

UNIVERSITY OF KANSAS

LAWRENCE CAMPUS

LABORATORY SAFETY MANUAL

PART II - Chemical Hygiene/Safety Plan

Section 4) Chemical Safety-Specific Information & Training

Federal and State regulations, as well as “Prudent Practice,” require the University to provide all faculty, staff, students, and visitors with information concerning the chemical hazards present in their University environments; and sufficient training to enable them to perform their tasks safely and protect themselves from potential chemical exposure.

4.1) Review of Universal (Part I) Information & Training Requirements

Note: This section provides references back to the universal laboratory safety information and training requirements provided in Part I - Chapter 4, as applicable for achieving chemical hygiene/safety. References to Part I are given.

All individuals (authorized users, and authorized laboratory supervisors) using chemicals in a laboratory shall:

4.1.1) Responsibilities

4.1.1.1) Fulfill their responsibilities for universal laboratory safety information and complete training as identified in Part I - Chapter 4: Section 4.1 (Specifically 4.1.1 through 4.1.4)

4.1.2) Required Information

4.1.2.1) Be familiar with and make the required information specified in Part I - Chapter 4: Section 4.2 (specifically 4.2.1 through 4.2.4) available.

4.1.3) Required Training

4.1.3.1) Comply with the required training specified in Part I - Chapter 4 (specifically sections 4.3 through 4.5).

4.1.4) Frequency of Information & Training

4.1.4.1) Comply with the information and training frequency requirements specified in Part I - Chapter 4: Section 4.6.

4.1.5) Documentation of Information & Training

4.1.5.1) Comply with the information and training documentation requirements specified in Part I - Chapter 4: Section 4.7.

4.2) Chemical Hygiene/Safety-Specific Information

Authorized Laboratory Supervisors shall:

4.2.1) General Chemical Safety Information

4.2.1.1) Inform all users of chemicals in their labs with the information required under Part I - Chapter 4: Section 4.2.1.

4.2.2) Specific Chemical Safety Information

4.2.2.1) Review the Laboratory Hazard Registration form for their lab with all chemical users. (See Part II: Section 3.3 for details.)

4.2.2.2) Review the Inventory of Chemicals present in the lab with all chemical users. (See Part II: Section 3.4.1 for details.)

4.2.2.3) Inform all users of chemicals in their lab as to the location and accessibility of Safety Data Sheets for chemicals present in the lab. (See Part II: Section 3.4.2.)

4.2.2.4) Inform all users of chemicals in their labs as to specific areas inside the lab that have been marked with Chemical Hazard Warning Signs.

4.3) Chemical Hygiene/Safety-Specific Training

Authorized Laboratory Supervisors shall:

4.3.1) General Chemical Safety Training

4.3.1.1) Provide all users of chemicals and occupants in their labs with the initial lab safety training specified in Part I - Chapter 4: Section 4.7.1.

4.3.1.2) Train all users of chemicals in their labs on all the following Standard Operating Procedures and Practices for Laboratories Using Chemicals found in Part II-Chapter 2: Sections 2.1 through 2.3. This includes:

Section 2.1 - General Principles for Working Safely with Chemicals

Section 2.2 - Universal SOPs for Chemical Hygiene/Safety

Section 2.3 - Chemical Hygiene/Safety-Specific Procedures/Practices

4.3.2) Specific Chemical Safety Information

4.3.2.1) Train any chemical user who is working with a compound that falls under any of the specific chemical hazard class work procedures/practices identified in Part II-Chapter 2: Sections 2.4 through 2.8. This includes:

Section 2.4 - Flammable/Combustible Liquids

Section 2.5 - Corrosives

Section 2.6 - Reactives

Section 2.7 - Explosive Compounds

Section 2.8 - Particularly Toxic Compounds

4.3.2.2) Train all users of chemicals in their labs on the Hazard Communication Procedures found in Part II-Chapter 3: Sections 3.1 through 3.3. This includes:

Section 3.3 - Laboratory Hazard Registration Form

Section 3.4.1 - Inventory of Hazardous Chemicals

Section 3.4.2 - Safety Data Sheets for Chemicals

Section 3.4.3 - Chemical Container Labeling

Section 3.4.4 - Chemical Hazard Warning Signs

Section 3.4.5 - Laboratory Entrance Posting

4.3.2.3) Train all users of chemicals in their labs on the Special Requirements for Laboratory Facilities with Hazardous Chemicals found in Part II- Section 3.5 through Section 3.7. This includes the following hazard control procedures:

Section 3.5 - Engineering Controls (training must also include the references to procedures found Part I: Section 3.5, especially section 3.5.4 which addresses fume hoods).

Section 3.6 - Personal Protective Equipment (training must also include the references to procedures found Part I: Section 3.6, especially section 3.6.3, which addresses the State Mandate for wearing eye/face protection).

Section 3.7 - Safety Equipment (training on safety equipment that is present in the lab or readily available. Must also include the references made back to procedures found Part I: Section 3.7.)

4.3.2.4) Train all users of chemicals in their labs on any special requirements imposed upon the lab by an EHS-approved Laboratory-Specific Safety Plan (Refer to Part I: Section 3.9 and Part II: Section 3.9 and the actual LSSP itself).

4.3.2.5) Train all users of chemicals in their labs on Medical Factors to Consider for Chemical Safety provided in Part II - Chapter 5.

4.3.2.6) Train all users of chemicals in their labs on the Safe Disposal of Hazardous Chemical Waste Procedures found in Part II - Chapter 6.

4.3.2.7) Train all users of chemicals in their labs on any laboratory-specific chemical safety procedures which have been implemented by the laboratory supervisor that are above and beyond those identified in Part II of this manual.

4.4) Chemical Hygiene/Safety - Information & Training Frequency

Authorized Laboratory Supervisor shall:

4.4.1) Provide all users of chemicals in his/her labs with information and training at a frequency that is in accordance with that specified in Part I - Chapter 4: Section 4.6.

4.5) Chemical Hygiene/Safety - Information & Training Documentation

Authorized Laboratory Supervisor shall:

4.5.1) Document the training of all chemical users in his/her labs in accordance with the procedures specified in Part I - Chapter 4: Section 4.

4.6) Information & Training Resources

Prospective supervisors and users of Hazardous Materials/Radiations shall:

4.6.1) If needed, contact EHS (864-4089) for assistance in providing the required information and training.

4.6.2) On-line safety training - KU-EHS currently offers 80+ safety courses/modules online via KU Blackboard/Canvas and MyTalent Learning. There are 34 courses that address Lab Safety issues/concerns. <https://ehs.ku.edu/training>

- a) Many Depts/Units have already set established required minimum training grids for personnel in their units. These are available through EHS online sites per each unit page.
- b) Many PI's/Lab Supervisors have lab/group specific pages that establish additional required training. These are available through EHS online sites per each PI/Class page.

4.6.3) Classroom/small group training – KU-EHS can provide a variety of training via request.