Laboratory-Specific Chemical Hygiene Plan Documentation

University of Wisconsin- Milwaukee

**PI:**

**Includes Lab rooms:**

**August 2018**

Table of Contents:

[ ] **Section 1**: Certification, Review and Updates

[ ] **Section 2**: Contact Information and Emergency Information

[ ] **Section 3**: Laboratory Room Locations

[ ] **Section 4**: Procedures for Exposures and Hazards

**4.1** Standard Operating Procedures (SOPs) and Safety Guidelines

**4.2** Chemical High Risk Procedures

[ ] **Section 5**: Laboratory-Specific Policies

**5.1** Working Alone Policy

**5.2** Unattended Experiments

**5.3** Eating and Drinking Locations

**5.4** Personal Protective Equipment (PPE)

**5.5** Equipment Use and Training Guidelines

**5.6** Other (if any)

**5.7** Information for Chemical Waste Disposal

**5.8** Controlling Exposure and Hazards – Work Practices Requiring Prior Approval

[ ] **Section 6**: Laboratory-Specific Safety Orientation Checklist

[ ] **Section 7**: Safety Data Sheet (SDS) and Inventory of Hazardous Chemicals Information

[ ] **Section 8:** Documentation of Laboratory-Specific Chemical Hygiene Plan Training

Note: If the laboratory has this information in their own format, they may use that format in lieu of this document as long as they cover all of the topics covered in this document.

**Section 1**

**Certification, Review and Updates:**

By signing and dating here, the Laboratory Safety / Chemical Hygiene Officer and Principal Investigator certify that this Laboratory-Specific Chemical Hygiene and Laboratory Safety Documentation is accurate and that it effectively provides for the laboratory and chemical safety of employees and students in this laboratory.

Principal Investigator:

Printed Name Signature Date

By signing and dating here the Laboratory Safety and Chemical Hygiene officer certifies that the required review (and update if needed) of the Laboratory–Specific Chemical Hygiene and Lab Safety Documentation has been completed and that this document continues to be accurate and to effectively provide for the chemical safety of employees in this laboratory.

Reviewed by:  Review Date:

Reviewed by:  Review Date:

Reviewed by:  Review Date:

Reviewed by:  Review Date:

Reviewed by:  Review Date:

Reviewed by:  Review Date:

Reviewed by:  Review Date:

**Section 2: Contact Information**

**Emergency Information:**

PI/ Laboratory Supervisor:

Name:  Emergency Phone:

Department:

Laboratory: Building:  Room#:

Group Safety Representative GSR (assigned by the PI):

 GSR Emergency Phone:

**University of Wisconsin – Milwaukee Emergency and information phone Numbers**

Emergency - First Responders / Campus Police 414-229-9911

Campus Police - Non-emergency 414-229-4627

Fire 414-229-9911

Ambulance 414-229-9911

Hazardous Materials Response Team (Milwaukee Fire Dept) 414-229-9911

Off-Campus Laboratory Emergency Number 911

University Safety and Assurances 414-229-6339

UWM Chemical Hygiene Officer 414-430-7508

Norris Health Center 414-229-4716

Utility Problems 414-229-4742

Environmental Protection (Hazardous Waste disposal) hazwaste@uwm.edu

Building Chair:

Departmental Chair:

Department Manager:

Facilities Contact:

Role:  Name:  Phone:

Role:  Name:  Phone:

Role:  Name:  Phone:

**Section 3:**

**Laboratory Room Locations**

List all the rooms in which your labs operate:

|  |  |  |  |
| --- | --- | --- | --- |
| Building | Rooms | Room Assigned to the PI (Y/N) | Shared Facility (Y/N) |
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**Section 4: Procedures for Exposures and Hazards**

**4.1 Controlling Exposures and Hazards- Standard Operating Procedures (SOPs) and Safety Guidelines**

Refer to https://uwm.edu/safety-health/chem-hygiene/ for requirements for standard operating procedures.

|  |  |
| --- | --- |
| Chemical Name or Hazard Class:  | Notes:  |
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 [ ] This lab does not have or need Chemical SOPs.

**4.2 Controlling Exposures and Hazards – Chemical High Risk Procedures**

Chemical high-risk procedures are lab procedures that pose significant risk of serious Injury or major property damage if a malfunction were to occur (such as a utility outage, runaway reaction, container failure or chemical spill or release) and/or which may require any of the following:

1. Engineering controls (include but not limited to) that are more specialized than good room ventilation, chemical fume hoods, biological safety cabinets and / or local exhaust such as snorkel or canopy hoods, inert- atmosphere glove boxes, vented gas cabinets, oxygen monitors and /or toxic gas monitors.
2. Personal Protective Equipment (PPE) in addition to gloves, lab coats, eye/face protection and or chemical or thermal protective aprons or sleeves
3. Chemical specific first aid treatments or antidotes

Contact US&A at 414-229-6339 or send a questions to sop-approval@uwm.eduif you have any questions regarding chemical high risk procedure or if you need US&A permission (as indicated in list below).

|  |  |
| --- | --- |
| [ ]  | Our lab does not perform any chemical high-risk procedures based on the definition above and the examples listed below. Name of person making this decision: Signature and Date |

|  |  |  |  |
| --- | --- | --- | --- |
| [ ]  | Chemical High Risk Procedure | Date of PI approval | Date and form of written approval, Name of US&A approver |
| [ ]  | **Use of liquid nitrogen or other cryogens** in large quantities or in a manner that could displace oxygen. Specify Cryogen(s): Amount(s)Task (if applicable, Location, (bldg./room): Approximate room dimensions: For liquid nitrogen, “large quantities would be more than one freezer or one attached liquid cylinder per room. Filling a cryocart or cooler is a task that could displace oxygen. Re-evaluate if the quantities involved or the tasks move to a different room or if the procedure or ventilation change significantly.  |  |  |
| [ ]  | **Heating of concentrated perchloric acid** (60% or more)Amount/ concentration: Location, (bldg./room): Frequency of use:      Location of Perchloric Acid Hood: |  |  |
| [ ]  | Use, Creation or Synthesis of Nanomaterials List materials created, Size of particles Materials area created as a powder or in suspension:  |  |  |
| [ ]  | Use of chemicals for which an antidote or specific first-aid treatment is required. (Note: Use of HF does not require US&A approval and is listed in the next section.) List chemical and antidote/ first aidIndicate if the location of antidote:Indicate if US&A is aware.:  |  |  |
| [ ]  | Any chemical found to need an SOP as per the Highly Hazardous Chemical list. NOTE: US&A and Chemical Safety Committee review and approval are also required. sop-approval@uwm.edu |  |  |
| [ ]  | Chemical procedures involving pressure,vacuum, or heat when failure of the container would result in significant physical hazards, exposure to toxic materials or fire. List procedures |  |  |
| [ ]  | Scale up of a previously approved high-risk procedure.  |  |  |

**Section 5: Laboratory-Specific Policies**

Include below all laboratory-specific policies instituted by the Principal Investigator (i.e.: Lab coats must always be worn in the lab, No working alone, etc.) This space provides the opportunity to document the labs safety policies related to the use of hazardous chemicals and equipment in one location.

5.1 Working Alone Policy:

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| --- |
|  |

5.2 Unattended Experiments:

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| --- |
|  |

5.3 Eating and Drinking Locations: (*NOTE: All food and drink must be segregated for a lab area by a wall and a door, office areas or desks inside a lab that are not segregated by a wall and a door may not have food, drink or any equipment that supports food and drink use, preparation or containment.)*

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| --- |
|  |

5.4 Personal Protective Equipment (PPE): [*i.e.; use and storage of lab coats, safety eyewear, gloves, respirators, hearing protection cryo safety gear*)

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| --- |
|  |

5.5 Equipment Use and Training Guidelines:

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| --- |
|  |

5.6 Other (if any)

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|  |

5.7 Information for Chemical Waste Disposal

 A. Our Lab is a chemical waste generator and waste accumulation containers are stored in these locations:

|  |
| --- |
|  |

B. Our lab does not generate chemical waste that needs to be picked up by Environmental Protections.

|  |
| --- |
|  |

C. Our laboratory is off-site and chemical waste is handled as follows:

|  |
| --- |
|  |

5.8 Controlling Exposure and Hazards – Work Practices Requiring Prior Approval.

Some laboratory work may not meet the definition of high-risk procedures but may introduce additional risk because of when and/or how the work is conducted. The following work practices require prior approval of the PI or Lab Safety Coordinator. Detail scenarios that are applicable and how approval will be documented in the lab

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**Section 6**

**Laboratory-Specific Safety Orientation Checklist**

**(Copy this form [page 10 and 11] and have each member of your lab sign the form before beginning to work with chemicals) If your lab already has an equivalent document it may be used in place of this one.**

A checklist for all laboratory personnel listed in section 1 must be filled out and saved with the lab training records.

Name:  Date:

**As part of my orientation with the laboratory operation, I have read and am familiar with the contents and location of:**

[ ]  The UW-Milwaukee Campus CHP [ ]  SOPs for lab chemicals and Equipment

[ ]  The Laboratory Specific CHP [ ]  SDS for Lab Chemicals

[ ]  Laboratory Inventory List [ ]  DHS list

[ ]  I have been given the opportunity to read the OSHA Lab Standard (<http://tinyurl.com/ov9p27g>) and its Appendices.

**I have been instructed on:**

[ ] The chemical hazards in the lab [ ] Laboratory–Specific Policies

[ ] Equipment use and training guidelines [ ] Eyewash Maintenance guidelines

[ ] The relevant exposure limits to items used in the labs [PELs (OSHA), TLVs (ACGIH), etc.]

[ ] The signs and symptoms associated with exposures to hazardous chemicals used in the lab

[ ] The physical hazards of the laboratory (heat, electrical, mechanical, etc.)

[ ] Hazardous Waste Generator Training and our Hazardous Waste Accumulation Area.

[ ] Hazard information about chemicals and safe handling, storage and disposal practices for chemicals found in this Laboratory.

[ ]  I am aware that the Department of University Safety and Assurances may be contacted to evaluate chemical exposure if needed.

I have reviewed the laboratory laboratory’s emergency procedures including:

[ ]  Emergency phone numbers [ ]  Procedures for uncontrolled chemical releases

[ ]  Evacuation Routes [ ]  Safety equipment failure procedures

[ ]  Chemical Spill Kit [ ]  Laboratory exhaust failure procedures

I am aware of the location of emergency equipment:

[ ]  Fire Extinguisher [ ]  Eyewash Stations

[ ]  Safety Showers [ ]  First Aid Supplies

[ ]  Spill Kit

I have been made familiar with routine operations of the laboratory, including:

[ ]  Lab cleaning and maintenance rules [ ]  Waste handling procedures

[ ]  Proper use of PPE [ ]  Chemical procurement practices

[ ]  Chemical storage policies for the lab [ ]  The proper use of chemical fume hoods

[ ]  Liquid nitrogen use/ training guidelines [ ]  The proper use of biosafety cabinets and autoclaves

In addition, I have been made familiar with the following lab -specific health and safety features and safety resources:

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[ ]

I have completed orientation of all the above items

Name **Date:**

**Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**PI (or GSR) Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Section 7:**

**SDS and Inventory of Hazardous Chemicals Information**

Several regulations require that Safety Data Sheets (SDS) are maintained and readily accessible for all chemicals present in the lab. The Campus Chemical Hygiene Plan also requires that inventories be maintained for chemicals. Updated electronic copies of lab inventories are to be supplied to University Safety and Assurances on a yearly basis. Provide a description of where the SDS are stored and how inventory records are maintained:

**Location of SDS:**

**Format of SDS**

[ ]  **Electronic**

[ ]  **Hard Copy**

[ ]  **Other**

**Method of Maintaining Inventory:**

**Location of Inventory Records**

**Location of DHS Inventory Records:**

**Section 8.**

**Documentation of Laboratory-Specific Chemical Hygiene Plan Training:**

The individuals listed below have read and fully understand the Chemical Hygiene Plan for this lab. The individuals have received training from their supervisor or assigned Group Safety Representative (GSR) and are aware of all potential hazards and countermeasures related to working in a laboratory, how to practice good chemical hygiene, and where to find safety information to perform their duties in a safe manner.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Name | Signature | e-mail | Date | Trainer Initials |
| 1 |  |  | **@uwm.edu** |  |  |
| 2 |  |  | **@uwm.edu** |  |  |
| 3 |  |  | **@uwm.edu** |  |  |
| 4 |  |  | **@uwm.edu** |  |  |
| 5 |  |  | **@uwm.edu** |  |  |
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