND PROCEDURES

The scope of this audit included reviewing the safety and monitoring functions of Controlled Substances and Ionizing Radiation in fiscal year 2014. The objective was to review the functions of EHS and determine whether safety programs and monitoring processes were in compliance with UT Austin policies and state and federal statutes.

To achieve these objectives, Internal Audits:

- Reviewed UT Austin policies and state and federal statutes;
- Surveyed via questionnaires and interviewed relevant staff;
- Reviewed supporting documentation;
- Observed laboratory safety inspection(s); and
- Conducted limited testing.

This audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing and with Government Auditing Standards.

AUDIT RESULTS

Internal Audits found that EHS’s safety and monitoring program is robust and works to ensure the safety of individuals using Ionizing Radiation. Where Controlled Substances are concerned, Internal Audits found that the monitoring program to ensure the safekeeping and proper usage of Controlled Substances was limited and could benefit from the enactment of a UT Austin policy. (See Controlled Substances Policy below.)

The following four recommendations are made to improve compliance with state requirements and UT Austin policies. Each issue has been ranked according to The University of Texas System (UT System) Audit Issue Ranking guidelines. Please see the Appendix for ranking definitions.

Controlled Substances Policy
Audit Finding Ranking: Priority
While EHS does have written procedures for reporting and investigating incidents, there is no formal program for reporting information and regulating the use of controlled substances, controlled substance analogues, chemical precursors, and chemical laboratory apparatus used in education or research activities. DEA regulations state that the responsibility over controlled substances belongs to the registrants, or PIs; therefore, it is the PI's responsibility to report information regarding controlled substances to UT Austin. Without a program to make PIs accountable for reporting information to EHS and the proper usage of controlled substances, there is an increased risk of damage to UT Austin’s reputation.

The Memorandum of Understanding [MOU] between the Texas Department of Public Safety and the Texas Higher Education Coordinating Board states, “in order to establish
the responsibilities of the DPS, the THECB, and the public or private institutions of higher education for implementing and maintaining a program for reporting information concerning controlled substances, controlled substance analogues, chemical precursors, and chemical laboratory apparatus used in education or research activities of higher education...Institutions of higher education in Texas shall adopt procedures in compliance with this MOU.”

The MOU states that the institution shall be responsible for maintaining records and submitting reports, prohibiting the sale, transfer or furnishing of controlled items, ensuring the security of controlled items and appointing individuals to be responsible for implementing security measures and serving as the liaison between the institution and the DPS.

**Recommendation 1:** As the MOU concerning Controlled Substances is directed toward institutions of higher education, UT Austin’s Senior Management, Legal Affairs, and EHS should work together to develop a Controlled Substances Policy.

**Management’s Response and Corrective Action Plan:**
EHS will coordinate initial planning meetings with representation from Legal Affairs and Senior Management to determine the appropriate course of action.

**Responsible Person:** Director, Environmental Health and Safety

**Planned Implementation Date:** Initial meeting by October 31, 2015.

**Post Audit Review:** Internal Audits will follow-up in the second quarter of FY16.

**Risk Assessment**

**Audit Finding Ranking:** Medium

EHS has not updated their campus-wide risk assessment since 2009. EHS participates in UT System peer reviews and the University Compliance Services’ Compliance and Ethics High Risk Areas Matrix, but these activities cover limited portions of the risk assessment. When a regular review of the campus wide risk assessment is not conducted, there is an increased possibility of overlooking areas of high risk.

Section 3.1 of UT System’s **UTS174 Environmental Health and Safety** states, “Each U.T. System institution shall perform an Environmental Health and Safety (EH&S) risk assessment to identify potential hazards that are present on their respective campus, along with the associated compliance requirements. Policies and procedures shall be created and implemented to address the EH&S risks on campus... EH&S policies and procedures shall be continuously assessed by each institution and programs updated accordingly to maintain a compliant and effective EH&S program.”
**Recommendation 2:** Management should regularly review and update the risk assessment to ensure potential hazards and risks are identified and updated accordingly.

**Management’s Response and Corrective Action Plan:**
EHS will review and revise the risk assessment as needed. Additionally EHS will implement bi-annual review of the assessment.

**Responsible Person:** Associate Director, Environmental Health and Safety
**Planned Implementation Date:** November 30, 2015

**Post Audit Review:** Internal Audits will follow-up in the second quarter of FY16.

**Lab Safety Coordinators**

**Audit Finding Ranking: Medium**

Colleges and schools with labs have not appointed a Lab Safety Coordinator (LSC) to EHS. Without appointing a LSC, EHS does not have the benefit of a liaison within each department or college when there are lab inspection issues, specialized training needs, or a point of contact for incidents.

Section I of EHS’s *Laboratory Safety Manual - College Laboratory Safety Responsibilities* states, “[the] Dean…will appoint at least one Lab Safety Coordinator (LSC) for each College. Can appoint additional Lab Safety Coordinators for individual Departments. Will provide EHS with list of LSCs.”

**Recommendation 3:** EHS management should coordinate with each college or school to determine who the LSCs for their area.

**Management’s Response and Corrective Action Plan:**
EHS will submit a request in writing to the Deans of each College/School that has laboratories to provide a list of the Laboratory Safety Coordinators.

**Responsible Person:** Director, Environmental Health and Safety
**Planned Implementation Date:** September 15, 2015

**Post Audit Review:** Internal Audits will follow-up in the second quarter of FY16.

**Laboratory Safety Training**

**Audit Finding Ranking: Medium**

Eighty-nine (26%) of 342 Lab Workers (combination of Radiation Workers and Controlled Substances Workers) sampled had not completed one or more of the required six Laboratory Safety Training courses. EHS personnel send reminders and escalate to deans and directors when necessary, but deans and directors do not consistently enforce required laboratory safety training. Employees who are not up-to-date on required
training prior to working in a laboratory increase the risk of injury to themselves and others.

Section III.3 of EHS’s Laboratory Safety Manual – Fundamentals of Laboratory Safety states, “The university requires that all individuals that work in a laboratory are adequately informed about the physical and health hazards present in the laboratory, the known risks, and what to do if an accident occurs.”

**Recommendation 4:** Management should ensure that all employees who work in a laboratory take the required Laboratory Safety Training. Deans, directors, chairs, and managers should be reminded it is their duty to ensure compliance with lab safety guidelines, including taking action on any training that has been disregarded for 30 days or more.

Note: The original Handbook of Operating Procedures Safety Policy 8-1020 did not address this issue, but during the course of our audit the policy was updated. The new policy, dated June 8, 2015, (Section VII.A.3) states, “Deans, directors, departmental chairs/heads, and managers are responsible for … responding to safety and environmental inspections; … monitoring and ensuring departmental compliance with applicable rules, procedures, guidelines, regulations, and laws.”

**Management’s Response and Corrective Action Plan:**
EHS will draft a memo to deans, chairs and directors reminding management of their responsibilities to ensure all lab safety training courses are completed. EHS will also develop and implement an escalation process to inform appropriate levels of management when employees do not complete required laboratory safety training.

**Responsible Person:** Director, Environmental Health and Safety  
**Planned Implementation Date:** November 30, 2015

**Post Audit Review:** Internal Audits will follow-up in the second quarter of FY16.

**CONCLUSION**

Based on audit procedures performed, it appears that the audited areas of EHS’s safety programs and monitoring processes are generally in compliance with UT Austin policies and state and federal statutes. Specific strengths identified during the audit include an overall excellent safety record, an effective radiation safety program, and annual inspections of 1,700+ labs with limited staff. However, four recommendations, including one priority finding, were made to improve compliance with state requirements and UT Austin policies.
In accordance with directives from The University of Texas System Board of Regents, the Office of Internal Audits will perform follow-up procedures to confirm that audit recommendations have been implemented.
APPENDIX

Audit Issue Ranking

Audit issues are ranked according to the following definitions, consistent with UT System Audit Office guidance. These determinations are based on overall risk to UT System, UT Austin, and/or the individual college/school/unit if the issues are left uncorrected. These audit issues and rankings are reported directly to UT System.

- **Priority** – A Priority Issue is an issue that, if not addressed immediately, has a high probability to directly impact achievement of a strategic or important operational objective of UT Austin or the UT System as a whole.

- **High** – An issue that is considered to have a medium to high probability of adverse effects to UT Austin either as a whole or to a significant college/school/unit level.

- **Medium** – An issue that is considered to have a low to medium probability of adverse effects to UT Austin either as a whole or to a college/school/unit level.

- **Low** – An issue that is considered to have minimal probability of adverse effects to UT Austin either as a whole or to a college/school/unit level. Issues with a ranking of “Low” are reported verbally to the unit and are not included in the final report.