1. *Use this form to perform a documented PHA and SOP for tasks that necessitate the use of Personal Protective Equipment (PPE)*
2. *Sign and submit to EH&S for approval*
3. *Provide training and document on a training roster (see attached)*
4. *Maintain this documentation until the project or task is no longer being performed.*

**Section A: General Information**

|  |  |
| --- | --- |
| **Chemical Name or Process:** | Click here to enter chemical name or process you will be performing. |
| **Purpose:** | Click here to enter a brief description of the process and the chemical(s) with which you will be working. |
| **Potential Hazards/Toxicity:** | Click here to enter all chemicals and/or hazardous equipment you will be using. Use (M)SDS, see Section 2 (or relevant section) for hazard info. For research: see note above and use other sources as appropriate for hazardous materials and methods. |
| **Engineering Controls:** | Click here to enter text. Fume hood, guards, or other controls |

**Section B: Personal Protective Equipment (PPE)**

|  |  |
| --- | --- |
| **Hand Protection:** | Click here to enter gloves necessary after using resources below. |

*NOTE: Consult with your preferred glove manufacturer, the (M)SDS and other sources to ensure that the gloves you plan on using are compatible with chemical(s) being used.*

*Refer to glove selection chart from the links below:*

[*http://www.ansellpro.com/download/Ansell\_8thEditionChemicalResistanceGuide.pdf*](http://www.ansellpro.com/download/Ansell_8thEditionChemicalResistanceGuide.pdf)

[*https://www.allsafetyproducts.com/hand-protection-gloves.html*](https://www.allsafetyproducts.com/hand-protection-gloves.html)

|  |  |
| --- | --- |
| **Eye Protection:** | Do you need safety glasses or goggles?  |

*Safety glasses or chemical splash goggles, as directed by advisor/P.I. Goggles are required whenever there is a potential for a hazardous liquid splash, as per the Chemical Hygiene Plan.*

|  |  |
| --- | --- |
| **Skin and Body Protection:** | Lab personnel working with the chemicals need to wear full-length pants or its equivalent, closed-toe footwear with no skin being exposed, and a lab coat. |
| **Hygiene Measures:** | Wash hands after working with the hazardous substances and when leaving the lab/shop. |
| **Respirators may be required under any of the following circumstances:** | * As a last line of defense (i.e., after engineering and administrative controls have been exhausted).
* When Permissible Exposure Limit (PEL) will or may be exceeded, or the airborne concentration is unknown.
* Regulations require the use of a respirator.
* There is potential for harmful exposure due to an atmospheric contaminant (in the absence of PEL)
* As PPE in the event of a chemical spill clean-up process
 |

*Prior to obtaining a respirator, an exposure assessment of the process or procedure must be conducted. If respiratory protection is required, then lab personnel must obtain respiratory protection training, a medical evaluation, and a respirator fit test through EH&S. This is a regulatory requirement.*

**Section C: First Aid Procedures for Chemical Exposures**

|  |  |
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| **If inhaled:** | Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, seek medical attention. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention. |
| **In case of skin contact:** | Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention, as necessary. |
| **In case of eye contact:** | Immediately flush eyes with plenty of water for at least 15 minutes. Check for and remove any contact lenses. Get medical attention. |
| **If swallowed:** | Enter text here from (M)SDS -Section 16: Labeling Information |

**Section D: Special Handling and Storage Requirements**

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| See (M)SDS Section 7 for storage and handling instructions for chemicals used. Note any deviations from regular lab use here, i.e store in fume hood, flammable cabinet, air sensitive, etc. |

**Section E: Spill and Accident Procedure**

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| **Spill:**  | Assess the extent of danger. Help contaminated or injured persons. Evacuate the spill area. Avoid breathing vapors. If safe, confine the spill to a small area using a spill kit or absorbent material. Keep others from entering contaminated area (e.g., use caution tape, barriers, etc.). |
| **Small (<1 L):** | If you have training, you may assist in the clean-up effort. Use appropriate personal protective equipment and clean-up material. Double bag spill waste in plastic bags, label and arrange hazardous waste pick-up. |
| **Large (>1 L):** | Evacuate spill area. Dial **911** and EH&S at (707)664-5555 for assistance.Remain available in a safe, nearby location for emergency personnel. |
| **Chemical Spill on Body or Clothes:** | Remove clothing and rinse body thoroughly in emergency shower for at least 15 minutes. Seek medical attention. *Notify supervisor, advisor or P.I. immediately.* |
| **Chemical Splash into Eyes:** | Immediately rinse eyeball and inner surface of eyelid with water from the emergency eyewash station for a minimum of 15 minutes by forcibly holding the eye open. Seek medical attention. *Notify supervisor, advisor or P.I. immediately.* |
| **Needle stick/puncture** **exposure:** | (as applicable to chemical handling procedure) – Wash the affected area with antiseptic soap and warm water for 15 minutes. For mucous membrane exposure, flush the affected area for 15 minutes using an eyewash station. Seek medical attention. *Note: All needle stick/puncture exposures must be reported to supervisor, advisor or P.I. and EH&S office immediately.* |
| **Medical Emergency Dial 911 and EH&S at (707)664-5555****Life Threatening Emergency, After Hours, Weekends and Holidays** **– Dial 911** *Note: All serious injuries must be reported to Supervisor/PI within 8 hours. Note: Any and all loss of consciousness requires a 911 call***Non-Life-Threatening Emergency** – * Students: Seek medical attention at the campus Health Center **during hours of operation**
* Emergency Medical services in the community are available at any time at hospital emergency rooms and some emergency care facilities.

***All injuries must be reported to PI/Supervisor immediately and follow campus injury reporting.*** |

**Section F: Decontamination/Waste Disposal Procedure**

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| Click here to enter text if different than outlined below |
| **General hazardous waste disposal guidelines:** |
| **Label Waste** | Affix a hazardous waste tag on all waste containers as soon as the first drop of waste is added to the container. Waste labels can be found on the EH&S website. |
| **Store Waste**  | * Store hazardous waste in closed containers, in secondary containment and in a designated location
* Double-bag dry waste
* Waste must be under the control of the person generating & disposing of it
 |
| **Dispose of Waste** | * Dispose of regularly generated chemical waste as per guidelines on EH&S website
* Prepare for transport for pick-up. Use secondary containment.
 |
| **Empty Containers** | * Dispose as hazardous waste if container once held extremely hazardous waste (irrespective of the container size) A list can be found at: [CCR List of Extremely Hazardous Waste](http://afd.calpoly.edu/ehs/docs/extremely_hazardous_wastes.pdf)
* All other containers are legally empty once a concerted effort is made to remove, pour out, scrape out, or otherwise completely empty the vessel. These may be disposed of as recycling or common trash as appropriate.
 |

*Call EH&S at* *(707)664-5555 for questions.*

**Section G: Safety Data Sheet (SDS) Location**

|  |
| --- |
| Online SDS can be accessed at: [MSDS Online](https://msdsmanagement.msdsonline.com/8511b604-100d-449a-9a6b-366eff19da04/ebinder/?nas=True) |

**Section H: Lab Specific Protocol**

|  |
| --- |
| Click here to enter lab specific Protocol as needed |

***NOTE:*** *Any deviation from this SOP requires approval from PI.*

**Approvals:**

|  |  |
| --- | --- |
| **P.I. or Supervisor Name:** | Click here to enter name. |
| **Signature:** |  |
| **Date:** | Click here to enter a date. |

|  |  |
| --- | --- |
| **EH&S Name:** | Click here to enter name. |
| **Signature:** |  |
| **Date:** | Click here to enter a date. |

**Documentation of Training** (signature of all users is required)

* The Principal Investigator must ensure that his/her laboratory personnel have attended appropriate laboratory safety training or refresher training within the last one year.
* Training must be administered by PI or Lab Manager to all personnel in lab prior to start

of work with particularly hazardous substance or newly synthetic chemical listed in the

SOP.

* Refresher training will need to be provided when there is a change to the work

procedure, an accident occurs, or repeat non-compliance.

I have read and understand the content, requirements, and responsibilities of this SOP:

|  |  |  |
| --- | --- | --- |
| **Name** | **Signature** | **Date** |
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