

This SOP template is designed to be used subsequent to a Hazard Assessment of the process under review. For each chemical hazard identified in the Hazard Assessment, an SOP is required to be written under the authority of 29 CFR 1910.1450 "Laboratory Standard".

This template is an example of a tool that can be utilized to fulfill this requirement. Additionally any physical, radiological, biological, and animal use provisions for hazard mitigation or elimination may also be documented on this form.

Hazardous Chemicals: *(List chemicals used. Include chemical name, common name and abbreviation)*

Potential Hazard(s): *(Describe the potential hazards associated with the chemicals or the procedure.)*

Examples include:

- 1) *Chemical hazards such as carcinogenic, irritant, corrosive, acutely toxic*
- 2) *Reproductive hazards such as teratogens or mutagens*
- 3) *Allergies or chemical sensitivities that may be associated with the chemical*
- 4) *Physical hazards such as pyrophoric, implosion, explosion, exothermic reactions, use of high energy equipment*

Routes of Exposure: *(As applicable, describe the potential routes of exposure associated with the procedure such as inhalation, injection, skin/eye contact)*

Quantity/Concentration Hazards: *(As applicable, describe if the quantity/concentration of the chemical increases the risk associated with exposure to the chemical.)*

Substitution of Less Hazardous Chemicals: *(As applicable, describe the potential use of less hazardous chemical substitutes)*

Control Measures

Personal Protective Equipment (PPE): *(List all applicable personal protective equipment needed for procedure)*

For example, describe use of:

- 1) *Gloves (what type)*
- 2) *Lab Coats, Suits, Aprons*
- 3) *Safety Glasses, Goggles, Faceshields*
- 4) *Respirators, Hearing Protection*

- 5) *Special Equipment (such as blast shields)*
- 6) *Other PPE*

Engineering Controls: *(As applicable, describe the engineering controls used for the procedure)*

Examples:

- 1) *Use of fume hoods or glove boxes*
- 2) *Special ventilation*
- 3) *Safe sharp devices*
- 4) *Other safety devices used*

Work Practice Controls: *(As applicable, describe work practice controls used for the procedure)*

Examples:

- 1) *Designated areas – must be addressed for particularly hazardous substances*
- 2) *Not performing procedure alone*
- 3) *Rotating workers*
- 4) *Restricting access; locks*
- 5) *Housekeeping*
- 6) *Special Signage*

Monitoring: *(As applicable, describe any monitoring needed for the procedure)*

Examples:

- 1) *Personal exposure monitoring*
- 2) *Gas release monitoring*

Use in Animals: *(As applicable, describe how the chemical will be safely used in animals)*

Examples:

- 1) *Dosing administration procedures*
- 2) *Animal restraining*
- 3) *Information on shedding/excretion of chemical*
- 4) *Handling animals*
- 5) *Special cage handling/washing instructions*

Cleanup Procedures: *(Describe the process for cleaning the work area during and after the procedure.)*

Storage Procedures: *(Describe how and where the chemical will be safely stored)*

Transportation Procedures: *(If the chemical will be transported on campus, describe procedure)*

Waste Disposal Procedures: *(Description of how waste will be disposed)*

- 1) *Animals: include bedding, cages and carcasses*
- 2) *Chemicals*
- 3) *Radioactive*
- 4) *Sharps*

Emergency Procedures: *(Describe what procedures should be followed in the event of an emergency)*

Spills or Releases: *(Provide specific instructions on what personnel should do in the event of a spill or gas release. Include location of spill kits.)*

Fire: *(Provide specific instructions on what personnel should do in the event of a fire)*

Emergency Shut Offs: *(If applicable, describe procedures for shutting down equipment in an emergency)*

Signs and Symptoms of Exposure: *(Describe the specific signs and symptoms of an exposure to the chemical)*

Exposures: *(Provide specific instructions on what personnel should do in the event of an exposure)*

First Aid: (If first aid for exposure is available, describe procedure. If not, describe what steps should personnel take if injured.)

Occupational Health Requirements: *(Describe any Occupational Health requirements necessary that are associated with the procedure. Examples include medical evaluation, baseline serum samples and respiratory fit testing)*

Safety Data Sheets (SDS): *(Describe how personnel will access SDS in the lab). Include a copy of the SDS with this SOP)*

Training Requirements: *(Describe what training personnel must complete before using chemical/procedure. This training should be documented)*

Review of Procedure: *(Describe the frequency for reviewing the SOP document)*

