Table of Contents

- 1. Monthly Lab Self-Inspection Checklist
- 2. Chemical Use and Planning Information
- 3. Lab-Specific Training Documentation
- 4. Orientation/Training Checklist for New Lab Workers
- 5. Safety Data Sheets (SDS) for Chemicals/ Pathogens
- 6. Guidelines for Working Alone in the Lab
- 7. Unattended Operations Signage
- 8. Standard Operating Procedures (SOPs)
- 9. Sink Disposal Authorizations
- 10. Memorandum of Understanding (MOUs)
- 11. Minors Working in the Lab
- 12. Biosafety Protocols
- 13. Other Reference Material

Monthly Lab Self-Inspection Checklist

A monthly lab self-inspection is required in each UVM lab. Principal Investigators are responsible for ensuring this is done.

Please be sure to mark the month (J/F/M = January, February, March, etc.) that you check and complete during the inspection.

Mark "N/A" for any items that do not apply.

This checklist may be audited. Please use it to keep your lab personnel safe, using best practices, and to remain in compliance with the following:

- UVM's Laboratory Safety Policy
- UVM's Chemical Hygiene Plan
- UVM's Laboratory Environmental Management Plan

Chemical Use and Planning Information

Chemical Use Planning Forms (CUPF) are required to be completed by labs using hazardous (flammable, corrosive, toxic, oxidizers, reactive, etc.) chemicals.

Complete an individual CUPF for highly hazardous chemicals.

OR

Complete a CUPF for assorted chemicals with the **same exact hazard(s)** that you use **exactly the same way**. Consult your Lab Safety Coordinator about this at <u>safety@uvm.edu</u>

Always review the Safety Data Sheet (SDS) from the manufacturer, and describe on the CUPF how you will safely use the chemical in your lab.

The CUPF is an assessment tool to help you document your assessment *before use*. Revise annually or if the use has changed.

Blank, fillable **Chemical Use Planning Forms** are available on the UVM Lab Safety Notebook website. Complete online, save, and print. Keep in the Lab Safety Notebook.

Chemical Use Planning Forms can be audited.

Lab-Specific Training Documentation

Lab-specific trainings must be documented. This may include a written SOP that identifies hazards and controls being used to conduct the work AND includes a section on how to properly collect and dispose of the waste generated during any activity.

Lab-specific trainings should include the following:

- Training outline/description of the contents of the training;
- Date the training was completed;
- The trainer (person delivering the training); and
- Training attendees.

See:

Train and Inform Personnel website for more info.

Orientation/Training Checklist for New Lab Workers

Each new lab worker must document a safety orientation to their lab areas and lab building. Principal Investigators are responsible for ensuring all lab personnel are oriented to the hazards and lab emergency procedures.

An orientation/training checklist is available on the Lab Safety Notebook website. If you need to edit the checklist to delete or add specific training items, let us know so we can send you a version to edit.

Cross off, or write "N/A" to any items on the checklist that may not apply to your lab.

Safety Data Sheets (SDS) for Chemicals/ Pathogens

Labs must keep Safety Data Sheets (SDSs) for the hazardous materials that they store and use in the lab. SDSs should be downloaded from the manufacturer on the container label and may be printed and kept in a safety notebook in the lab OR in a digital file in a clearly designated folder on a lab computer that does not leave the lab. Everyone in the lab must know where to find them.

Principal Investigators are responsible for ensuring that lab personnel review and understand the hazards listed on the SDS and that they have and use appropriate controls to prevent exposure.

SDSs may be audited.

Safety Data Sheets can be found on the Chemical Manufacturer's website:

- http://www.sigmaaldrich.com/safety-center.html
- http://www.fishersci.com/ecomm/servlet/msdssearchhome?LBCID=9296 6620&showMSDSSearch=Y&storeId=10652
- https://us.vwr.com/store/search/searchMSDS.jsp;jsessionid=1578EA34A D6BF6C3FB190A5A803BF450?tabId=msdsSearch

Additionally, SDSs can be found at these sites:

- Chemicals: http://ccinfoweb.ccohs.ca/msds/search.html
- Pathogens: http://www.phac-aspc.gc.ca/lab-bio/res/psds-ftss/index-eng.php

Guidelines for Working Alone in the Lab

Each Principal Investigator is responsible for establishing and documenting a Working Alone Protocol in the lab.

For example, lab personnel might not be allowed to work alone outside of typical working hours (8am-4pm) using a specific hazardous chemical or a specific hazardous piece of equipment. Document this information on this form, and communicate it to all lab personnel.

Update the form annually or if anything changes.

The form can be found on the Laboratory Safety Notebook website.

Unattended Operations Signage

Print and complete this form when leaving a process or procedure running when you are not present in the lab.

Use the form if you leave for a short period of time (e.g., over lunch) or for a longer period of time (e.g., over the weekend).

Complete the form and tape it to the lab door facing the hallway, so that emergency responders will see it should there be a lab emergency in your lab area or building.

A re-usable form may be created and used if a process occurs routinely.

A blank Unattended Operation sign can be downloaded from the Laboratory Safety Notebook website.

Standard Operating Procedures (SOPs)

A Standard Operating Procedure (SOP) should be created for hazardous processes. An SOP is one way to document an assessment has been completed.

SOPs should be updated regularly or when the process changes.

SOPs should include sections that clearly state the following:

- The hazards of the procedure
- The controls to be used in each step of the procedure
- The waste stream(s) generated in the procedure
- How to properly dispose of the waste using UVM's lab waste protocol
- Step-by-step directions for completing the procedure

See:

Lab Safety Notebook website, and choose the Standard Operating Procedure tab.

OR

See the **Evaluate and Control Hazards** website. There is an SOP website that can be found:

Control > Work Practices.

Sink Disposal Authorizations

Written Sink Disposal Approvals must be kept in this section.

The Environmental Protection Agency (EPA) and City of Burlington (due to Lake Champlain) have strict regulations about what can be disposed of down a lab drain. Please be sure to check the website before you submit an online **Sink Disposal Request** before you pour lab wastes down the drain.

See:

Laboratory Chemical Waste Management website.

Pre-approved solutions that can go down a lab drain can be found here:

https://riskmgmt.w3.uvm.edu/sinkdisposal/show_approved.php

If your concentrations differ from what is on this list, you must submit a Sink Disposal Request. It can take a couple days to get a response, so plan accordingly.

Sink disposal approvals can be audited.

Memorandums of Understanding (MOU)

Each non-affiliate or Visiting Lab Worker working in your lab for ANY amount of time must complete a Memorandum of Understanding (MOU).

A blank MOU can be downloaded from the **Laboratory Safety Notebook** website.

Minors Working in the Lab

Review UVM's Minors in Laboratories policy.

Be sure to check the **Protection of Minors** website.

The Laboratory Safety Notebook webpage has the required permission form and the policy under the tab Minors Working in Lab Permission Form.

Biosafety Protocols

Include all approved IBC protocols and any Safety Data Sheets for pathogens used in the lab.

Other Reference Material

Include UVM Injury Protocol

Include Emergency Response numbers

Include lab group members' contact info

Include any other relevant lab information that does not fit into one of the other sections.