

UNIVERSITY OF KANSAS - LAWRENCE CAMPUS

LABORATORY SAFETY MANUAL

PART II - Chemical Hygiene/Safety Plan

2) Standard Operating Procedures and Practices for Laboratories Using Chemicals

2.1) General Principles for Working Safely with Laboratory Chemicals

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

2.1.1) Pursue the goal of minimizing all chemical exposures to a level “as low as reasonably achievable.”

2.1.2) Avoid underestimation of chemical risks.

2.1.3) Establish and maintain adequate ventilation when working with chemicals.

2.1.4) Observe established Action Levels, Permissible Exposure Limits, and Threshold Limit Values for chemicals and keep exposures below them.

2.1.5) Comply with the Requirements of this KU Chemical Hygiene/Safety Plan.

2.2) Review of Universal Standard Operating Procedures for Chemicals

Note: This section provides references back to the Universal Standard Operating Procedures in Laboratories with Hazardous Materials provided in Part I, as applicable for achieving Chemical Hygiene/Safety. References to Part I are given.

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

2.2.1) Responsibilities under SOPs

2.2.1.1) Fulfill their responsibilities as identified under SOPs in Part I: Section 2.1 (specifically 2.1.1 through 2.1.4).

2.2.2) Procurement of Chemicals

2.2.2.1) Procure chemicals in accordance with the SOPs identified in Part I: Section 2.2.

2.2.3) Chemical Receipt and Distribution

2.2.3.1) Receive and distribute chemicals in accordance with the SOPs identified in Part I: Section 2.3.

2.2.4) Chemical Storage

2.2.4.1) Store chemicals in accordance with the SOPs identified in Part I: Section 2.4.

2.2.5) General Lab Safety Practices/Conduct with Chemicals

2.2.5.1) Comply with and enforce the access restrictions applicable to visitors and/or non-laboratory authorized occupants in rooms with chemicals as identified in Part I: Section 2.5.1.

2.2.5.2) Comply with and enforce the access restrictions applicable to individuals who are Authorized Occupants in rooms with chemicals as identified in Part I: Section 2.5.2.

2.2.5.3) Follow the general lab safety practices identified in Part I: Section 2.5.3. when working with chemicals.

2.2.6) Specialized Safe Laboratory Practices/Conduct

2.2.6.1) Adhere to each of the specialized safe laboratory practices/conduct when working with chemicals, as applicable. These are identified in Part I: Section 2.6 (specifically 2.6.1 through 2.6.15).

2.2.7) Hazard Specific Safety Procedures

2.2.7.1) Follow hazard-specific laboratory safety procedures as identified in Part I: Section 2.7.

2.2.7.2) Follow chemical hazard-specific safety procedures as identified in Part II: Section 2.3

2.2.8) Laboratory-Specific SOPs

2.2.8.1) Develop and implement laboratory-specific SOPs in accordance with Part I: Section 2.8.

2.2.9) Emergency Procedures

2.2.9.1) Adhere to the general emergency procedures identified in Part I: Section 2.9.

2.3) Chemical Hygiene/Safety-Standard Procedures

2.3.1) Restricted or controlled access to Laboratory during chemical operations

The Authorized Laboratory Supervisor (ALS) shall:

2.3.1.1) Evaluate the need for restrictions on access to the laboratory during critical chemical operations within the laboratory, instruct the Authorized Users and Authorized Occupants concerning the nature of those restrictions and include those instructions in the laboratory-specific Standard Operating Procedures.

Note: This includes an evaluation of the need to inform visitors, authorized occupants, and even authorized users of special risk factors. Some individuals may be susceptible to allergic reactions to chemicals and other materials in the laboratory. All these factors may need to be considered in establishing the level of control that is needed.

2.3.1.2) Implement any/all access restrictions specifically required by EHS-approved Laboratory-Specific Safety Plans. Authorized Users and Authorized Occupants shall:

2.3.1.3) Follow the instructions given by the Authorized Laboratory Supervisor concerning access restrictions.

2.3.2) Chemical Decontamination or Clean-up Techniques

The Authorized Laboratory Supervisor shall:

2.3.2.1) Establish effective decontamination procedures for the chemicals used in the laboratory.

NOTE: Appropriate procedures to be used for decontaminating equipment, instruments, glassware, and laboratory benches, etc., must be developed as part of the laboratory-specific standard operating procedures.

2.3.2.2) Train Authorized Users in these procedures and provide these in writing as part of the laboratory-specific procedures.

2.3.2.3) Enforce the use of such procedures by Authorized Users.

Authorized Users shall:

2.3.2.4) Isolate equipment and glassware potentially contaminated with hazardous chemicals and appropriately mark/label such materials until decontamination is accomplished.

NOTE: This means that such equipment and glassware must be kept in a “reserved area that is appropriately labeled” and in appropriate containers.

2.3.2.5) Decontaminate equipment/glassware in an expedient fashion using the procedure stipulated in the laboratory-specific Standard Operating Procedures.

a) Use appropriate protective clothing and equipment in handling chemically contaminated items.

2.3.2.6) Clean work areas at the end of an experiment or the end of the day, whichever comes first, using the laboratory-specific decontamination procedures. (Note: This is the minimum frequency. Judgment is to be used in deciding whether the frequency should be greater.)

2.3.2.7) Clean work areas after any known chemical contamination episode or suspected episode.

2.3.3) Storage Containers for Chemicals

The Authorized Users shall:

2.3.3.1) Collect, handle, process and store all chemicals in accordance with requirements previously identified in section 2.2.4 of this Part II. Containers used to store chemicals shall be compatible with the materials being stored, leak-proof, and corrosion resistant.

2.3.3.2) Label each container in accordance with the requirements specified in section 3.4.3 of this Part II.

2.3.4) Chemical Waste

Authorized Users and Authorized Laboratory Supervisors shall:

2.3.4.1) Comply with the requirements identified in Part II: Chapter 6 for safe disposal of all chemicals.

2.3.5) Shipping and Transporting Hazardous Chemicals

Authorized Users and Authorized Laboratory Supervisors shall:

2.3.5.1) Not ship or transport chemicals off campus via postal or private express services without prior consultation with EHS concerning applicable federal and state regulations that must be satisfied.

2.3.5.2) Not transport chemicals across or off campus in personal vehicles.

2.3.5.3) Not transport chemicals across or off campus in university-owned vehicles without prior consultation with EHS concerning applicable federal and state regulations that must be satisfied.

NOTE: Only someone with the appropriate training in these regulations may prepare and send shipments of chemicals or transport them.

2.3.5.4) Contact EHS for assistance in determining appropriate procedures and protocols to be followed when needing to ship samples of synthesized or unknown compounds across or off campus.

2.4) Specific Procedures for Working with Flammable/Combustible Liquids & Gases

These are materials that, under standard conditions, can generate sufficient vapor to cause a fire when in the presence of an ignition source. Liquids that have a flash point below 100°F (38°C) are considered "flammable liquids." Liquids that have flash points at or above 100°F (38°C) are considered to be "combustible liquids." Fires may result when the invisible vapors from these materials come in contact with an ignition source, creating a flashback; or direct contact with an ignition source will cause these liquids to burn. Also, fire can result from reactions between flammable or combustible liquids and other compounds (e.g., oxidizers).

The International Fire Code (IFC 2018) places flammable and combustible liquids into the following classes:

<u>Flammable Liquids</u>	<u>Flash Point</u>	<u>Boiling Point</u>
Class IA	<73F (23C)	<100F (38C)
Class IB	<73F (23C)	>=100F (38C)
Class IC	>=73F (23C) <100F (38C)	

Combustible Liquids

Class II	>=100F (38C) <140F (60°C)
Class IIIA	>=140F (60C) <200F (93C)
Class IIIB	>=200F (93C)

IFC, NFPA and OSHA specify the maximum allowable container size for point of use storage in a laboratory:

<u>Container Type</u>	<u>IA</u>	<u>IB</u>	<u>IC</u>	<u>II</u>	<u>III</u>
Glass	500ml	1L	4L	4L	20L
Metal or Approved Plastic	4L	20L	20L	20L	20L
Safety Containers	10L	20L	20L	20L	20L

(Exception): Glass containers as large as 1 gallon (3.785 L) may be used if the required liquid purity would be adversely affected by storage in a metal or an approved plastic container, or if the liquid would cause excessive corrosion or degradation of a metal or approved plastic container.

(Prohibition): Laboratories are not allowed to have containers of flammable or combustible liquids greater than 5 gallons in size in the lab without special EHS-approved Laboratory-Specific Safety Plans.

IFC, NFPA and OSHA regulate the maximum quantity of flammable/combustible liquids and gases that may be present in a laboratory. The limits are dependent upon the size of the lab, class of materials, and whether the materials are stored outside of an approved storage cabinet. Therefore, the following limits are set to identify levels that require Laboratory-Specific Safety Plans and the related Safety Authorization from EHS:

Flammable/Combustible Liquids

<u>Storage Type</u>	<u>EHS Review/Approval Required</u>
1) Unapproved Cabinets, Shelf or open storage/use	>30 gallons total (all classes)
a) Glass, plastic, or metal cans	>10 gallons total (all classes)
b) Approved Safety Containers	>30 gallons total (all classes)
c) Any single container (drum, tank, etc.)	> 5 gallons in size (any class)
2) Storage in Approved Safety Cabinets	> 1 cabinet per lab
a) Class I liquids	> 30 gallons per cabinet
b) Class I, II, & III combined	> 60 gallons per cabinet

Flammable Gases

<u>Type</u>	<u>EHS Review/Approval Required</u>
1) Flammable Gas Cylinders	> Lecture size >2 cylinders total
a) Hydrogen	> 1 cylinder
2) Flammable Gas Cylinders - Lecture size	>5 lecture cylinders total

Some specific procedures for safe handling/usage of Flammable/Combustible Liquids & Gases are provided below. They are not intended to be all inclusive but serve as minimum safety procedures to be followed when handling and using these materials. Specific safety instructions may be obtained from the Material Safety Data Sheet, container label, or by contacting the EHS Dept.

The Authorized Laboratory Supervisor shall:

2.4.1) Obtain the necessary EHS Safety Authorization with the associated LSSPs if the lab is or needs to store quantities more than those identified above. (See also Part I; EHS 3.9 and Part II: Section 3.9.)

2.4.2) Establish and maintain flammable and combustible liquids & gases storage and usage in the lab in accordance with the requirements above and procedures below. Provide adequate fire safety equipment as necessary.

2.4.3) Train and inform authorized users on flammable/combustible liquids & gases hazards, the safety procedures of this section, the appropriate action to take in the event of an emergency in the lab, and any provisions imposed by an applicable EHS-approved Laboratory-Specific Safety Plan (LSSP).

The Authorized User shall:

2.4.4) Eliminate ignition sources (open flames, smoking materials, hot surfaces, sparks from welding/cutting, electrical equipment, and static electricity) from areas where flammable/combustible liquids and gases are used or stored.

2.4.5) Minimize the quantity of these materials within the work area.

2.4.6) Store such materials in accordance with the container type size and storage type quantity limitations stated previously in this section and these procedures in 2.4.4 - 2.4.13.

2.4.7) Segregate flammable/combustible liquids and gases away from oxidizers and other incompatible materials.

2.4.8) Not store flammable/combustible liquids in Non-approved refrigerators/freezers.

2.4.10) Establish and maintain proper bonding and grounding when transferring or dispensing flammable liquids from a larger container into smaller ones.

2.4.11) Establish and maintain appropriate sprinkler systems or fire extinguishers where flammable/combustible liquids or gases are used or stored.

Note: Although the provision for these is the responsibility of the Authorized Laboratory Supervisor, the Authorized User shall not perform these procedures at any location for which these are not available.

2.4.12) Be familiar with the hazards of the flammable/combustible liquid & gases being used and the appropriate action to take in the event of a flammable/combustible liquids or gases emergency in the lab.

2.4.13) Comply with all provisions required by an applicable EHS-approved Laboratory- Specific Safety Plan if one has been established for the lab.

2.5) Specific Procedures for Working with Corrosives

These materials are health hazards and chemically react at the point of contact to cause immediate, acute erosive effects (often visible burn-like damage) to tissues. Examples of corrosives include:

Strong Acids

Organic Acids such as: Glacial Acetic Acid, Acetic Anhydride, Chloroacetic Acid, Formic Acid, Phenol, Trichloroacetic Acid & etc;

Inorganic Acids such as: Hydrochloric, Hydrobromic, Hydroiodic, Hydrofluoric, Sulfuric, Nitric, Phosphoric, Perchloric, Chromic, Chromerge, No-Chromix, and etc.

Strong Alkali

Organic Bases such as: Amines, Diamines, Imines, Hydrazines, & etc; Inorganic Bases such as: Metal (sodium, potassium, calcium , etc.) Hydroxides, Metal Hydrides, Ammonia, Ammonium Hydroxide & Sulfide, Hydrazine, & etc.

Organic & Inorganic Halides

Various materials with anions of fluoride, chloride, bromide, iodide, sulfide, oxide, silane, etc., may be corrosive, especially when put into solution. This can include compounds such as: Aluminum Trichloride, Ammonium Bifluoride, Antimony Trichloride, Calcium Fluoride, Ferric Chloride, Sulfuryl Chloride, Thionyl Chloride, Phosphorous Pentachloride, Phosphorous Pentoxide, Sodium Bisulfate, Tin Chloride, Acetyl Chloride, Benzyl Chloride, Chlorotrimethylsilane, Dichlorodimethylsilane, etc.

Elemental Halogens

Compounds such as: Fluorine, Chlorine, Bromine, Iodine, Phosphorus

Corrosive Compounds

EHS Level III LSSP Required

Perchloric Acid (70% or greater concentration)	Any Quantity when being heated >100°F
Chlorine (gas)	>= 5 lbs total
Fluorine (gas)	>= 5 lbs total
Corrosive Liquids	>10 gallons total volume present
Corrosive Solids	>100 pounds total mass of all present
Corrosive Gases Any cylinder	> lecture size
Multiple Corrosive Lecture Cylinders	5 or more lecture cylinders

Some general procedures for safe handling/usage of Corrosives are provided below. They are not intended to be all inclusive but serve as minimum safety procedures to be followed when handling and using corrosives. Specific safety instructions may be obtained from the Material Safety Data Sheet, container label, or by contacting the EHS Dept.

The Authorized Laboratory Supervisor shall:

2.5.1) Obtain the necessary EHS Safety Authorization if the lab is using/storing corrosives at quantities more than those identified above. (Also see Part I: Section 3.9 and Part II: Section 3.9).

2.5.2) Establish and maintain corrosives storage and usage in the lab in accordance with the requirements above and procedures below. Provide adequate personal protective and safety equipment as necessary.

2.5.3) Train and inform authorized users specifically on corrosives hazards, the safety procedures of this section, the appropriate action to take in the event of a corrosive's emergency in the lab, and any provisions imposed by an EHS-approved Laboratory-Specific Safety Plan.

Authorized User shall:

2.5.4) Wear eye protection (chemical safety goggles) and appropriate gloves, as a minimum, when handling or using corrosives. A face shield, rubber apron, rubber boots, or other appropriate personal protective equipment may be necessary depending upon the work being performed.

2.5.5) Always add acid to water (never the reverse) to avoid violent reaction and splattering.

2.5.6) Establish and maintain an appropriate eyewash within the lab and a readily accessible safety shower within 55 ft of areas where corrosives are used and stored.

Note: Although the provision for these is the responsibility of the Authorized Laboratory Supervisor, the Authorized User shall not perform these procedures at any location for which these are not available.

2.5.7) In the event of skin or eye contact with corrosives, immediately flush the affected area with cool water for at least 15 minutes. Remove contaminated clothing and get medical help immediately.

2.5.8) Comply with all provisions required by any applicable EHS-approved Laboratory Safety Plan if one has been established for the lab.

2.6) Specific Procedures for Working with Reactives

Any solid, liquid, or gaseous chemical substances that are flammable solids, or have the potential to react rapidly to release relatively large amounts of energy and/or dangerous by-products (e.g., a toxic gas) are termed reactives.

<u>Reactive Compounds</u>	<u>EHS Review/Approval Required</u>
All solid/liquid Reactives	=>1 pound of any single reactive compound
All solid/liquid Reactives	=>10 pounds total combined reactives in lab
Reactive Gases Any cylinder	> lecture size
Multiple Reactive Lecture Cylinders	5 or more lecture cylinders

Several groups of such substances are listed below with some simple precautions to be followed when handling them. They are not intended to be all inclusive but serve as minimum safety procedures to be followed when handling and using reactives. Specific safety instructions may be obtained from the Safety Data Sheet, container label, or by contacting the EHS Dept. Refer to Part II: Appendices for additional information on reactive chemical hazards, chemical incompatibilities, & peroxidizable compounds.

The Authorized Laboratory Supervisor shall:

2.6.1) Obtain the necessary EHS Safety Authorization if the lab is using/storing reactives at quantities more than those identified above. (Also see Part I: Section 3.9 and Part II: Section 3.9).

2.6.2) Establish and maintain reactives storage and usage in the lab in accordance with the requirements above and procedures below. Provide adequate personal protective and safety equipment as necessary.

2.6.3) Train and inform authorized users specifically on reactive hazards, the safety procedures of this section, the appropriate action to take in the event of a reactive emergency in the lab, and any provisions imposed by an applicable Laboratory-Specific Safety Plan

The Authorized User shall:

2.6.4) Obtain prior review and approval by the laboratory supervisor before using or initiating any procedures with reactive compounds.

2.6.5) Comply with all provisions required by any applicable EHS-approved Laboratory- Specific Safety Plan if one has been established for the lab.

Flammable Solids (ignite readily, can burn vigorously and persistently)

2.6.6) Store and use minimal amounts. Keep away from ignition sources or protect from actions that can cause ignition.

Oxidizers (can react vigorously with organic materials or reducing agents)

2.6.7) Store and use minimal amounts. Keep these materials away from organic compounds, reducing agents, and flammable materials.

Peroxidizables (react with oxygen to form potentially explosive peroxides)

2.6.8) Keep quantities limited and consume materials before expiration date. Routinely check for the presence of peroxides before handling, especially after storage of six months or more. If bottles contain visible crystalline material, (do not touch these containers) put up a warning sign and notify EHS as soon as possible.

Air Reactives (Pyrophorics -can undergo spontaneous combustion)

2.6.9) Store and use minimal amounts. Actual materials should be stored and used in an inert atmosphere. (e.g., glove bag, dry box, Schlenk apparatus). Limit quantities to as small as possible.

Water Reactives (react violently with water to produce a flammable or toxic gas or other hazardous condition)

2.6.10) Store and use minimal amounts. Keep these materials away from water sources and they should be stored/used in well-ventilated areas (to help disperse flammable or toxic gases if there is an accident). Have dry sand or a Type D fire extinguisher available for emergencies.

2.7) Specific Procedures for Working with Explosive Compounds

Explosives are solid, liquid, or gaseous chemicals that can cause a sudden, almost instantaneous release of pressure, gas, and heat when subjected to shock, pressure, or high temperature. These compounds present the greatest, immediate danger to individuals in comparison to any other chemical compounds. Their acquisition, storage and use is highly regulated (some even require a federal license or permit) and demands the utmost in safety protection. Highly secure storage provisions and special safety practices are necessary. Because of this, any storage/use of regulated explosive compounds at any quantity requires an EHS Safety Authorization with the included Laboratory-Specific Safety Plan prior to the introduction of these materials in the lab.

Explosive Compounds

Any ATF identified explosive compound(s)
 Any DOT identified explosive compound(s)
 Potentially Explosive Compounds

EHS Review/Approval Required

Any quantity requires a Level IV LSSP
 Any quantity requires a Level III LSSP
 See limits for Reactives (Section 2.6)

Several compounds are specifically identified as explosives, while many others are labeled “potential” explosives. Extreme care must be taken when working with any of the compounds identified as explosives or potential explosives. The fact that an explosive compound has been reported to have been prepared without incident is not adequate evidence that it is safe. Refer to Part II: Appendices for further information on explosive chemicals: chemical Incompatibilities, potentially explosive compounds, ATF & DOT Identified Explosives.

Some general procedures for safe handling/usage of explosive compounds are provided below. They are not intended to be all inclusive but serve as minimum safety procedures to be followed when handling and using explosive compounds. Specific safety instructions may be obtained from the Material Safety Data Sheet, container label, or by contacting the EHS Dept.

The Authorized Laboratory Supervisor shall:

2.7.1) Obtain the necessary EHS Safety Authorization if the lab is using/storing any regulated (DOT or ATF) explosive compounds at any quantity. (See also Part I: Section 3.9 and Part II: Section3.)

2.7.2) Establish and maintain explosives storage and usage in the lab in accordance with the requirements above, procedures below, and any EHS-approved Laboratory-Specific Safety Plan. Provide adequate personal protective and safety equipment as necessary.

2.7.3) Train and inform authorized users specifically on explosives hazards, the safety procedures of this section, the appropriate action to take in the event of an explosives emergency in the lab, and any provisions imposed by an EHS-approved LSSP.

The Authorized User shall:

2.7.4) Obtain prior review and approval from Authorized Laboratory Supervisor before using or initiating any procedures with explosive compounds.

2.7.5) Heat such compounds only with a carefully controlled water or oil bath and **SHALL NOT** mix or grind them in the dry state.

2.7.6) Perform all operations involving the explosive compound behind a safety shield, wear a face shield and a long-sleeve laboratory coat, with appropriate protective gloves. Corresponding care must be observed in the storage of such compounds as well.

2.7.7) Never initiate or carry out reactions involving explosive compounds without:

2.7.7.1) Warning all other individuals in the lab;

2.7.7.2) Having at least one other person present in the area who is knowledgeable of the experiment and on stand-by to obtain assistance in the event of an emergency.

The Authorized User should:

2.7.8) Restrict the scale of the experiment involving the compound as a reactant or product to as small a mass as possible, preferably 1 gram or less.

2.8) Specific Procedures for Working with Particularly Toxic Chemicals

This section pertains to Select Carcinogens, Reproductive Toxins, and Chemicals with High Acute Toxicity, or Moderate to High Chronic Toxicity as identified by the following:

OSHA Listed Carcinogens

OSHA Regulated Substances

The National Toxicology Program (NTP) “Known or Reasonably Anticipated to be Carcinogens” List

The International Agency for Research on Cancer (IARC) “Carcinogenic or Probably Carcinogenic to Humans” List

Particularly Toxic Compounds

OSHA Listed Carcinogens

OSHA Regulated Substances (EHS Group A)

NTP “Known Carcinogens”- Group 1

IARC “Group 1 Carcinogens”

Acute Toxicity (LD50< 50 or LC50<100)

OSHA Regulated Substances (EHS Group B)

NTP “Reasonably Anticipated Carcinogens” - Group 2

IARC “Group 2A or 2B Carcinogens”

EHS Review/Approval Required

Any Quantity - Level IV LSSP

Any Quantity - Level III LSSP

Any Quantity - Level III LSSP

Any Quantity - Level III LSSP

Any Quantity - Level III LSSP

Any Quantity - Level II Notification

Any Quantity - Level II Notification

Any Quantity - Level II Notification

Compliance with the universal and chemical hygiene/safety standard operating procedures previously identified in this Part II will assist in assuring that chemical exposure of laboratory users/occupants/visitors is minimized or prevented. However, because of the high toxicity hazards of the compounds identified above, it is necessary for the laboratory to implement the following additional protective operating procedures when working with any of the compounds identified above. Refer to Part II: Appendices for additional information on the various particularly toxic groups identified above.

Authorized Laboratory Supervisors shall:

2.8.1) Obtain the appropriate EHS Safety Authorization for procurement and use of these materials as required in Part I: Section 3.9 and Part II: Section 3.9. The proposed Laboratory-Specific Safety Plan will need to provide specific operating procedures and hazard controls to be implemented for working with the compounds identified above and will specifically address in greater details the requirements below.

2.8.1.1) Establish a designated area for the storage and use of these materials, including access restrictions and proper hazard identification through warning signage. Assure that all laboratory users/occupants with access are aware of necessary safety precautions.

2.8.1.2) Provide proper containment devices such as hoods, glove boxes, work surfaces, etc. and personal protective equipment for protecting lab laboratory users/occupants from exposure. Enforce their use.

2.8.1.3) Develop and implement appropriate decontamination procedures and require compliance with those procedures.

2.8.1.4) See that all contaminated wastes are collected and removed in accordance with the procedures identified in Part II: Chapter 6 as well as any special waste conditions established in the Laboratory-Specific Safety Plan.

2.8.1.5) Inform and train all laboratory users/occupants in accordance with the chemical hygiene/safety requirements established in Part II: Chapter 4, as well as on all procedures, practices, and safety measures mandated by all applicable Laboratory-Specific Safety Plans and hazard information specific to the compound they are using.

Authorized Users shall:

2.8.2) Comply with all requirements set forth in applicable Laboratory-Specific Safety Plans for working with these compounds and the instructions/SOPs provided by the authorized laboratory supervisor.