

# AREA HAZARD ANALYSIS WORK FORM

Title: Bldg 130 Chem Lab

Location (Bldg & Rm) 130 - 201

**Instructions:**

An Area Hazard Analysis (AHA) is a process that is used to evaluate a work area to 1) determine the hazards that may be present 2) determine appropriate controls for these hazards and 3) provide a mechanism to communicate these hazards to someone entering the area. The AHA covers the facility and equipment within the facility. It does not cover specific jobs/tasks that may be performed in the area. Job/task specific hazards and controls are covered by the JHAM process.

The AHA should be done by the area manager, in cooperation with the Building Manager. An AHA should be done once for all working areas and whenever there is a change in to the facility or regulations or the introduction of new equipment or new hazard.

Complete instructions and supporting information is available at [https://www-internal.slac.stanford.edu/esh/SLACsafety/jham/aha\\_instruction.htm](https://www-internal.slac.stanford.edu/esh/SLACsafety/jham/aha_instruction.htm). Enter information into boxes which will expand to accommodate whatever length of text is entered. Once this AHA is complete, the area responsible person signs.

Processes / Equipment in Area	Hazards	Recommended Controls & Actions
Lab Instrumentation (centrifuges, hot plates, furnace, UV lamp, vacuum pumps, glove boxes, ultrasonic cleaners, low speed diamond saw, etc.)	Personal exposure via: <ul style="list-style-type: none"> <li>• Point of operation – moving and/or cutting parts.</li> <li>• Heat transfer on items that may get hot during operation.</li> <li>• UV hazards from lamp sources.</li> </ul>	<ul style="list-style-type: none"> <li>• Insure lab instrumentation is in good condition before use. Report any damaged equipment to lab manager.</li> <li>• Label hot plates when in use.</li> <li>• Make sure centrifuges are properly balanced and inspect rotors before use.</li> <li>• Observe safety locks to prevent UV radiation exposure.</li> <li>• Observe posted signs.</li> <li>• PPE: UV protective eyewear when using UV lamps.</li> <li>• Protective gloves for high or low temperature work.</li> </ul>
Compressed gasses	Personal exposure via: <ul style="list-style-type: none"> <li>• Compressed nitrogen.</li> <li>• Other compressed gasses.</li> </ul>	<ul style="list-style-type: none"> <li>• Compressed gas bottles to be stored upright and secured properly at all times. Cylinders in use must always be fitted with a regulator. Must be capped if not in use.</li> <li>• All compressed air and gas equipment to be kept in good condition. Replace worn gas lines, loose fittings, etc.</li> </ul>
Hazardous Materials and	Personal exposure via:	<ul style="list-style-type: none"> <li>• Training required for working with hazardous</li> </ul>

Chemicals	<ul style="list-style-type: none"> <li>• Solvents – acetone, alcohol, etc.</li> <li>• Acids and Bases</li> <li>• Other hazardous chemicals</li> <li>• Possible burn, skin/ eye injury</li> <li>• Toxic/ carcinogen exposure</li> </ul>	<p>materials: HAZCOM and Introduction to Waste Management.</p> <ul style="list-style-type: none"> <li>• Be aware of the hazards associated with each chemical and practice safe chemical handling, storage and disposal.</li> <li>• Read and observe all MSDS's.</li> <li>• Waste to be disposed of through SLAC Hazardous Waste Group.</li> <li>• Containers and samples to be labeled as required.</li> <li>• All stock quantities to be stored in appropriate cabinets and lockers.</li> <li>• PPE: Protective eyewear, gloves, lab coats, close-toe shoes, as required for level hazard.</li> <li>• Be aware of the location of eye washes and safety showers.</li> </ul>
Sharps and Breakable Items	<p>Personal exposure via:</p> <ul style="list-style-type: none"> <li>• Sharp surfaces exposure (punctures, cuts)</li> <li>• Potential explosive hazards</li> </ul>	<ul style="list-style-type: none"> <li>• Check condition of breakable and sharp items before use. Report any damaged items to lab manager.</li> <li>• Do not heat closed containers.</li> <li>• Pay attention to task and surroundings.</li> <li>• PPE: Protective eyewear and gloves as required for level hazard.</li> <li>• Use appropriate labeled containers for sharps/glass disposal.</li> </ul>
Cryogenics	<ul style="list-style-type: none"> <li>• Personal exposure to liquid nitrogen (burns, eye injury, oxygen deficiency)</li> </ul>	<ul style="list-style-type: none"> <li>• PPE: Use safety glasses, gloves, long pant, and close-toe shoes</li> </ul>
Signs	<ul style="list-style-type: none"> <li>• Other Hazards</li> </ul>	<ul style="list-style-type: none"> <li>• Respect ALL warning/caution signs.</li> <li>• Contact lab manager for review of shop policy and procedures.</li> </ul>
Spills	<ul style="list-style-type: none"> <li>• Personal and environmental hazard resulting from</li> </ul>	<ul style="list-style-type: none"> <li>• Call 9-911 for emergency or major spills.</li> <li>• Contact waste management for minor spills.</li> </ul>

	unintentional release of chemicals or other hazardous materials.	<ul style="list-style-type: none"> <li>• Spill kits are available for minor spills.</li> <li>• Use appropriate PPE.</li> </ul>
Other	<ul style="list-style-type: none"> <li>• Please report other hazards not on this list to the lab manager.</li> </ul>	

<b>Completed by</b>	<b>Print Name</b>	<b>Date</b>
<b>Area Responsible:</b>	Behzad Bozorg-Chami	30-July-2008
<b>Participants:</b>		