

CHP DOCUMENT BINDER

The University of Michigan – Dearborn Chemical Hygiene Plan (CHP) establishes a written program in accordance with the requirements of the Michigan Occupational Safety and Health Act (MIOSHA) Part 431 Hazardous Work in Laboratories Standard R 325.70101. The Plan is available for all employees to view on the EHS website.

UM-Dearborn Chemical Hygiene Plan is located at:

<https://www.dropbox.com/s/hvam8vlvx3cu80n/2014%20Chemical%20Hygiene%20Plan%20UPDATES%202019.pdf?dl=0>

This CHP Document Binder is a required supplement and contains additional laboratory operation policies, procedures, and responsibilities beyond those in the CHP for the following:

Principal Investigator

(PI):

Lab Chemical Hygiene Officer (CHO, when other than the

PI):

List building and room information for the above referenced PI/research facility:

Building:

Building:

Room(s):

Rooms:

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The CHP Document Binder and contents will be **reviewed annually** and updated as necessary by the PI/Laboratory CHO. Document this annual review below.

| Reviewer | Date | Reviewer | Date |
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Section 1 – Program Information

The CHP contains standard laboratory emergency information and instructions. In addition to this, each laboratory must develop emergency plans for hazards requiring additional protective measures not included in the CHP. These additional safety procedures will be kept in this section.

Enter your department's safety program key personnel below. Also refer to Section 9.0 *Emergency Response* of the CHP for additional information.

In Case of Emergency: 911 (With a campus phone.)

Campus Dispatch: 313.593.5333 (With a Mobile Phone)

UM-Dearborn Environmental Health & Safety (EHS)

Phone

UM-Dearborn EHS Director

(313) 583-6679

UM-Dearborn Specialist

(313) 593-0921

U-M Ann Arbor Occupational Safety & Environmental Health (OSEH)

U-M Radiation Safety Officer

(734) 764-6200

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Laboratory Contact Information

PI: _____

Work Phone #: _____

Home/Cell Phone #: _____

Lab CHO:
(When other than PI) _____

Work Phone #: _____

Home/Cell Phone #: _____

Lab Manager: _____

Work Phone #: _____

Home/Cell Phone #: _____

Section 2 – Chemical Inventory

This section contains information on the Chemical List/Inventory, as described in CHP Section 5.4 *Chemical List*.

The Chemical List/Inventory can be accomplished by using either of the following options. Please select the system your laboratory uses:

- ☐ 1. Using Ann Arbor OSEH's web-based MI Safety Portal (MISP) chemical inventory tracking system (<https://ehs.umich.edu/research-clinical/mi-safety-portal/>). ***This is the preferred method.***
- ☐ 2. Use of other systems (e.g., Excel, Access, Cloud Based system), to create the Chemical List.

Note the location of your Chemical List if not in this CHP Document Binder: _____

If the non-MISP option (Option 2) is chosen, the Chemical List should have a clear title and heading, which includes the following information:

- Room number and building name
- Department
- Name of person taking inventory
- Date of last review

There is no specific required format for the information provided in the Chemical List. The List at a minimum should identify the following:

- Full chemical name
- Maximum quantity stored in laboratory

The Chemical List must be updated immediately when new chemicals arrive at the laboratory.

Section 3 - Safety Data Sheets (SDS)

Most Safety Data Sheets (SDS) can be quickly found using the Chemwatch's Gold FFX SDS system located on the EHS website (<https://umdearborn.edu/environmental-health-and-safety/safety-data-sheets-sds>). Each lab is responsible for obtaining and maintaining copies of SDS received with incoming shipments of hazardous chemicals and making sure they are readily accessible to laboratory employees.

For laboratories with an extensive inventory of chemicals (greater than twenty unique chemicals), it is advisable to create a Folder (Example: UM_Dearborn_*Lab Name or Building and Room Number*) on the Chemwatch Gold FFX website and populate the folder with the chemicals unique to that laboratory.

Place received SDS in this section. EHS can assist in obtaining SDS that may be difficult to find.

Section 4 – Training Records

Employee training is documented in four parts in this section of the binder.

Part 1: Each person working in a laboratory must attend EHS laboratory safety training noted in Chapter 7 of the CHP. Each employee will sign the acknowledgement below **OR** insert a current copy of the Comprehensive Laboratory Safety Training Quiz certificate in this section. The following link is for the EHS Training page:

<https://umdearborn.edu/environmental-health-and-safety/training>

Part 2: Each person working in a laboratory must review the **UM-Dearborn CHP and this CHP Document Binder**. They will also receive training on lab-specific procedures identified in the Part 2 acknowledgement and sign the following acknowledgement form.

Part 3: Any additional laboratory-specific training is recorded on the documentation sheets in this section.

Part 4: Training on specific SOP is documented on each SOP located in Section 5 of this document.

Part 1: Acknowledgement of EHS Lab Safety Training

[illegible]

Part 1: Acknowledgement of EHS Lab Safety Training

[illegible]

Part 2: Lab-Specific Training Acknowledgement – Sign below to acknowledge having reviewed or received training on the following information. Any questions relating to this material will be directed to the PI or other designated lab authority. (UM- Dearborn, CHP, page 56, section 7.3)

PI Responsibilities as Referenced in the UM- Dearborn CHP:

Section 1.3 Responsibilities (pg. 2); Section 1.6 Expectations to Plan Safe Research (pg. 6); Section 3.3 Personal Protective Equipment/ Hazard Assessment and selection of PPE (pg. 20 and 21); Section 4.0 Standard Operating Procedures (pg. 31); Section 7.3 Chemical Hazard Information and Training/ Work Directed by PI (pg. 56)

- U-M Chemical Hygiene Plan (CHP) – pg 2, section 1.1
- Laboratory specific CHP Document Binder – pg 3, section 1.3
- Lab-specific Standard Operating Procedures (SOP) – pg 3, section 1.3; pg 53, section 7.1
- Chemical List/Inventory – pg 44, section 5.4
- Location of Safety Data Sheets (SDS) – pg 56, section 7.5; EHS website
- Emergencies: Spills, Injury, Procedures – pg 60, section 9.0
- Waste Handling: Labeling, Packaging, Pick-ups – pg 49, section 6.0
- Fume hoods, biological safety cabinets or other local exhaust – pg 15, section 3.1
- Exposure Control Plan (If working with human blood or other potentially infectious materials) – Appendix 2
- Radiological safety practices (If working with radioactive materials) – pg 2, section 1.2; pg 7, section 1.9; pg 13, section 2.13
- Specific areas for food consumption – pg 27, section 3.4
- Working after hours – pg 29, section 3.4; pg 56, section 7.3
- Chemical procurement, distribution, and storage – pg 34, section 4.2; pg 36, sections 5.0 and 5.1; pg 45, section 5.5
- Compressed gas cylinders – pg 10, section 2.8
- Protective Apparel and Equipment (PPE) – pg 20, section 3.3
- Housekeeping, Maintenance, and Inspections – pg 29, section 3.4; pg 55, section 7.3
- Maintenance of scientific equipment – pg 29, section 3.4
- Environmental monitoring: PEL's and TLV's for chemicals – pg 30, section 3.5; pg 55, section 7.3
- Biosafety Manual (If working with recombinant DNA or infectious agents) – pg 2, section 1.2; pg 7, section 1.9; pg 55, section 7.3
- Medical surveillance (Respirator, Heat Stress, Noise, Animal Handler, etc.) – pg 63, section 10.0; for animal research, pg 65, section 10.5

LABORATORY-SPECIFIC TRAINING ACKNOWLEDGEMENT

| Name | UM-Dearborn ID No. | Signature | Date of Training |
|------|--------------------|-----------|------------------|
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Part 2: Lab-Specific Training Acknowledgement – Sign below to acknowledge having reviewed or received training on the following information. Any questions relating to this material will be directed to the PI or other designated lab authority. (UM- Dearborn, CHP, page 56, section 7.3)

LABORATORY-SPECIFIC TRAINING ACKNOWLEDGEMENT

| Name | UM-Dearborn ID No. | Signature | Date of Training |
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Part 3: Additional Lab Specific Training – Record any safety training beyond that covered in the previous parts and within the SOP section.

| Training Type | Employee Name | UM- Dearborn ID No. | Initials | Trainer | Date |
|--|-------------------|---------------------------|-----------|------------------------|------------------|
| <i>(e.g., Glove box usage)</i> | <i>John Doe</i> | <i>55551212</i> | <i>JD</i> | <i>Dr. Smith</i> | <i>1-1-2011</i> |
| <i>(e.g., operating a metal melting furnace)</i> | <i>Sandy Buck</i> | <i>56128957</i> | <i>SB</i> | <i>Professor Forge</i> | <i>7-13-2023</i> |
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Part 3: Additional Lab Specific Training – Record any safety training beyond that covered in the previous parts and within the SOP section.

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Section 5 – Standard Operating Procedures (SOP)

Each laboratory working with hazardous chemicals should include applicable SOP in this section. The CHP provides information and guidelines on best practices in laboratory health and safety. In addition, EHS & OSEH has developed SOP for many specific chemicals and classes of chemicals used in the laboratory. An SOP **must** be developed for hazardous chemicals or procedures **not** included in EHS's list of SOP.

Laboratory employees working with a particularly hazardous chemical or hazardous procedure must receive the applicable SOP training from their PI.

When developing SOP for working with hazardous chemicals in your laboratory, follow these steps:

- Download and print applicable SOP from the EHS website. These SOP may be modified if necessary to reflect laboratory-specific information. Employees will be trained on applicable SOP by their PI. Once training is complete, employees will certify training with a signature in *Training of Personnel* section of SOP.
- Develop an SOP for any hazardous chemical or procedure **not** included in the list of SOP. Use the SOP template to develop the SOP. Once SOP training has been given by the PI, employees will certify with signature in *Training of Personnel* section of SOP.
- Please note that there are particular hazardous chemicals (found in CHP Section 2.9 *Particularly Hazardous Substances*), restricted chemicals (found in CHP Section 4.2 *Restricted Chemicals Requiring Prior Approval*), and chemicals with a hazard ranking of 4 in any ChemWatch Gold FFX rating for Flammability, Toxicity, Body contact, Reactivity or Chronic. When developing an SOP for the above chemicals, use the SOP template.

Section 6 – Additional Documentation

The following items must be saved in this section:

- **Laboratory Self-Inspections:** Laboratory self-inspection records. Refer to Section 8.2 *Lab Self-Inspections* for more information. Make copies of the checklist to complete annually and save completed checklists in this binder section. The document is also available on the EHS web at the following location: [Laboratory Self-Inspections Checklist](#)
- **EHS Correspondence:** Copies of correspondence to the PI from EHS, safety-related memos within laboratory groups, requests for safety information, and other correspondence that may be important to safety management.
- **EHS Inspection Information:** EHS laboratory inspections and personal exposure monitoring information.
- **Incident/Near-Miss Information:** A copy of an EHS Laboratory Incident and Near-Miss Report. ***Please note, a Work Connections Injury or Illness Report Form must also be completed for all workplace injuries and illnesses.***