

Appendix C - Templates for Lab Specific Information

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A. LABORATORY-SPECIFIC INFORMATION

The following pages contain templates and examples that can be used to note laboratory-specific information that is required to complete your lab's Chemical Hygiene Plan (CHP). These templates are also available as documents which can be downloaded from the EH&S web pages, from [add link](#).

Your lab's CHP consists of the generic CSU Laboratory Safety Manual plus your lab's laboratory-specific information. These materials must be accessible to your workers at all times, and your workers must know where these materials are.

If you have paper copies of your laboratory-specific information, you should typically file these pages in the front of the safety manual for easy reference, or maintain them in a location that everyone knows is the location of the laboratory-specific information for your CHP. If you keep electronic copies of all or some of your laboratory-specific information, everyone in the lab must know which are the current files, and how to access them.

Figure C-1 Laboratory-Specific Information

(Begins on next sheet)

This Chemical Hygiene Plan (CHP) belongs to:

Laboratory Name:	
Chemical Hygiene Officer*:	
Department:	
Phone:	
Date:	

This CHP covers the following laboratory spaces:

[illegible]

This CHP, consisting of the CSU Laboratory Safety Manual and our laboratory-specific information, was reviewed and updated:

On:

By:

The items listed below identify our laboratory-specific information that is attached (or filed in its noted location), and that applies to our laboratory:

✓	Laboratory-specific information cover sheet (<i>i.e.</i> , these pages)
✓	Laboratory floor plan(s)
	General laboratory safety rules, applicable at all times in our laboratory
	Designations of individuals performing particular tasks (e.g., checking first aid supplies, maintaining chemical inventories, weekly eyewash check, etc.)
	Authorizations for individuals to use specific hazardous/controlled substances
	Any special instructions for receiving and storing hazardous materials
	Contents of chemical spill kit(s)
	Any special instructions for labeling containers
✓	Training records, or location if filed separately from this Plan
✓	Standard Operating Procedures (SOPs), or location if filed separately
✓	Chemical Inventory Report, or location if filed separately
	Locations of SDSs, other reference materials, University or departmental safety rules that apply to us, equipment maintenance manuals, other paper documents (such as a building evacuation plan or departmental health and safety plan) if filed separately from this CHP, etc.

B. LABORATORY FLOOR PLANS

Draw a floor plan for each room that is covered by this manual. Place it/them in the front of this manual. Note the locations of any signs, safety equipment and process- related equipment that may be present. Please see the examples of such equipment, and an example floor plan, in Figure C-2.

Eyewash Stations

Emergency Showers

Fire Extinguishers

First Aid Kits

Flammable Liquid Storage Cabinets

Glove Boxes

Any other specialized equipment or operation with safety implications.

Emergency Phone Number Signs

Direction of Exit

Gas Shut-Off Valves for Benches

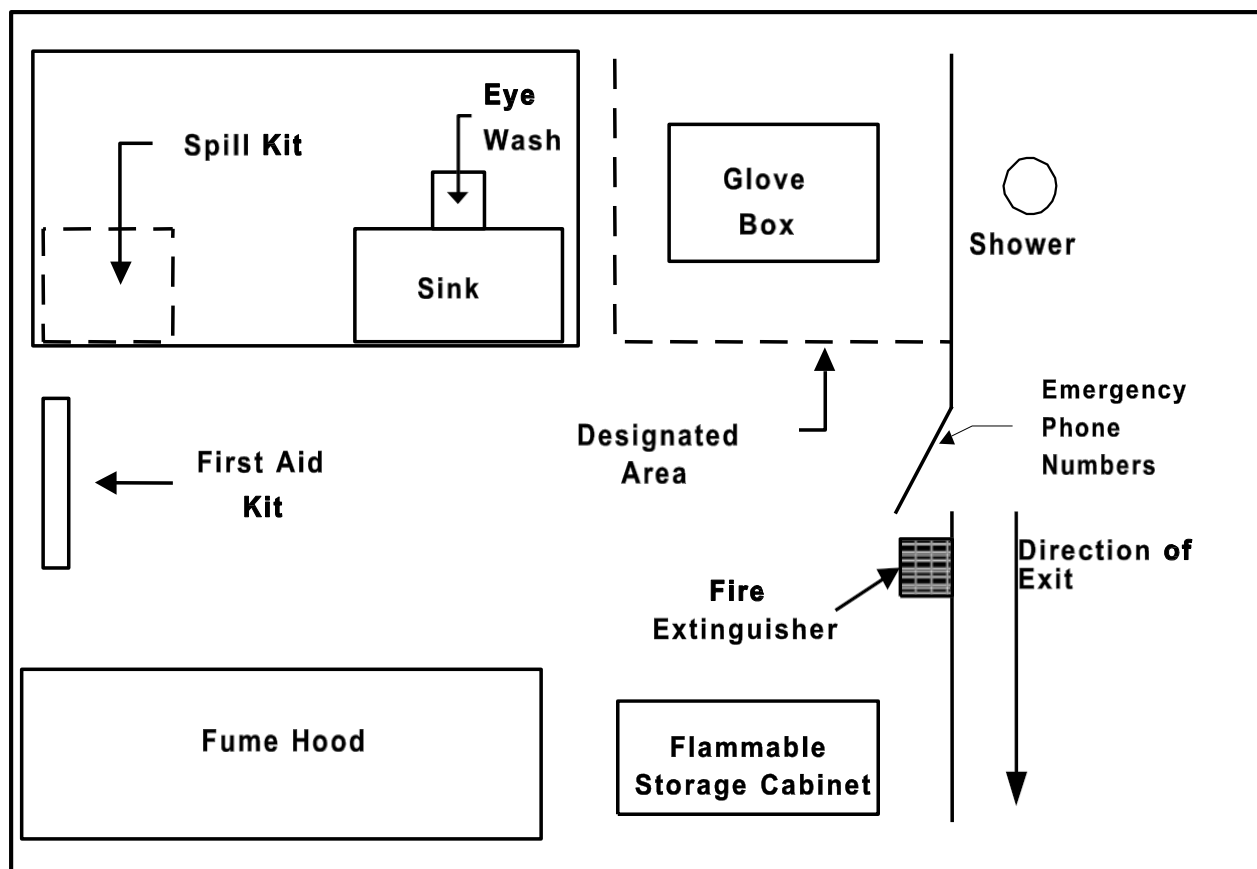
Ventilation Systems

Spill Kits

Electrical Panels/Circuit Boxes

(If select carcinogens, reproductive toxicants, select agents, highly toxic or highly dangerous chemicals are in use, a “designated area” must be specified. This area can be the entire laboratory, a fume hood, or portion of the laboratory.)

Figure C-2 Example Floor Plan



C. TRAINING DOCUMENTATION FORMS

The following page (Figure C-3, Example Chemical Safety Training Log) shows an example form which could be used to document training. After being filled out to describe a training session, this form could be filed in the laboratory-specific information section or in a department's filing scheme. If filed separately from the laboratory-specific information section, the filing location should be noted in the laboratory-specific information section.

The CSU Laboratory Employee Safety Training Checklist can also be used to plan, track and document the training received by a specific individual, Figure C-4 beginning on page C-8 below. A "pdf" version of this form is available at [add link](#) for your use.

[illegible]

Figure C-4 CSU Laboratory Employee Safety Training Checklist

CSU LABORATORY EMPLOYEE SAFETY TRAINING CHECKLIST

Site-Specific Safety Orientation & Training for New Laboratory Personnel

Revised - 07/2018

Prior to completing this site safety orientation and training, all laboratory personnel must have successfully completed the CSU Laboratory Safety Fundamentals course through Blackboard. Completion of this training is required prior to personnel being granted unescorted access to the laboratory.

Initial	Topic	Action
EMERGENCY PROCEDURES		
	Fire Alarm Pull Station:	Show location(s) and proper activation.
	Eye Wash / Safety Showers:	Show location(s) and proper operation.
	Spill Procedures	Show location of spill kit(s), and describe procedures.
	First Aid Kits:	Location(s) and description of contents.
	Phone:	Location(s), detail dialing instructions, '911' dialing instructions, bomb threat card.
	Emergency Response Guide:	Location(s) of flipchart guide, discuss scenario actions
	Emergency Action Plan:	Review Emergency Action Plan. Demonstrate both paths to Emergency Assembly Area. Review evacuation procedures for disabled employees if applicable.
	Emergency Notification:	Enroll in CSU emergency alert system, recommend registering cellular phone number.
ENGINEERING CONTROLS		
	Chemical Fume Hood(s):	Demonstration of proper use, instruction on adjustable controls, flow sensor function, and training requirements.
	Biological Safety Cabinet(s):	Demonstration of proper use, instruction on adjustable controls and training requirements.
	Chemical Storage Location(s):	Location(s) and segregation rules, volume limits (>10 gallons require flammable storage cabinet).
	Other Controls (e.g., Glove Boxes, Snorkels, Gas Cabinets, Paint Booths, Laminar Flow Benches):	Demonstration of proper use, instruction on adjustable controls.
	Describe in detail:	
ADMINISTRATIVE CONTROLS		
	Laboratory Safety Manual (incl. Chemical Hygiene Plan):	Location and content description. Also, any applicable Laboratory Safety Plan(s) location and content.
	Safety Data Sheets (SDSs):	Demonstrate electronic access and describe laboratory repository of hard copy SDSs, if applicable
	Standard Operating Procedures	Location of lab's SOPs, describe required approvals.

(SOPs):

Identification of chemical processes / areas requiring specific SOP use, and laboratory safety rules.

Describe in detail:

|

PERSONAL PROTECTIVE EQUIPMENT

Determine Hazard-Specific Safety Training:

Consult CSU Lab Training Matrix for Laboratory Personnel, enroll in courses

Lab Coat:

Some labs/hazards require flame resistant coats.

- Type: ☐ Cotton/Blend ☐ Barrier ☐ Flame Resistant

Size: |

Eye Protection:

Glasses must fit appropriately, be comfortable to wear, and stay securely in place. For labs where goggles must be worn provide pair(s) of fitted chemical splash goggles. When a face shield is required, demonstrate proper use, care and storage.

- Corrective Prescription Y / N

Model: |

Gloves:

Location(s), provide knowledge and resources to select correct type. Instruct proper procedure to don and doff.

OTHER

Hazardous Waste:

Overview of laboratory hazardous waste procedures. Location(s) of accumulation area, demonstrate proper labeling, describe proper storage requirements, and detail pickup/removal procedures.

Specialized Equipment:

Review of safety procedures for proper operation. e.g., UV light, laser, high voltage equipment, superconducting magnets, cryogen handling, high/low vacuum, etc...

Describe in detail:

|

According to state/federal laws and Cleveland State University policy, Principal Investigators and laboratory supervisors are responsible for ensuring that all employees receive adequate training to understand the hazards present in their work area. This includes administrative personnel who handle lab chemicals for such tasks as receiving, inventory, and stocking. Training must occur prior to assignments involving potential exposure to chemicals. EH&S provides general training for most categories of hazards in the laboratory. EH&S strongly encourages and in some cases requires that employees take these classes since they cover topics that are specific to the Cleveland State University. Laboratory staff must also receive training applicable to all CSU employees such as an orientation to the department Health and Safety Plan, Emergency Evacuation and Operations Plan, Asbestos General Awareness, Violence Prevention, etc.

Employee Name: _____ **Date:** _____

Supervisor Name: _____ **Date:** _____

Laboratory Specific Training		
<i>The below types of training are required for each laboratory staff person and are to be provided by the Laboratory P.I., Manager, or Chemical Hygiene Officer. Details about each subject are discussed in Section 7 of the CSU Laboratory Safety Manual, online at add link.</i>		
Have you received the following?		Date
Orientation to the content and location of the Chemical Hygiene Plan, including: <ul style="list-style-type: none"> • CSU Laboratory Safety Manual • Lab-specific Standard Operating Procedures (SOPs) • Other lab specific information 	<input type="checkbox"/> YES	
Methods for finding exposure limits	<input type="checkbox"/> YES	
Safety Data Sheets (SDSs) and other safety references	<input type="checkbox"/> YES	
The hazards of the workplace and how to detect the presence or release of hazardous chemicals and the basic signs and symptoms of chemical overexposure	<input type="checkbox"/> YES	
Requirements for Personal Protective Equipment (PPE) and how to select, don, doff, and maintain it	<input type="checkbox"/> YES	
How to segregate and safely store chemicals in the laboratory	<input type="checkbox"/> YES	
Proper disposal of all laboratory waste	<input type="checkbox"/> YES	
How to safely clean up spills and respond to other emergencies	<input type="checkbox"/> YES	

EH&S Laboratory Safety Training	
<i>Answer the following questions. If YES, fill in the date when the training is completed. For more information about the classes, see add link or contact the EH&S Training Office : 216-687-9306.</i>	
	Date
Are you responsible for chemical safety in your laboratory?	
<input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, take the Laboratory Safety Standard Compliance class.	
Do you work with hazardous chemicals?	
<input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, take the online/classroom Managing Laboratory Chemicals class. <div style="text-align: center;">REQUIRED</div>	
Do you need to wear a respirator on the job?	
<input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, follow the instructions at: add link . REQUIRED	
Do you work with any form of recombinant DNA, pathogenic microorganisms, human / non-human primate tissues or other biohazardous agent?	
<input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, take the Biosafety Training class. (Initial and every three years thereafter) REQUIRED	

CSU Laboratory Employee Safety Training Checklist

Do you work with human cells, tissue or body fluids?	
<input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, take the online/classroom Bloodborne Pathogens for Researchers class (Annual training) REQUIRED	
Are you planning to use ionizing radiation?	
<input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, follow the instructions at: add link . REQUIRED	
Are you planning to use non-ionizing radiation?	
<input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, contact EH&S Radiation Safety at 216-687-3715 additional training may be required. REQUIRED	
Are you planning to use class 3b and 4 Lasers with a power greater than 5 milliwatts (mW)?	
<input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, register for the Laser Safety Training at: add link . REQUIRED	
Are you expected to use a fire extinguisher in the event of an emergency?	
<input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, take the Fire Extinguisher Training class (Annual training) REQUIRED	
Do you package, ship, and/or transport hazardous materials or infectious substances?	
<input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, take the Shipping Hazardous Materials class or if applicable, the "Online Shipping Biological Substance Category B" or the "Online Shipping Dry Ice with non-dangerous goods or Exempt Patient Specimens" (initial and every two years thereafter) REQUIRED	

Training

Use this section for any additional safety training needed in your laboratory due to "unusual hazards" such as forklift operation, confined space entry, maintaining powered equipment [lockout/tagout], working at heights [fall protection], lifting safety, or perchloric acid fume hood use.

After all of the training has been completed have the new employee sign and date this form and save it in your laboratory training records.

Employee Signature: _____