Safety News
Office of Environmental & Regulatory Compliance

Issue No. 3, October 2012

Top Stories

Chemical Hygiene Plan

Occupational Safety and Health Administration (OSHA) regulation "Occupational Exposure to Hazardous Chemicals in Laboratories", 29 CFR 1910.1450 requires that facilities engaged in laboratory use of hazardous chemicals develop and implement a written "Chemical Hygiene Plan". Compliance with this regulation is the primary directive of the Laboratory Safety Program and is mandatory for all laboratory personnel.

The Office of Environmental and Regulatory Compliance (ERC) is developing programs and plans to help laboratory personnel in implementing good laboratory practices in their laboratory. Implementation of good lab practices creates a safe laboratory environment and promotes compliance with applicable local, state and federal regulations, standards and guidelines. More on page 3

Biomedical Waste, Radioactive Materials and Controlled Substances

• To establish minimum sanitary practices relating to the handling, labeling, storage, and disposal of Biomedical Waste (BMW), as established by Chapter 64E-16, Florida Administrative Code (F.A.C.), ERC is currently implementing a Biomedical Operating Plan. Previously we generated less than 25 pounds of biomedical waste per each 30 day period.

• The office of radiation safety is scrambling to revise the current Radioisotope Use and Safety Manual for addition to the amendment package needed to update our current license with the Florida Dept. of Health.

• In order to ensure compliance with Florida Tech’s obligations under the Controlled Substance regulations and licenses, ERC has taken over the facilitation of purchasing, licensing, registration, storage, security, disposal, and inventory requirements of Controlled Substances. More on page 2

Director’s Note

As you can see, times continue to be busy at Florida Tech on the Regulatory & Compliance front. In this issue we have articles from the RSO, LSO and a special section on the Recent AON insurance inspection of campus and the resulting improvements to be implemented. New laboratories are opening (New Siemens Turbine Blade Plasma Deposition Lab to become operational in November at ARL among others) and several are transitioning. We are changing how we handle our Bio Medical Waste (BMW 😊). Engineering work has begun on a major upgrade of our Olin Life Sciences Hood ventilation system. This academic year ALL our EPA plans are being updated. As always we appreciate your help and assistance in all these endeavors.
**Controlled Substances**  
*by Colleen Lindler & Gideon Hengari*

Due to their potential for abuse, items identified by the United States Department of Justice, Drug Enforcement Administration, and the Florida's Department of Health as Controlled Substances are subject to extensive licensing, registration, storage, security, use, disposal, and inventory requirements.

ERC is currently implementing procedures to ensure that the University is in compliance with both State and Federal regulations concerning the use and handling of Controlled Substances. DEA’s Controlled substances are designated as Schedule I - V according to their medical use, potential for abuse, and safety or dependence liability.

ERC shall have primary responsibility for assisting faculty, researchers, and their staff in complying with the requirements set forth in the Federal and State regulations. Currently two laboratories (1 main campus and 1 at ARL) have applied to use Controlled Substances in their research. We are currently filing for their licenses with the State and working with respective Professors to set up effective controls to guard against theft and potential abuse of Controlled Substances.

It is imperative to have a constant cooperation with our researchers to assist us in obtaining the appropriate licenses in a timely fashion. We are regulated by the Florida Department of Business & Professional Regulation (Drugs, Devices and Cosmetics) and the DEA. There are conditions and responsibilities associated with our licenses and usage of the prescribed drugs in our research.

Our department is also working with our Purchasing Department to insure the proper procedures are set forth for ordering shipping, and inventoried of Controlled Substances mimicking those of our Radiation Safety Program.

Noncompliance with any of these conditions may be grounds for disciplinary action under Chapter 499, Florida Statutes, including, but not limited to, revocation of the license.

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**Biomedical Waste Management**  
*by Colleen Lindler & Gideon Hengari*

The Department of Environmental & Regulatory Compliance is responsible for implementing programs to control exposure to bloodborne pathogens, BMW and biological safety in the laboratory. Florida Tech Campus contains areas such as Athletics, Life Sciences, Engineering and Chemistry where instruction, research and medical treatment occur. These areas generate waste materials that may contain blood, tissues, body fluids or other potentially infectious material, and discarded sharps.

Our campus has generated less than 25 pounds of biomedical waste per each 30 day period in the past. However, with new research to be conducted by Dr. Mitra and Dr. Davis at ARL, the new football training program, and expanded use of sharps in Chemistry and Engineering we may generate more BMW in upcoming months/years.

To ensure compliance with all Federal and/or State laws, as well as Chapter 64E-16, Florida Administrative Code (F.A.C.), we are filing for the permit to allow for more than 25 pounds per 30 days and we are busy writing the updated Biomedical Waste Plan for our main campus.

As per Florida Administrative Code (FAC) 64E-16 Biomedical Waste, all facilities that generate BMW must ensure proper disposal and handling of the waste to eliminate employee, patient and the general public exposure to disease-causing agents.

Only a State approved transporter (ERC contracted Advanced Biotech Solutions, Inc.) may remove the biomedical waste containers from our campus at least once a month and we have to maintain all transportation manifests.

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**Radioactive Materials License Amendment**  
*by Colleen Lindler*

Revisions include the addition of Dr. Michael Kemp, Assistant Professor in the Biological Sciences Department, the removal of Dr. Sinden, updates to the Radioactive Material use and storage maps and floor plans, facility descriptions, and forms. This will be the 32nd amendment to the Radioactive Materials License, and the possibility of inspection exists with all amendment requests.

Dr. Julia Grimwade continues to provide the mandatory radiation Safety Training course for all new researchers and assists who work with radioactive materials at Florida Tech. The course consists of two parts: (1) Four hours of formal (classroom) training, and (2) Two hours of laboratory training. In addition, a 50 question multiple choice exam is given.

Once the exams and other documentation is provided to the RSO, the new researchers will be provided dosimetry badges and allowed to work in their respective labs. We are currently looking for a new long-term radiation storage facility to replace the existing outdated one, that complies with requirements necessary to meet the rules and provisions of long-term radiation storage. A new suitable location will be approved soon to avoid future penalties and possible loss of licensure.
Memorandum

Date: 5 September 2012

TO: Deans, VPs, Directors – Athletics, Autism, Aviation, College of Engineering, College of Science, Facilities

RE: AON/FICURMA Campus Safety Inspection & Resultant Requirements

10 May 2012 – Campus Inspection by Robert C Prior, MS, CSP, ARM, Senior Consultant, AON Global Risk Consulting

21 June 2012 – 23 Page report submitted to FIT (Dr. Niebuhr) by Mr. Prior.

17 August – FICURMA Safety & Hazardous Waste Workshop at University of Tampa – Conducted by: Mark D. Yanchisin, Clinical & Laboratory Safety Coordinator, Environmental Health & Safety, University of Florida; and Dr. Stephen Kucera, Environmental Health & Safety Director, Tenured faculty, University of Tampa. Three in attendance from FIT.

Summary:

Existing documents & plans related to OSHA required Chemical Hygiene and Hazard Communication are out of date and in need of revision across campus and colleges. Practices observed by Mr. Prior reflect the need for additional training, plans & practices campus wide. Many good practices were observed that are in need of formalization as well.

HRP & Associates and AON Global Risk Consulting are on board to assist the FIT Office of Environmental & Regulatory Compliance (ERC) in performing this update. The ERC will provide a web link to soft copies of all support documents provided by AON & HRP indicating both best and required practices on the FIT servers during September.

A Hazard assessment survey document is being created for laboratory & facility evaluation campus wide. These survey data will be used, along with interviews and inspections to revise the required Plans over the course of the Fiscal year with a target completion of 30 April 2013.

The ERC has created a website with reference materials that you may review that cover the scope of what will be done over the academic year to implement the improvements indicated by AON. We will be updating this site over the year with additional references and more specific information. To access these reference materials, please see link below:

http://erc.fit.edu/chpreferences.php

More information on Laboratory Safety and CHP
by Greg H. Peebles
ERC Training
by Gideon Hengari & Colleen Lindler

Our mission statement is: The Office of Environmental and Regulatory Compliance (ERC) works to assure safe and healthful environments for all segments of the campus population through programs of information and education, review and monitoring, technical consultation and provision of direct services. ERC is also responsible for implementing programs to ensure compliance with applicable state and federal health, safety and environmental regulations, and campus policies on environmental health and safety. One method to accomplish these goals is training. ERC has historically offered EPA/OSHA required training programs in Hazardous Waste Handling, Spill Prevention, Radiation Safety and Mold identification to our Resident Assistants.

We recently completed the DOT Hazardous Material Transport Training given by HRP Associates, Inc. to individuals who package, label, transport, or prepare shipper’s declarations for hazardous materials.

Shipments of hazardous materials and dangerous goods are regulated by the US Department of Transportation (DOT) and the International Air Transport Association (IATA). Individuals who perform functions related to the transportation of hazardous materials are required to complete transportation/shipping training every 2 years and follow all DOT/IATA regulations. 18 people from main campus and aviation attended the DOT training.

Laser Safety Office
by Ed Croy-LSO

LASER is an acronym which stands for Light Amplification by Stimulated Emission of Radiation. The LASER produces an intense, highly directional beam of light. These, along with other characteristics, make the LASER very useful for a wide variety of applications.

These characteristics also make the light produced by the LASER a source of potential hazard for personnel. These hazards range from temporary to permanent blindness, temporary to permanent tissue damage, and in extreme instances, potential loss of life. There are also non-light hazards which will be described in a later article.

These issues require that a definitive safety protocol be adopted to insure safety for all laser operators and observers. A protocol has been in place here at F.I.T. since lasers were introduced into various programs.

With the start of the new academic year, it is time to update the records and protocols for Laser Safety as it applies to F.I.T. In the next few weeks, I will be contacting Professors who oversee laser applications to arrange meetings and review the safety requirements. These meetings will also be to introduce myself, to review the laser inventory, to get a list of students, both returning and new, who will be participating in laser applications, and to answer any questions about laser safety.

In October and November, we will have the annual Laser Safety Training as required by OSHA. This will be announced via a facultydist@lists.fit.edu email, and Training and Testing will begin afterwards, at the ARL. I’ll have more details about the training and testing at a later date.

If anyone has any questions at this time, please feel free to email me at dcroy@fit.edu or call me at Ext 8217.

Happy Lasing!

Raccoons
by Colleen Lindler & Gideon Hengari

Raccoons (Procyon lotor) are found across the United States largely due to their excellent ability to adapt and take advantage of new habitats. They are most commonly found in wooded areas along rivers, marshes or lakes. Our campus has plenty of suitable habitat to house this opportunistic animal. In July we had a baby Raccoon stranded and abandoned in our campus, and was found by our Security Officers in the north end of the OPS building. ERC contracted Trutech Wildlife & Animal Removal Specialists and the baby raccoon was successfully relocated.

Raccoons cause problems when they lose their fear of humans. Problems include feeding in garbage cans and causing damage to properties and gardens. Of late, complains have been made to our Facilities Department on the increase of raccoons at our residence halls garbage cans (Columbia & Harris, in particular). Raccoons may carry fleas, rabies, and canine and feline parovirus. So it is imperative that we keep this animal away from our campus community. ERC is fully committed to making sure that any animals known to cause danger to our campus community are relocated in accordance with Federal/State regulations.
ERC offers a variety of opportunities to students, providing practical experience which better prepares them for a future in Environmental Health and Safety, Programming, Technical Writing and Website Development.

**New faces at ERC**

*by Greg H. Peebles*

David Jarkey – Graduate Student in Aerospace Engineering, Maryland is Home & participates in sport rocketry – will be supporting COE Senior Design & SRRS Projects Safety.

Talisa Henry – Junior in Software Engineering, Maryland is Home & likes to work with Children with Disabilities – will be working on GIS for Melbourne Fire Department.

Dennis Hogan – Junior in Chemical Engineering, Florida is Home & enjoys cooking - will be part of our EPA waste handling & OSHA inspection teams.

Tessa Wolack – Junior in Chemical Engineering, Florida is Home & is a self professed Disney-a-holic and enjoys reading - will be part of our EPA waste handling & OSHA inspection teams.

Seth Reesh – Sophomore in Mathematics & Mechanical Engineering, Florida is Home & is on the FIT Cross Country Team - will be part of our EPA waste handling & OSHA inspection teams.

Brain Patterson – Senior in Information Systems, Texas and Japan are considered Home & enjoys rock climbing - will be continuing to build our network & software systems with assistance from FIT IT.
Environmental Policy

Policy

Protecting our shared environment is of fundamental importance to the Florida Institute of Technology. To support this goal, we will strive to provide leadership, resources, and services to assure a safe and healthful environment for all members of the University community.

As stewards of the University’s human, physical and environmental resources, the President and the Board of Trustees place high emphasis on:

- implementing programs that prevent accidents and minimize human exposure to hazardous agents, conditions and diseases;
- preventing degradation of the environment through responsible waste management, active waste reduction and recycling;
- promoting responsible purchasing and use of assets.

In partnership with the both the business and academic administrators, their departments and respective personnel Florida Institute of Technology will strive to:

- develop and implement cooperative services and programs that ensure adequate employee and student training in environmental and regulatory compliance;
- promote awareness and respect of inherently hazardous conditions throughout the university;
- provide necessary health and safety resources and timely assistance;
- implement management and minimization of wastes and
- facilitate regulatory compliance.

Florida Institute of Technology will make every effort to ensure that environmental compliance is an integral part of our operations. To this end, we will measure and periodically report on our progress in realizing these goals.

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