

**Chemical Hygiene Plan**

**-Version 2025-**

This template/document can be downloaded and modified by MSU Laboratories. The laboratory specific information that will be required is highlighted in yellow. Laboratory managers and supervisors will need to provide, in most situations, only information that is requested in the yellow highlighted areas to complete a Chemical Hygiene Plan, CHP, for their laboratory or laboratories. It should be noted that the written CHP can apply to one or several laboratory locations as long as each is specified within this document.

**Building Name**

**Room Number(s)**

**“Enter Current Date”**

**Completed by: “Enter Name”**

**Page Intentionally Blank**

Contents

[Purpose 1](#_Toc120529505)

[Scope 1](#_Toc120529506)

[Responsibilities 1](#_Toc120529507)

[Deans, Directors, and Department Heads 1](#_Toc120529508)

[Principal Investigators (PI) 1](#_Toc120529509)

[Employees and Lab Occupants 1](#_Toc120529510)

[Safety Coordinators (SC) 1](#_Toc120529511)

[Safety & Risk Management 2](#_Toc120529512)

[Standard Operating Procedures 2](#_Toc120529513)

[General Principles 2](#_Toc120529514)

[Guidelines for General Personal Hygiene in the Laboratory Setting 3](#_Toc120529515)

[Guidelines for Handling and Use of Flammable Chemicals 3](#_Toc120529516)

[Guidelines for Handling and Use of Corrosives/Caustics, and Contact-Hazard Chemicals 3](#_Toc120529517)

[Guidelines for the Handling and Use of Reactive Chemicals 3](#_Toc120529518)

[Guidelines for Compressed Gas 3](#_Toc120529519)

[Lab Criteria for Control Measures 4](#_Toc120529520)

[Laboratory-Specific SOPs 4](#_Toc120529521)

[Prior Approval Circumstances 5](#_Toc120529522)

[Personal Protective Equipment, Engineering Controls & Apparel 5](#_Toc120529523)

[Personal Protective Equipment 5](#_Toc120529524)

[Gloves 5](#_Toc120529525)

[Safety glasses/safety goggles/safety face shields 6](#_Toc120529526)

[Respirators 6](#_Toc120529527)

[Engineering Controls 7](#_Toc120529528)

[Apparel 7](#_Toc120529529)

[Clothing 7](#_Toc120529530)

[Shoes 7](#_Toc120529531)

[Laboratory Equipment 8](#_Toc120529532)

[Safety Equipment 8](#_Toc120529533)

[Eye wash equipment 8](#_Toc120529534)

[Safety Showers 8](#_Toc120529535)

[Laboratory Sinks 8](#_Toc120529536)

[First Aid Kits (Not Required) 8](#_Toc120529537)

[Chemical Spill Clean-up Kits (Not Required) 9](#_Toc120529538)

[Chemical Management 9](#_Toc120529539)

[Housekeeping 9](#_Toc120529540)

[Emergency Procedures for Accidents and Spills 9](#_Toc120529541)

[Chemical Waste 9](#_Toc120529542)

[Training 9](#_Toc120529543)

[Safety Rules & Regulations 10](#_Toc120529544)

[Medical Surveillance & Exposure Monitoring 10](#_Toc120529545)

[Appendix A: SOP Template 13](#_Toc120529546)

# Purpose

The purpose of this Chemical Hygiene Plan is to protect faculty, staff, students and visitors who may be working with or around hazardous chemicals in Building Name, Room(s). The program is designed to ensure that the hazards of chemicals in this laboratory setting are communicated to affected employees. Implementing these measures reduces the likelihood of a chemical incident that may affect faculty, staff, students or visitors to campus.

The program fulfills Occupational Safety and Health Administration (OSHA) regulatory requirements in 29 Code of Federal Regulations (CFR) 1910.1450, *Occupational Exposure to Hazardous Chemicals in Laboratories*, along with the Chemical Hazard Communication Program and the Montana State University (MSU) Environment, Health & Safety Policy.

# Scope

This chemical hygiene plan covers operations in Building Name, Room(s).

# Responsibilities

## Deans, Directors, and Department Heads

Responsible for:

1. Ensuring compliance with this program in their respective areas of responsibility;
2. Ensuring corrective actions are taken to remedy deficiencies identified in their respective areas of responsibility; and
3. Stopping and/or complying with SRM requests to cease any activity which presents an unreasonable health or safety risk to employees, students or visitors.

## Principal Investigators (PI)

[Enter name of PI or PI], as the “responsible official” of above listed lab(s) is responsible for:

1. Ensuring implementation of this CHP in their area;
2. Ensuring their employees and students are trained;
3. Updating the plan annually or as operations change; and
4. Resolving inspection findings.

## Employees and Lab Occupants

Responsible for:

1. Complying with this plan;
2. Completing training prior to work; and
3. Participating in medical surveillance if required by tasks.

## Safety Coordinators (SC)

Responsible for:

1. Coordinating with Deans, Directors, Department Heads, Building Supervisors, and SRM to assist in inspections and inspection finding resolutions; and

## Safety & Risk Management

Responsible for:

1. Developing and updating this Chemical Hygiene Plan template
2. Maintaining exposure records associated with chemical monitoring;
3. Providing training;
4. Performing periodic inspections to assist in deficiency identification and correction (including stopping activities which present unreasonable health or safety risk to employees, students, or visitors).

# Standard Operating Procedures

Uniformity of practice in the laboratory ensures safety and efficiency. These Standard Operating Procedures (SOPs) create a standard of practice that is to be followed by all employees working in the laboratories at this facility, to ensure the safety of its employees.

## General Principles

1. Know the safety policies and procedures that are applicable to the task.
2. Determine the potential physical and chemical hazards and appropriate safety precautions before beginning any new or modified procedure.
3. Know the location of all emergency equipment in the laboratory and the proper procedure for each device.
4. Be familiar with all laboratory emergency procedures.
5. Be alert to unsafe conditions and actions, and alert the responsible official.
6. Follow acceptable waste disposal procedures to avoid hazards to the environment.
7. Ensure that all chemicals are correctly and clearly labeled.
8. Post warnings when unusual hazards exist, such as flammable materials or biological hazards.
9. Avoid distracting or startling a coworker.
10. Use equipment only for its originally designed purpose.
11. Do not work alone in the laboratory if any hazardous procedures are being conducted.
12. Do not store, handle, or consume food in the laboratory.
13. Never use glassware or utensils that have been used in the laboratory to store, prepare, or consume food or beverages.
14. Report unusual odors as soon as they are detected to the Chemical Hygiene Officer.
15. Do not use odors as a means of determining that inhalation exposure has or has not been exceeded. Whenever there is a reason to suspect that a toxic chemical inhalation limit might be exceeded, whether or not a suspicious odor is identified, notify the Laboratory Supervisor or PI.
16. Use safety glasses at all times (except when pouring chemicals, where goggles are necessary) while in the laboratory.
17. Use careful handling and storage procedures to prevent damage to glassware.
18. Do not use damaged glassware items, discard or repair the item.
19. Broken glassware must not be handled directly by hand, but must be removed by mechanical means such as a brush and dustpan, tongs, or forceps.
20. Report all accidents immediately to the responsible official and to the Chemical Safety Officer in SRM. An accident report must be completed for every accident, major chemical spill or fire.

## Guidelines for General Personal Hygiene in the Laboratory Setting

1. Wash promptly whenever a chemical has contacted skin.

a. Use soap and water; do not wash with solvents.

b. Wash thoroughly before leaving laboratory.

2. Do not eat, drink, or apply cosmetics in the laboratory. No tobacco allowed in labs.

3. Food and drinks shall not be stored in laboratory refrigerators.

4. Use suction bulbs for pipetting; do not use mouth suction.

5. Do not sniff chemicals. Avoid inhaling toxic vapors and gasses; use fume hoods when directed to by product safety data sheets (SDS).

## Guidelines for Handling and Use of Flammable Chemicals

1. Chemicals with flash points below 200 degrees Fahrenheit are considered flammable chemicals.

2. These chemicals must be stored in approved flammable solvents cabinets.

3. Flammable chemical usage should be conducted under vented hoods and away from sources of ignition.

4. When transferring flammable liquids between conductive containers, provide bonding (through metal to metal contact or bonding wire) to prevent ignition via static discharge. If you require assistance regarding grounding through metal to metal contact or use of bonding wire please contact the MSU Hazardous Materials Manager or Chemical Safety Officer in Safety and Risk Management.

## Guidelines for Handling and Use of Corrosives/Caustics, and Contact-Hazard Chemicals

1. Chemicals that can cause destruction of or irreversible alterations in living tissue by chemical action at the site of contact; or having a pH less than or equal to (≤) 2 or greater than or equal to (≥) 12.5 will be considered corrosives/caustic and contact hazard chemicals.

2. Handle these chemicals with proper safety equipment, including safety goggles or shields, gloves resistant to permeation, and a lab coat or protective apron.

3. Do not store corrosives or contact hazard chemicals near incompatible substances. Acids and bases should be stored separately.

## Guidelines for the Handling and Use of Reactive Chemicals

1. Chemicals that are capable of detonation, explosive reaction, or are either oxidizers or organic peroxides will be considered reactive chemicals.

2. Isolate reactive chemicals in storage areas. Reactive chemicals should always be stored according to SDS recommendations.

3. Design reaction experiments with safety barriers or shields (such as lowering fume hood sash), as well as with controls for heating and stirring outside the shielded area.

4. Use and store the minimum amounts of chemicals required by the experiment.

5. Perform experiments involving the use or heating of perchloric acid in perchloric acid hoods.

6. Ensure lab has appropriate fire extinguishers for the type of chemical being used.

## Guidelines for Compressed Gas

Detailed safety guidelines for compressed gas use are available from the Compressed Gas Association. At a minimum:

1. Secure all cylinders by a chain, strap, or other approved method;
2. Ensure cylinders are properly labeled;
3. Keep cylinder caps in place if not in uses;
4. Use proper regulator for gas and cylinder;
5. Use proper fittings;
6. Store oxygen separate from flammables; and
7. Move cylinders with proper hand truck or approved cart.

## Lab Criteria for Control Measures

As part of the CHP, criteria have been developed for determining and implementing control measures to reduce employee exposure to hazardous chemicals in the laboratory. The criteria may be based on the degree of toxicity of the substances to be used, the exposure potential of the chemical procedures to be performed, the capacity of the engineering controls, administrative practices or protective equipment to control employee exposure effectively. These measures are specified in the manufacturer provided SDS for all applicable chemicals. Additional requirements to be included in the CHP where appropriate to protect employees working with particularly hazardous chemicals such as select carcinogens, reproductive toxins and chemicals exhibiting a high degree of acute toxicity include:

**Standard control measures in use in our facility include, but are not limited to:** “Please delete any not found within your lab and add any additional measures necessary”

• No eating or drinking will be allowed in the laboratory or chemical/hazardous material storage areas of the building.

• All work will be conducted in a manner to minimize potential exposure to hazardous materials which will include: Monitoring of building engineering controls to ensure that fume hoods, exhaust systems and emergency controls are in working order.

**Engineering control measures in use in our facility include, but are not limited to:** “Please delete any not found within your lab”

• General ventilation

• Fume hoods

• Approved flammable chemical storage cabinets

• Chemical secondary containment

**Work practice control measures in use in our facility include, but are not limited to** “Please delete any not found within your lab and add any additional measures necessary”

• Separation of incompatible chemicals

• Performing hazardous work within fume hood(s) to minimize potential exposures to hazardous chemicals

• Required use of hazard appropriate personal protective equipment (PPE)

• Required use of proper chemical secondary containment

• Prohibition of mouth pipetting

• Prohibition of eating or drinking in all lab areas

## Laboratory-Specific SOPs

Lab equipment or Lab Operations requiring specific SOPs in this Laboratory include:

1. Insert SOP Title Here if applicable

2. Insert SOP Title Here if applicable

## Prior Approval Circumstances

Certain laboratory operations, procedures, or activities require prior approval from the lab responsible official before they may be performed. At this facility, specific operations, procedures and activities requiring prior approval of the responsible official; whom is the PI, Lab Manager or other designated responsible personnel are:

“list the specific laboratory operations, procedures, and activities”

# Personal Protective Equipment, Engineering Controls & Apparel

## Personal Protective Equipment

### Gloves

Glove selection is based upon chemical hazard type and glove material compatibility considerations with regard to chemical(s) of interest. Gloves are one of the most common forms of protective clothing. When properly selected, gloves can offer protection from exposure to a wide variety of hazardous and infectious substances.

Contact the lab responsible official, PI, Laboratory Supervisor or the MSU Chemical Safety Officer for questions regarding glove selection and proper use.

1. Thermally Resistant Gloves

Thermally resistant gloves are used when handling exceptionally hot or cold materials. Although asbestos gloves are no longer used because of the carcinogenic hazard they present, substitute materials exist. Before each use, gloves should be inspected for punctures and tears and replaced, if necessary.

1. Chemically Resistant Gloves

Chemically resistant gloves should be worn whenever potential contact exists between the skin and corrosive or toxic materials. Neoprene, polyvinyl chloride, nitrile, and butyl or natural rubbers are the most common glove materials.

Before each use, all gloves should be inspected for discoloration, punctures, and tears. Before removal of any gloves, the user should wash the gloves appropriately. Gloves should be removed before leaving the laboratory and prior to touching doorknobs, telephones, pens or pencils, notebooks, etc. As gloves are eventually permeated by chemicals, they can only be used for limited time periods.

Non-disposable gloves should be inspected carefully before use. Gloves should be replaced periodically, depending on the frequency of use and the permeability to the hazardous materials handled. When possible, disposable gloves should be used.

### Safety glasses/safety goggles/safety face shields

Eye and face protection equipment selection is based upon chemical hazard type and material compatibility considerations with regard to chemical(s) of interest. Staff must wear eye protection at all times while in the lab. Eye protection should conform to the Standard for Occupational and Educational Eye and Face Protection, Z87.1, established by the American National Standards Institute (ANSI).

1. Safety Glasses

Safety glasses protect the eyes against flying objects and direct splashes. Safety glasses are the minimum acceptable eye protection, and should be made of impact-resistant hardened glass or plastic. Many safety glasses have side shields molded into or attached onto the earpieces. Side shields on safety glasses provide some peripheral protection, but cannot provide adequate shielding from all flying debris and chemical splashes. Other eye protection should be worn when significant hazard exists.

1. Safety Goggles

Safety goggles provide protection for the eye from flying objects or splashing chemicals. To prevent lenses from fogging, impact-protection goggles have screened areas on the sides to provide ventilation. However, these do not provide full shielding from chemical splashes. When full protection from harmful chemical splash is needed, splash goggles or "acid goggles" should be worn.

1. Safety Shields

Portable shields should be non-combustible. They can be made of laminated safety glass or polymeric materials such as polycarbonate or methacrylate. When used on the laboratory bench, safety shields should surround the hazard, with minimum openings to allow maneuvering of apparatus inside. Like safety glasses and goggles, safety shields should be cleaned and inspected frequently. Cracked or pitted safety shields should be replaced. The most common example of a safety shield is the window of a laboratory fume hood. Portable safety shields can also be used on the laboratory counter top

### Respirators

Under ordinary conditions, respirators should not be necessary in the laboratory. Respirators may not be used under any circumstances unless approved by MSU Safety and Risk Management and the wearer is in MSU's medical surveillance program. This program includes a medical evaluation and clearance, fit testing and training. If a respirator is thought to be needed, please call SRM and request a hazard assessment to determine if one is required. Note that dust masks are not chemical respirators and offer no protection for chemical hazards.

ARM/OSHA policy dictates that engineering and work practice controls be used to reduce employee exposure below the Permissible Exposure Limit, or PEL. Respiratory protection is to be used only as an interim measure or when engineering or work practice controls are infeasible. Use of respiratory equipment must comply with the requirements of ARM 24.30.102(5)1910.134, which specifies factors such as selection, fit, use, and maintenance.

## Engineering Controls

Fume hoods and other protective equipment must function properly at all times. Specific measures are taken to ensure proper and adequate performance of such equipment as detailed below.

Lab fume hood face velocities are measured by a contractor at programmed intervals with non-attainment hoods being documented and identified for repair. Tests are conducted annually and a sticker should be on the hood noting date and airflow.

Ensuring adequate hood performance is a complex issue and includes many factors including:

1. Operation of the building's ventilation system.

2. Procedures and work practices including:

a. Position and movement of the user,

b. Contaminant generation characteristics,

c. Contaminant generation location,

d. Location of obstructions, and

e. Sash position and configuration.

3. Laboratory designs, including:

a. potential for interfering cross drafts,

b. location of all hoods in the lab,

c. proximity of air supply diffusers, and

d. proximity to doors and traffic aisles.

With particularly hazardous chemicals or wastes, operations such as unpacking, diluting, packing, or reacting hazardous materials should be performed in the fume hood. Weighing operations involving particularly hazardous substances should be performed in a glovebox.

## Apparel

### Clothing

Laboratory coats or aprons should always be worn when working with chemicals. These garments should be replaced if they become perforated or torn. A laboratory coat can provide protection against contact with dirt and minor chemical splashes or spills. It also provides protection for the user's clothing. The laboratory coat does not; significantly resist penetration by organic liquids or concentrated acids and bases. Laboratory coats should be cotton, or fire resistant material if required.

### Shoes

Work shoes of a specialized nature are not required. However, open-toed or cloth shoes are unacceptable in the laboratory. While leather shoes offer protection in case of spills, leather readily absorbs organic liquids.

# Laboratory Equipment

Laboratory equipment must be UL Listed all built in safety features must be in place for use. Cords must be in good condition, free of tears in insulation. Lab occupants must be familiar with the equipment and read any relevant instructional materials/manuals prior to use.

# Safety Equipment

Safety and emergency equipment includes fire extinguishers, eyewash equipment, safety showers, laboratory hoods, laboratory sinks, first-aid kits and spill kits.

## Eye wash equipment

Eyewash equipment shall be capable of providing a controlled flow of flushing fluid to both eyes simultaneously at a velocity low enough to be non-injurious to the user. Please flush eyes for a period as indicated within the SDS for that specific chemical (Section 4). Eyewash equipment shall be capable of delivering flushing fluid to the eyes not less than 1.5 liters per minute (0.4 gpm) for 15 minutes

The eyewash should be located as close to the safety shower as possible, so that the eyes may be rinsed while the body is being showered. Plumbed eyewash units must be activated weekly to flush the line and to verify proper operation. Laboratories with plumbed eyewash units should assign someone to provide weekly flowing of the eyewash unit(s).

## Safety Showers

Safety showers are for immediate first-aid treatment of personnel contaminated with hazardous materials, and for extinguishing clothing fires. Every laboratory worker should be familiar with the location and proper operation of safety showers. Emergency showers shall be activated weekly for a period long enough to verify operation and ensure that flushing fluid is available. Laboratory occupants should examine the weekly test card/document to ensure the equipment has been tested on a weekly basis. The shower should be equipped with a quick-opening valve that can remain open without being held but requires manual closing since the minimum recommended time of operation is 15 minutes.

## Laboratory Sinks

The laboratory sink is essential for safety in the laboratory. Employees must wash their hands with soap and water after removal of gloves, before leaving the laboratory, or when skin comes in contact with hazardous substances. The sink is also used for washing equipment that comes in contact with hazardous materials. Any problems with water supply or drainage of laboratory sinks should be reported to MSU Facilities Services.

## First Aid Kits (Not Required)

The OSHA Standard 29 CFR 1910.151(b), Medical services and First Aid, states that a first aid kit is not required except; *"In the absence of an infirmary, clinic, or hospital in near proximity to the workplace..."* An OSHA Letter of Interpretation from March 23, 2007 defines *"in near proximity"* as emergency care within 3-4 minutes for workplaces with the potential for serious accidents, such as amputation, and up to 15 minutes for workplaces without the potential.

## Chemical Spill Clean-up Kits (Not Required)

The OSHA Standard 29 CFR 1910.1450, Occupational Exposure to hazardous chemicals in laboratories, a.k.a. “The Laboratory Standard” does not require that laboratories utilizing or storing hazardous chemicals maintain a hazardous chemical spill cleanup kit. The OSHA Standard 29 CFR 1910.1200(h)(3)(iii), Hazard Communication, requires employee training in emergency procedures in the event of a chemical spill. Montana State University’s Environmental Health and Safety (EHS) Policy requires that OSHA GHS/Hazard Communication training be completed by all university employees working with chemicals and in laboratories.

# Chemical Management

In addition to guidelines in the Standard Operating Procedures section, each laboratory will maintain a chemical inventory using the MSU’s Chemical Inventory Database (SciSure) system linked from the SRM Web Page. This system allows lab occupants to track chemicals, and to access Safety Data Sheets.

# Housekeeping

Consistent and formal housekeeping along with laboratory inspections shall be conducted by the PI and/or all other individuals working within the laboratory on a regular basis.

# Emergency Procedures for Accidents and Spills

Small incidental spills may be cleaned up by lab occupants who are trained and familiar with the material spilled. For larger spills and accidents, contact 911 and/or SRM as appropriate.

# Chemical Waste

Laboratory chemical waste/hazardous waste must be stored in approved, labeled containers with appropriate secondary containment. Hazardous waste pick-up can be requested at the SRM web site (<https://www.montana.edu/srm/forms/waste/>) as needed.

# Training

MSU provides all employees affected by ARM 24.30.102(5)1910.1450 with information pertaining to safely working with hazardous chemicals and how to protect themselves. MSU also meets OSHA 1910.1200 standards ensuring employees retain effective information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new chemical hazard the employees have not previously been trained about is introduced into their work area. Information and training may be designed to cover categories of hazards (e.g., flammability, carcinogenicity) or specific chemicals. Completing the OSHA/GHS Hazard Communication Training. This section outlines the training and information.

• Training is to be conducted under the following circumstances:

• Prior to initial assignment for all employees new to the lab.

• OSHA/GHS Hazard Communication Standard training.

• At annual intervals thereafter.

• Whenever a new process, reaction or chemical of interest is introduced into the laboratory.

Local training is to be provided by the lab responsible official (lab manager, PI, or other qualified individual) and general overview training is provided by SRM, either in the form of classroom training or on-line training. All training activities must be documented and kept on file, preferably in the laboratory safety binder with this CHP. OSHA Hazard Communication training shall be taken and validated via certification prior to initial assignment for all employees working with chemicals on campus. OSHA revised its Hazard Communication Standard (HCS) to align with the United Nations’ Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

At a minimum, the training discussion topics must include the following at time of initial assignment and annually thereafter:

• The existence of the CHP and requirements of the laboratory standard.

• The location and availability of the CHP.

• Permissible exposure limits for regulated substances and recommended exposure limits for other hazardous chemicals where no OSHA standard applies.

• Signs and symptoms associated with exposures to hazardous chemicals.

• Location and availability of known reference materials, including MSDS, safe handling, storage, and disposal of hazardous chemicals in the workplace.

Upon initial assignment and/or new exposure situations at this facility, it is the responsibility of the Lab Manager, PI, or other designated individual to ensure:

* Employees are apprised of the specific hazardous chemicals present in their work area.
* Employees are informed of the specific measures of protection from hazards within their work area.
* Employees are trained on the applicable details of the written CHP.

The above is typically met by taking chemical hazard communication and hazardous waste generator training, by reading and acknowledging the Chemical Hygiene Plan, by reading relevant Safety Data Sheets and SOPs, and by having a specific safety briefing by the PI or Lab Manager

# Safety Rules & Regulations

MSU adheres to safety rules and regulations outlined in OSHA, the Montana Code Annotated, the MSU EHS Policy and several other regulatory agencies. Please contact Safety and Risk Management for additional details. Specific programs are outlined on the SRM and ORC web pages.

# Medical Surveillance & Exposure Monitoring

Medical consultation and examinations are the employees right in certain circumstances. MSU is committed to providing for such medical care for all employees affected by this CHP.

All individuals who work with hazardous chemicals should have the opportunity to receive medical surveillance, including follow-up exams, under the following circumstances:

a. When an individual develops signs or symptoms associated with a hazardous chemical they may have been exposed to, they should receive an appropriate medical exam.

b. When exposure monitoring reveals exposure level to be above the ARM/OSHA action level or PEL for which there are exposure monitoring and medical surveillance requirements, medical surveillance should be established as prescribed by the standard.

c. When an event such as a spill, leak, or explosion occurs resulting in the likelihood of a hazardous exposure, medical consultation should be provided to determine the need for a medical examination.

d. When working with specifically-listed chemicals that require medical surveillance by law.

All medical exams and consultations must be performed by or under the direct supervision of a licensed healthcare provider and will be provided without cost to the exposed individual, and at a reasonable time and place. The laboratory should provide the following information to the healthcare provider:

a. The identity of the hazardous chemical(s) to which the individual may have been exposed;

b. Description of the conditions under which the exposure occurred including quantitative exposure, if available; and

c. Description of the signs and symptoms of exposure that the individual is experiencing if any, and;

d. Copies of SDSs for the hazardous chemical(s). MSU’s online SDS database provider can be utilized for this purpose and accessed through the SRM website:
[https://www.montana.edu/srm/chemicalsafety/MSU’s Chemical Inventory Database (SciSure)chemtracker.html](https://www.montana.edu/srm/chemicalsafety/scishieldchemtracker.html)

SRM must obtain a written opinion from the healthcare provider performing the examination or consultation, which must include the following:

a. Any recommendation for further medical follow-up.

b. The results of the medical examination and any associated tests.

c. Any medical conditions which may be revealed in the course of examination which may place the individual at increased risk as a result of exposure to a hazardous chemical found in the laboratory; and

d. Statement that the exposed individual has been informed by the healthcare provider of the results of the consultation or examination and any medical condition that may require further examination or treatment. The written opinion should not reveal specific findings of diagnoses unrelated to occupational exposure.

Any employee who is exposed routinely above the ARM/OSHA action level or, in the absence of an action level, above the PEL for an ARM/OSHA regulated substance for which there exists exposure monitoring or medical surveillance requirements, has the opportunity for medical attention and evaluation. Employees are required to immediately notify the supervisor if they reasonably feel that a chemical exposure has occurred, or is likely to occur. In consultation with the MSU Occupational Health Manager the employee will seek immediate medical screening and evaluation. Prior to any return to work, the work environment will be evaluated by the Occupational Health Manager and the Hazardous Materials Officer to determine how exposure to hazardous substances might have occurred and will take immediate action to mitigate exposure potential in the work environment.

MSU establishes and maintains for each employee an accurate record of exposure monitoring results and any medical consultation and examinations, including tests or physician medical opinions, in accordance with the ARM/OSHA rule governing access to employee exposure and medical records, ARM 24.30.102(5)1910.1020 according to the following method: Exposure monitoring results and corresponding medical consultation information associated with potential hazardous material exposures are maintained by MSU Safety and Risk Management. Records are kept in SRM for the length of the employee's employment at MSU, plus thirty years.

Any known or suspected workplace exposure incidents, or any illness of questionable origin, must be reported immediately to the supervisor. Seek medical attention at the Bozeman Deaconess Hospital Emergency Room (406) 585-1000 24 hours a day.

As soon as possible following an exposure incident, and within 24hrs, the employee and supervisor must complete a First Report of Injury or Occupational Disease form, to begin the worker’s compensation process. This form is available at: <https://firstreportinjury.mus.edu/>.

A follow-up investigation may be initiated by SRM staff to determine the circumstances of the event, and examine potential options to prevent future occurrences.

Use of carcinogens or suspect human carcinogens require occupational medical surveillance. If you are using a chemical on the list below, you must contact Safety and Risk Management to discuss how the chemical is used and receive information on what medical surveillance may be involved. Please view the [Medical Screening and Surveillance Requirements in OSHA Standards](https://www.osha.gov/sites/default/files/publications/osha3162.pdf) and [OSHA 29 Code of Federal Regulations 1910 Subpart Z.](https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910SubpartZ)

|  |  |
| --- | --- |
| * Acrylonitrile
 |  |
| * Arsenic (Inorganic)
 |  |
| * Benzene
 |  |
| * 1,3 Butadiene
 |  |
| * Cadmium
 |  |
| * Chromium (VI), Hexavalent Chromium
 |  |
| * 1,2-dibromo-3-choropropane
 |  |
| * Ethylene oxide
 |  |
| * Formaldehyde
 |  |
| * Lead
 |  |
| * Methylene chloride
 |  |
| * Methylenedianiline
 |  |
| * Vinyl chloride
 |  |

|  |  |  |
| --- | --- | --- |
| **Name (Print)** | **Date CHP Read** | **Signature** |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |

**Appendix A: SOP Template**



