

## LSU LABORATORY SAFETY ACCREDITATION SYSTEM SAS

The EHS Safety Accreditation System is the basis for insuring that all types of laboratories on the LSU campus are operating in a manner that is safe, protecting the health of laboratory personnel and complying with LSU, State and Federal regulations.

The LSU Laboratory Safety Accreditation System is designed to improve the overall Environmental and Safety performance of the LSU laboratories. It is designed to do so by increasing the safety and environmental awareness of personnel in the laboratories. Increased awareness and training along with pre-audits, audits and corresponding corrective action will increase routine EHS performance in the laboratories.

The purpose of auditing is to:

- a. ensure conformance with LSU, EHS and Departmental policies, systems and procedures
- b. ensure conformance with the environmental, safety and health regulations of State and Federal agencies
- c. assess the safety of lab activities, procedures and equipment
- d. evaluate the effectiveness of the implementation of safety and environmental practices
- e. promote understanding among faculty, staff, employees, students and campus departments that will foster the safety and well-being of all
- f. communicate information to EHS and Departmental management to provide assurance that lab practices are compliant and safe.
- g. provide a means of recognizing those labs that meet Accreditation Audit standards

### **The Audit and inspection process**

- a. The Supervisor of each laboratory will inspect the laboratory each semester using the QAF provided by the EHS department. The form should be sent to the EHS department and will be used as part of the Accreditation Program's pre-Audit step. The surveys should be done at the beginning of each semester.
- b. As the QAF's are turned in by laboratory supervision, the results will be evaluated by the EHS staff to see where immediate help and guidance can be provided.
- c. The EHS Director in consultation with his staff will prepare an audit schedule that will cover laboratories in several departments.
- d. This schedule will be based on the importance of the laboratory activities and the results from previous audits.
- e. Each academic area with active laboratories will be audited. The goal is to audit all teaching and research laboratories on a four year cycle. All the laboratories or single buildings under the direction of a principle investigator will be audited as a single unit.
- f. The LSU Laboratory Safety Accreditation Audit Form has been developed by EHS to review those issues construed to be important by the National Institute of Health, the American Chemical Society, OSHA and NFPA regarding safety in the chemistry laboratory. The form will be used as part of the pre-audit and final accreditation audit
- g. It is important that the inspected area be identified by building name, department (chemistry, biochemistry, chemical storage, etc.), floor on which it is located, and room number. Further, the area shall be identified as used for teaching, research, both, or neither, as would be the case in chemical storage and/or hazardous waste holding areas.

### **Communication and process timelines**

- a. An individual discussion of the accreditation process and the audit schedule will be reviewed with the Principle Investigator of the laboratories to be audited. The use and advantage of the Pre-audit will be explained and a time and date for the Pre-Audit will be scheduled.
- b. An individual discussion of the accreditation process and the audit schedule will be reviewed with the Building Manager of the laboratories to be audited. A discussion and review of current conditions and issues with the building will be conducted. Special emphasis will be on safety equipment such as hoods, ventilation systems, safety showers, emergency eye wash fountains, pressure relieving devices and fire systems.

### **The pre-audit period**

Effective completion of the Pre-Audit is a way to insure that the lab being audited has a chance to correct its deficiencies before the Accreditation Audit. The Pre-audit phase is not designed to go over every question and section of the Accreditation audit form, but is rather a discussion of what is required to meet the requirements of the accreditation program. The PI or Laboratory Supervisor will be given a copy of the Audit form as a guide and working model for their audit preparations. If the PI and his staff make an effort to review the list and make corrections, the laboratory has a good chance at doing well on the Accreditation Audit. The EHS Coordinator will make himself available for discussion and help in resolving issues. The whole pre-audit period should be considered as a coaching, facilitating and mentoring process.

- a. The pre-audit will be scheduled one week in advance via email and will detail the meeting time, agenda and time required for the audit. Much of this can be discussed in advance during the meeting with the PI.
- b. The PI and RA should be in attendance along with available graduate students.
- c. The pre-audit will be conducted by the EHS Coordinator assisted by other EHS team members as necessary.
- d. Findings will be discussed during the pre-audit with the PI and his team. A summary document will be prepared by the Coordinator and sent to the PI, Department Chair, Director of EHS and the appropriate EHS team members.
- e. The Laboratory will have three weeks to prepare for the audit by taking actions based on the pre-audit discussion and the PI's estimation of what needs to be done to pass the audit.
- f. The PI will notify the EHS Coordinator that the laboratory is ready for the Accreditation Audit.
- g. It is possible some laboratories are in a state that only minor corrective measures need to be taken in the laboratory to meet accreditation standards. In such cases, and on completion of the corrective measures, the audit will be performed immediately and accreditation will be awarded immediately to the PI and the Laboratories and their accomplishment celebrated and publicized.

### **The Accreditation Audit**

- a. Upon successful closure of the Pre-Audit, the Coordinator in conjunction with the PI will schedule the Accreditation Audit. Notification will be sent to the PI, Department head, EHS director and Staff, via email and will detail the meeting time, agenda and time required for the audit.
- b. The audit will be conducted by the EHS Coordinator assisted by other EHS team members as necessary.
- c. The PI and RA should be in attendance along with available graduate students.
- d. The Laboratory will have three weeks to take corrective action on the non-conforming problems discovered in the Accreditation-Audit as well as any other problems discovered in previous audits.
- e. Upon notification by the PI that corrective actions have been taken, the Coordinator will return to the lab to review only those non-conforming items noted in the Accreditation Audit.

- f. The Coordinator will notify the PI, Dean, Department Chair and EHS Director and Staff that the non-conforming items have been successfully corrected.
- g. Accreditation is awarded to the PI and the Laboratories
- h. Celebration and publication of the accomplishment.

#### Maintaining the Safety of Laboratories

- a. The PI or his designee will continue to perform their evaluations for laboratory conditions every semester using the QAF. The PI should take corrective action on the discovered problems and document the corrections on the second page of the form. The EHS staff will be available to assist in any way they can.
- b. The completed forms will be sent to EHS. The forms will be reviewed by the staff to see if there is a continuing trend in all of the laboratories for which EHS might provide a permanent solution.
- c. EHS staff, as they work through the campus, will perform unscheduled inspections of the labs using the QAF. Any problems discovered will be discussed with the PI for correction. Help will be provided as necessary towards maintaining the labs accreditation or preparing the lab for the accreditation audit.

#### Maintaining Accreditation

- a. A maintenance re-accreditation audit will be scheduled and performed by the EHS Coordinator every 36 months using the Accreditation Audit Form following the same process described above in the Accreditation Audit section.
- b. If the Lab score is in the acceptable range, Accreditation is maintained and corrective actions will be taken within an agreed upon schedule.
- c. If the Lab score falls below the acceptable minimum, the lab has three weeks to take corrective action before being re-audited. If the new score is above the minimum, Accreditation is maintained and the lab will be returned to the normal audit schedule.
- d. Should the new score still be below the acceptable minimum, Accreditation will be revoked. The PI and EHS coordinator will then draw up an action plan to prepare the lab for a new accreditation audit in 6 months.
- e. Laboratories that switch PI's need to be have at least a Quick Assessment done within three months of the transition. The lab will maintain its accreditation until the next audit.