



**Document Control No.:**

**Document Title: Chemical Hygiene Plan 29 CFR 1910.1450**

**APPENDIX 1: Hazard Assessment Form**

<b>Hazard Assessment Form</b>		<b>PART 1</b>
<i>This form must be completed for each occupational position in each department and for each research project to include routine and non-routine work activities. The completion of this form fulfills regulatory requirements for the Chemical Hygiene and Personal Protective Equipment programs.</i>		
GENERAL INFORMATION		
Building:	Room Number/Area:	
Department/Unit:		
Process/Procedure (Explain):		
Routine Procedure	<input type="checkbox"/> Yes <input type="checkbox"/> No	Non-routine Procedure <input type="checkbox"/> Yes <input type="checkbox"/> No
POTENTIAL HAZARDS		
<input type="checkbox"/> Chemical (Vapor/Dust)	<input type="checkbox"/> Biological	<input type="checkbox"/> Fire/Explosion
<input type="checkbox"/> Non-Ionizing Radiation	<input type="checkbox"/> Noise	<input type="checkbox"/> Thermal
<input type="checkbox"/> Ionizing Radiation	<input type="checkbox"/> Ergonomic	<input type="checkbox"/> Other
If "Other" is selected, please explain.		
Monitoring Results:		
POTENTIAL ACCIDENT PROBABILITY		
Frequency:	<input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High	Severity: <input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High
REQUIRED PERSONAL PROTECTIVE EQUIPMENT (PPE)		
<i>Insert PPE Codes for selected area(s) of impact. See Part 2 of the Hazard Assessment Form for PPE Codes.</i>		
Area Potentially Impacted By Hazard	PPE Code / Number	
<input type="checkbox"/> Eyes		
<input type="checkbox"/> Face		
<input type="checkbox"/> Head		
<input type="checkbox"/> Foot		
<input type="checkbox"/> Hand		
<input type="checkbox"/> Body		
<input type="checkbox"/> Hearing		
<input type="checkbox"/> Respiratory Protection		
OTHER REQUIREMENTS		
<i>If Yes, please attach additional pages.</i>		
Special Technical Skills Training: <input type="checkbox"/> Yes <input type="checkbox"/> No		
Special Project Safety Plan: <input type="checkbox"/> Yes <input type="checkbox"/> No		
Special Tools/ Equipment: <input type="checkbox"/> Yes <input type="checkbox"/> No		
Standard Operating Procedures Published: <input type="checkbox"/> Yes <input type="checkbox"/> No		
Other: <input type="checkbox"/> Yes <input type="checkbox"/> No		

Certified by Principal Investigator: \_\_\_\_\_

Date: \_\_\_\_\_

**Hazard Assessment Form**

PART 2

**Personal Protective Equipment (PPE) Codes**

Enter the PPE code (and number when itemized) from the list below into the Hazard Assessment Form.

PPE Type	PPE Code	PPE Code Description	
Hand Protection	CRG	Chemical Resistant Gloves	
		1. Butyl Rubber	5. Polyvinyl Alcohol Plastic
		2. Natural Rubber	6. Polyvinyl Chloride Plastic
		3. Neoprene Rubber	7. Viton
		4. Nitrile Rubber	8. 4H / Silver Shield
	CLG	Cloth Gloves (Utility)	
	LEG	Leather Gloves	
	TRG	Thermal Resistant Gloves	
RUG	Rubber Gloves		
Face / Eye Protection	CSG	Chemical Splash Goggles	
	SGS	Safety Glasses with Side Shields	
	FAS	Face Shield	
	WEM	Welding Mask	
	WEG	Welding Goggles	
Torso Protection	CRC	Chemical Resistant Clothing	
	CRA	Chemical Resistant Apron	
	LSS	Long Sleeved Shirt	
	LSC	Long Sleeved Coveralls	
	WEJ	Welder's Jacket	
Respiratory Protection	APR	Air Purifying Respirator	
		1. Dust, Mist, and Fumes	4. Combination – Organic Vapor Acid
		2. Organic Vapor	5. Gas and High Efficiency Particulate Filter
		3. Organic Vapor / Acid Gas	
Miscellaneous Protection	SAH	Safety Harness and Life Line	
	HAH	Hard Hat	
	SAS	Safety Shoes	
	HEP	Hearing Protection	
		1. Earplugs	2. Ear Muffs



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# Hazard Assessment Form

PART 3

## Personal Protective Equipment (PPE) for Workers

Please complete the following hazard assessment for your work area. This assessment is required by OSHA for any tasks that require personal protective equipment.

Please check all activities that apply to your area. If a task is not listed or if you want to add a new task that requires personal protective equipment, please fill out the blank spaces at the bottom of the page.

When the form has been completed, submit a copy of the form to Environmental Health and Safety for review and OSHA record keeping purposes. A finalized copy will be returned for posting in your lab. Thank you very much for your consideration.

Date: \_\_\_\_\_

Department: \_\_\_\_\_

Building: \_\_\_\_\_ Room Number(s): \_\_\_\_\_

Principal Investigator: \_\_\_\_\_

Assessment By: \_\_\_\_\_

Email: \_\_\_\_\_

**Check All That Apply.**

**CHEMICAL HAZARDS**

TASK		POTENTIAL HAZARD	RECOMMENDED PPE
<input type="checkbox"/>	Working with small volumes of corrosive liquids (< 1 liter).	Skin or eye damage	<ul style="list-style-type: none"> <li>• Safety glasses or goggles</li> <li>• Light chemically resistant gloves</li> <li>• Lab coat, closed shoe, pants</li> </ul>
<input type="checkbox"/>	Working with large volumes of corrosive liquids (> 1 liter), acutely toxic corrosives, or work which creates a splash hazard	Large surface area skin or eye damage, poisoning, or great potential for eye and skin damage	<ul style="list-style-type: none"> <li>• Safety goggles and face shield</li> <li>• Heavy chemically resistant gloves</li> <li>• Lab coat, closed shoe, pants, and chemically resistant apron</li> </ul>
<input type="checkbox"/>	Working with small volumes of organic solvents (< 1 liter).	Skin or eye damage Slight poisoning potential through skin contact	<ul style="list-style-type: none"> <li>• Safety glasses or goggles</li> <li>• Light chemically resistant gloves</li> <li>• Lab coat, closed shoe, pants</li> </ul>
<input type="checkbox"/>	Working with large volumes of organic solvents (> 1 liter), very dangerous solvents, or work which creates a splash hazard	Major skin or eye damage, or potential poisoning through skin contact	<ul style="list-style-type: none"> <li>• Safety goggles and face shield</li> <li>• Heavy chemically resistant gloves</li> <li>• Lab coat, closed shoe, pants, and chemically resistant apron</li> </ul>
<input type="checkbox"/>	Working with toxic or hazardous chemicals (solid or liquid).	Potential skin or eye damage, potential poisoning through skin contact.	<ul style="list-style-type: none"> <li>• Safety glasses (goggles for large quantities)</li> <li>• light chemically resistant gloves</li> <li>• Lab coat, closed shoe, pants</li> </ul>
<input type="checkbox"/>	Working with acutely toxic or hazardous chemicals (solid or liquid).	Great potential skin or eye damage, great potential poisoning through skin contact.	<ul style="list-style-type: none"> <li>• Safety goggles</li> <li>• appropriate heavy chemically resistant gloves</li> <li>• Lab coat, closed shoe, pants</li> <li>• Coveralls and booties if necessary</li> </ul>
<input type="checkbox"/>	Working with explosives.	Skin or eye damage from flying projectiles or chemicals.	<ul style="list-style-type: none"> <li>• Blast shield, safety goggles or full face shield</li> <li>• Chemically resistant gloves</li> <li>• Lab coat, closed shoe, pants</li> </ul>
<input type="checkbox"/>	Working with chemical dusts.	Skin or eye damage, respiratory damage.	<ul style="list-style-type: none"> <li>• Safety glasses or goggles</li> <li>• Appropriate gloves</li> <li>• Lab coat, closed shoes or boots if necessary, pants</li> <li>• Approved respiratory protection (call EH&amp;S)</li> </ul>
<input type="checkbox"/>	Chemical spill cleanup.	Skin or eye damage, respiratory damage.	<ul style="list-style-type: none"> <li>• Safety glasses or goggles</li> <li>• Appropriate gloves</li> <li>• Lab coat, closed shoes or boots if necessary, pants</li> <li>• Approved respiratory protection (call EH&amp;S)</li> </ul>

**Check All That Apply.**

**RADIOLOGICAL HAZARDS**

TASK		POTENTIAL HAZARD	RECOMMENDED PPE
<input type="checkbox"/>	Working with solid radioactive materials or waste.	Potential cell damage, potential spread of radioactive materials.	<ul style="list-style-type: none"> <li>• Safety glasses</li> <li>• Appropriate gloves</li> <li>• Lab coat, closed shoe, pants</li> </ul>
<input type="checkbox"/>	Working with radioactive chemicals (corrosives, flammables, liquids, powders, etc.).	Potential cell damage or spread of contamination plus hazards for the appropriate chemical hazards above.	<ul style="list-style-type: none"> <li>• Safety glasses (or goggles for splash hazard)</li> <li>• Light chemically resistant gloves</li> <li>• Lab coat, closed shoe, pants</li> <li>• Use PPE for applicable chemical hazards above.</li> </ul>
<input type="checkbox"/>	Working with ultraviolet radiation.	Conjunctivitis, corneal damage, erythema.	<ul style="list-style-type: none"> <li>• UV face shield</li> <li>• Goggles</li> <li>• Lab coat, closed shoe, pants</li> </ul>
<input type="checkbox"/>	Working with Laser radiation.	Retinal eye damage, skin damage.	<ul style="list-style-type: none"> <li>• Appropriate shaded goggles with optical density based on individual beam parameters</li> <li>• Lab coat, closed shoe, pants.</li> <li>• No jewelry or reflective items allowed.</li> </ul>
<input type="checkbox"/>	Working with infrared emitting equipment (i.e. glass blowing).	Cataracts, flash burns to cornea.	<ul style="list-style-type: none"> <li>• Appropriate shaded goggles</li> <li>• Lab coat, closed shoe, pants</li> </ul>

**Check All That Apply.**

<b>BIOLOGICAL HAZARDS</b>			
<b>TASK</b>		<b>POTENTIAL HAZARD</b>	<b>RECOMMENDED PPE</b>
<input type="checkbox"/>	Working with radioactive human blood, body fluids, or blood borne pathogens (BBP).	Potential cell damage, potential spread of radioactive contaminants, or potential BBP exposure.	<ul style="list-style-type: none"> <li>• Safety glasses (goggles for splash hazard)</li> <li>• Light latex gloves</li> <li>• Lab coat, closed shoe, pants</li> </ul>
<input type="checkbox"/>	Working with small volumes of human blood, body fluids, tissues, or blood borne pathogens.	Potential contraction of infectious disease, potential spread of infectious disease.	<ul style="list-style-type: none"> <li>• Safety glasses</li> <li>• Light latex gloves,</li> <li>• Lab coat, closed shoe, pants</li> </ul>
<input type="checkbox"/>	Working with large volumes of human blood, body fluids, tissues, or blood borne pathogens.	Increased potential for infectious disease or increased potential for spread of infectious disease.	<ul style="list-style-type: none"> <li>• Safety goggles with face shield</li> <li>• Latex gloves</li> <li>• Lab coat, closed shoe, pants.</li> <li>• Coveralls and boot covers if necessary</li> </ul>
<input type="checkbox"/>	Working with live or poisonous animals and plants.	Animal bites, stings, or infectious disease. Skin or eye damage from contact with animal or plant poisons.	<ul style="list-style-type: none"> <li>• Safety glasses or goggles</li> <li>• Protective gloves</li> <li>• Lab coat, closed shoe, pants</li> </ul>
<input type="checkbox"/>	Working with animal specimens (preserved or unpreserved).	Potential exposure to infectious disease, animal toxins, or preservatives.	<ul style="list-style-type: none"> <li>• Safety glasses or goggles</li> <li>• Protective gloves</li> <li>• Lab coat, closed shoe, pants</li> </ul>



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**PHYSICAL HAZARDS**

TASK		POTENTIAL HAZARD	RECOMMENDED PPE
<input type="checkbox"/>	Working with cryogenic liquids.	Major skin, tissue, or eye damage.	<ul style="list-style-type: none"> <li>• Safety glasses or goggles for large volumes</li> <li>• Heavy insulated gloves</li> <li>• Lab coat, closed shoe, pants</li> </ul>
<input type="checkbox"/>	Working with very cold equipment or dry ice.	Frostbite, hypothermia.	<ul style="list-style-type: none"> <li>• Safety glasses</li> <li>• Insulated gloves</li> <li>• Warm clothing, lab coat, closed shoe, pants</li> </ul>
<input type="checkbox"/>	Working with hot liquids, equipment, open flames (autoclave, Bunsen burner, water bath, oil bath).	Burns resulting in skin or eye damage.	<ul style="list-style-type: none"> <li>• Safety glasses or goggles for large volumes</li> <li>• Insulated gloves</li> <li>• Lab coat, closed shoe, pants</li> </ul>
<input type="checkbox"/>	Metal arc or tungsten arc (TIG) welding.	Conjunctivitis, corneal damage, erythema, skin burns.	<ul style="list-style-type: none"> <li>• Appropriate shaded goggles and face shield</li> <li>• Appropriate gloves</li> <li>• Lab coat, closed shoe, pants</li> </ul>
<input type="checkbox"/>	Instrument repair.	Eye damage from foreign objects.	<ul style="list-style-type: none"> <li>• Safety glasses</li> <li>• No loose clothing or jewelry</li> </ul>
<input type="checkbox"/>	Metal or woodworking.	Eye damage from foreign objects, lacerations from burrs or splinters.	<ul style="list-style-type: none"> <li>• Safety glasses, gloves,</li> <li>• No loose clothing or jewelry</li> </ul>
<input type="checkbox"/>	Working in nuisance dusts.	Skin or eye damage, respiratory damage.	<ul style="list-style-type: none"> <li>• Safety goggles</li> <li>• Appropriate gloves</li> <li>• Lab coat, closed shoes or boots if necessary, pants</li> <li>• NIOSH approved dust mask or other respiratory protection (call EH&amp;S)</li> </ul>
<input type="checkbox"/>	Glassware washing.	Lacerations.	<ul style="list-style-type: none"> <li>• Heavy rubber gloves</li> <li>• Lab coat, closed shoes, pants</li> </ul>
<input type="checkbox"/>	Working with loud equipment, noises, sounds, or alarms, etc.	Potential ear damage and hearing loss.	<ul style="list-style-type: none"> <li>• Ear plugs or headphones as necessary.</li> </ul>