



Item: AF: I-1A

**AUDIT AND FINANCE COMMITTEE**

Wednesday, April 30, 2008

**SUBJECT: REVIEW OF AUDITS: REPORT NO. FAU 07/08-3, AUDIT OF HAZARDOUS WASTE MANAGEMENT FOR THE PERIOD JAN. 1, 2007 THROUGH MARCH 12, 2008.**

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**PROPOSED COMMITTEE ACTION**

Information Only.

**BACKGROUND INFORMATION**

Our primary objective was to determine whether the University had adequate policies, procedures and practices in place to ensure compliance with federal and state laws and regulations related to the generation, storage, and disposition of hazardous wastes. We also reviewed the adequacy of employee training and safeguarding of facilities when hazardous materials were involved.

No reportable recommendations were made as a result of this audit.

**IMPLEMENTATION PLAN/DATE**

Not Applicable

**FISCAL IMPLICATIONS**

Not Applicable.

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**Supporting Documentation:** Report No. FAU 07/08-3

**Presented by:** Mr. Morley Barnett, Inspector General

**Phone:** 561-297-3682

## *Office of Inspector General*

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Audit of Hazardous Waste Management  
January 1, 2007 through March 12, 2008

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### **SCOPE AND OBJECTIVES**

In accordance with the University's Internal Audit Plan for fiscal year 2007-08, we have conducted an audit of the hazardous waste management programs administered by the Department of Environmental Health and Safety (EH&S). The primary objectives of this audit were to determine the adequacy of: 1) policies, procedures, and practices in place for ensuring compliance with applicable state and federal regulations related to the generation, storage and disposition of hazardous wastes and 2) training of university personnel and safeguarding of facilities impacted by hazardous waste.

We obtained an understanding of the University's hazardous waste management programs by interviewing key EH&S personnel, reviewing policies and procedures, and applicable state and federal regulations. Our assessment of compliance with established policies and procedures and applicable regulations was based primarily on reviews of hazardous waste records, governmental inspection reports, and observations of laboratory and waste storage facilities, and transportation of hazardous wastes, both on and off-campus. Populations, sample sizes, and selection methods were determined based on our evaluation of internal controls, our assessment of audit risk, the availability of pertinent University records, and other factors including auditor judgment.

We conducted our audit in accordance with the Institute of Internal Auditors' International Standards for the Professional Practice of Internal Auditing.

### **BACKGROUND**

Environmental Health and Safety is the primary contact for federal, state, and local regulatory agencies regarding the handling and disposal of the University's hazardous materials and wastes. EH&S is responsible for the administration and management of hazardous materials in compliance with applicable regulations in order to protect the health and safety of the public, FAU's faculty, staff, students and visitors, and to safeguard the environment from any release of hazardous materials. Under federal regulations, Florida Atlantic University is considered a large quantity generator of hazardous waste based on output of greater than 1,000 kg (2,205 lbs) per month.

The University's program for managing hazardous materials and waste is governed by various state and federal regulatory agencies, generally coordinated to avoid duplication of oversight. The Resource Conservation and Recovery Act (RCRA) is our nation's primary law governing disposal of solid and hazardous waste. Consistent with RCRA Subtitle C (*Regulation 40 CFR Parts 260 through 279*), the University's hazardous waste program establishes a system for controlling waste from the time it is generated through ultimate disposal. The Florida Administrative Code (FAC) - *Chapters 62-730, 64E-5, and 64E-16* regulates all waste generators and transporters, as well as persons who own or operate a facility which treats, stores, or disposes of biological, chemical, or radiological hazardous waste. The FAC also covers monitoring requirements, recordkeeping, training, radiation surveys, storage and transportation precautions, container labeling, emergency spill procedures, inventories, and so on. All modes for shipment of hazardous materials are regulated by the U.S. Department of Transportation. Federal legislation passed in November 2007 allows the Department of Homeland Security, through its *Chemical Facility Anti-Terrorism Standards Final Rule*, to address the risk of terrorism by requiring all facilities, including universities, which handle hazardous chemicals to submit a "Top Screen" information report – a chemical inventory and security assessment of all related storage facilities.

The following information summarizes the quantities of hazardous wastes (in kilograms) for various FAU campuses, including waste generated by the Scripps Research Institute on the Jupiter Campus, during the past three calendar years.

	<u>Boca Raton</u>	<u>Jupiter/Scripps</u>	<u>Davie</u>	<u>SeaTech</u>
2007	B 6,178 C 13,788 R 220	B 14,406 C 20,855 R 225	B 0 C 475 R 0	B 0 C 294 R 0
2006	B 5,682 C 1,236 R 394	B 10,527 C 13,833 R 309	B 0 C 122 R 0	B 0 C 299 R 0
2005	B 5,968 C 19,214 R 524	B 4,623 C 7,168 R 32	B 0 C 344 R 0	B 0 C 46 R 0

Waste types (in kilograms): B- Biological C-Chemical R- Radioactive

## **OBSERVATIONS and COMMENTS**

### *Hazardous Waste Training Enhancements*

A critical element of the University's hazardous waste programs is the training of individuals who are expected to be involved in handling hazardous materials. In this audit, we noted that EH&S conducts regularly-scheduled training sessions for such employees, but the program could be enhanced. Specifically, early identification of such individuals would help to ensure a more comprehensive and responsive training program.

Based on discussions with management, coordination is underway between EH&S, the Research Division, and the Office of Graduate Studies to identify individuals, during new employee orientation, who are expected to be involved with scientific research and other activities that generate hazardous wastes. Management believes this new practice can be instituted by the 2008 fall semester. We encourage on-time implementation of the new procedure which will enhance governance policies, especially as the University's research activities increase.

### **Prior Audit Recommendations**

Our examination generally includes a follow-up on findings and recommendations of prior internal audits, where the subjects of such findings are applicable to the scope of the current audit.

Within the past three fiscal years, there have not been any internal audits of the hazardous waste management function. Accordingly, a follow-up on prior audit recommendations is not applicable.

## **CONCLUSION**

Based on our observations, review of records, and interviews with key managers, we believe that management has established appropriate policies, procedures, and practices to ensure proper operational and administrative controls for managing hazardous wastes. In our opinion, the University's hazardous waste management programs are conducive to ensuring compliance with applicable state and federal laws, rules, and regulations.

We wish to thank the staff of Environmental Health and Safety for their cooperation and assistance, which contributed to the successful completion of this audit.



Morley Barnett, CPA, CFE  
Inspector General

Audit Performed by: Morley Barnett, CPA, CFE  
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