VII. Environmental Programs

The Environmental Section of EHS encompasses many duties and several specific programs which manage the environmental impact of University activities. Strictly regulated by the Louisiana Department of Environmental Quality (LADEQ) and closely scrutinized by local inspectors, the campus community, and the general public; the Environmental Section must maintain compliance with local, state, and federal laws concerning environmental protection. Established programs that help maintain compliance are the Hazardous Waste Program, the Management of Asbestos Containing Material, Emergency Response and Water Quality. These programs manage hazardous activities and situations to minimize the impact on campus life.

A. Hazardous Waste Management Guidelines

The University is required to manage hazardous wastes in a safe and environmentally sound manner by federal, state, and local regulations. A generator of hazardous waste is responsible for following University guidelines concerning management and disposal of hazardous waste within a laboratory, shop or service area.

Title 33, Part V of the Louisiana A-del.nouitatnivese is-5(t)-4(he)ate5(nd r-4(ne)-5()22(pon)11(e)-5(to)5(, to)5()

d. Oxidizers such as chlorates, permanganates, inorganic peroxides, or nitrates that yield oxygen readily to stimulate the combustion of organic matter.

2. Corrosivity(D002)

- a. Aqueous solutions that have a pH equal to or less than 2 or equal to or greater than 12.5. However, wastes with pH ranges 2-6 and 11-12.5 are also managed as hazardous waste because of sewer discharge regulations and SARA Title III requirements.
- b. Liquids capable of corroding SAE 1020 steel at a rate greater than 6.35 mm/year at 55° C.

3. Reactivity(D003)

- a. Substances that react with water violently or produce toxic gases or explosive mixtures.
- b. Substances that are unstable.
- c. Explosives.
- d. Substances that contain cyanide or sulfide that generate toxic gases when exposed to a pH in the range between 2 and 12.5.

4. Toxicity

a. A solid waste containing the contaminants listed in the following table at or above the maximum concentration listed when tested by TCLP.

EPA Waste Number	Contaminant	Max Concentration (mg/L)
D004	Arsenic	5
D005	Barium	100
D006	Cadmium	1
D007	Chromium	5
D008	Lead	5

LSU University Safety Manual Section VII - Environmental Programs

LSU University Safety Manual Section VII - Environmental Programs

- d. Train your employees and students in pollution prevention techniques.
- e. Use the Chemical Redistribution Program to recycle or reuse unused chemicals.

VI. Waste Collection Procedures

The following procedure shall be followed in order for your waste to be collected by EHS in a prompt, effective and safe manner.

- a. Waste must be labeled and containerized properly.
- b. Waste pickup requests must be submitted using the Online Request, the link will be

The Student Health Center collects, stores, and disposes of medical waste generated at its facility as well as other departments.

The School of Veterinary Medicine collects, stores, and disposes of waste generated in teaching labs and research ongoing at its facility.

EHS collects, stores, and disposes of biomedical waste generated in research labs not associated by the SVM or the SHC.

All biomedical waste shall be properly containerized, labeled, and then notify one of the facilities listed above for pick up or drop off.

3. Recycling Program

- a. Used Oil Recycling
 - EHS collects and stores used oil and other petroleum production for recycling. A local recycler converts the used oil into a useful product for sale.
- b. Fluorescent bulb recycling
 EHS manages used fluorescent lamps as universal waste and sends all lamps and bulbs
 to a mercury recycler.
- c. Battery recycling
 - EHS manages used batteries as universal waste and recycles the following types of batteries: nickel cadmium (Ni-Cad), nickel metal hydride (Ni-MH), lithium, sealed lead acid, alkaline, and mercury.
- d. Lead Waste Recycling
 Lead contacting waste can be recycled at a local smelting facility. Used lead acid
 batteries and lead waste from other campus operations are shipped to this facility.

C. Management of Asbestos Containing Materials

The management of asbestos containing materials (ACM) located in campus buildings is regulated by the state Department of Environmental Quality. Specifically, Chapter 27 of the Air Quality Regulations covers all activities in schools and state owned buildings regarding asbestos containing materials. Additional information on asbestos may be found in section V of this manual. The following guidelines must be followed when handling ACM.

1. Rules for The Proper Handling of Asbestos Containing Material(ACM)

- a. Only authorized persons can handle asbestos containing material. State regulations mandated that employees must be training and accredited to perform asbestos work.
- b. Suspect material that may contain asbestos, should not be touched. Contact EHS or Facility Services and a training and accredited inspector will assess the situation for potential hazards.
- c. Prior to renovation or demolition activities EHS shall be consulted to determine if asbestos materials are present.

LSU University Safety Manual Section VII - Environmental Programs

- d. EHS has oversight of occupational and environmental exposure to asbestos. As such EHS is the point of contact (liaison) with the LADEQ to ensure compliance with OSHA and DEQ regulations.
- e. Facility Services maintains the University Asbestos Operation and Maintenance Plan, including periodic surveillance. Periodic surveillance (PS) must be completed every six (6) months for all areas of the campus. PS consists of a visual inspection of all asbestos containing materials to note any change in condition of the material.
- f. Building Coordinators ensure

permit process. LSU is permitted to discharge sewer waste to the city parish sewer system. LSU is also permitted to discharge wash water into a local bayou by the LADEQ.

1. Permit Management

a. City Sewer Discharge Permit Management

LSU is the largest user of water and the largest discharger of waste in the parish. Sanitary sewer waste is discharged off campus into city parish sewage treatment facilities. The waste sent off campus is routinely monitored by LSU and City Parish employees to insure that only normal sewage is being discharged. Waste must fall within a set-criteria when it reaches the treatment plant. Waste falling outside the established limits will be surcharged; or in other words, the University will be fined. A current discharge permit is included in the appendix.

b. State Discharge Permit Landscape Services

LSU is permitted to discharge wash water from landscaping operations into a local bayou by the LADEQ. LSU applied for and was granted a Louisiana Water Discharge Permit (LWDP) for landscape services. This permit only allows discharge which meets a strict-criteria. The discharge must be sampled and tested quarterly by LSU to insure that the discharge falls within the regulatory requirements. A copy of the LWDP is located in the appendix.

E. Radiation

Radiation Protection in University Facilities is managed by the Office of Radiation Safety. ORS is located in the Nuclear Science Building as part of the Department of Nuclear Science. Radiation Protection is also regulated by the LADEQ. All users of radioactive materials must be registered with ORS and follow University guidelines.