

Department:			Contact:			Phone:		
Shop Location:			Assessment performed by:			Date:		
Hazard Category	Subcategory	Working Qtys (not qtys in inventory)	Response		Potential Hazard(s)	Controls		
			Yes	No		Engineering	Administrative	PPE
Machinery 01	Cutting devices (e.g., drill press; milling machine; tables saw; band saw; lathes; or portable tools)	N/A			Eye injury; lacerations	Machine guarding	OSHA Machine Guarding	<ul style="list-style-type: none"> <li>Safety glasses</li> <li>Long pants</li> <li>Closed-toe shoes</li> </ul>
Machinery 02	Rotating equipment	N/A			Entanglement	Machine guarding	OSHA Machine Guarding	<ul style="list-style-type: none"> <li>Contain long hair</li> <li>No loose sleeves</li> <li><b>NO GLOVES</b></li> </ul>
Machinery 03	High noise levels	N/A			Potential ear injury and hearing loss	Noise eliminator, dampener, or baffle	OSHA Hearing Conservation	<ul style="list-style-type: none"> <li>Earplugs or ear muffs depending on noise reduction rating and comfort.</li> </ul>
Machinery 04	Dust; flying particles	N/A			Eye injury; lacerations; respiratory injury; skin abrasions; or hearing loss	Protective shield; dust collector	Generate required SOP(s); periodic air sampling	<ul style="list-style-type: none"> <li>Splash goggles or safety glasses</li> <li>Face shield with safety glasses</li> <li>Leather gloves</li> <li>Protective jacket, apron, or coat (e.g., leather, tyvek, or mylar)</li> <li>Long pants; closed-toe shoes</li> <li>Earplugs or ear muffs</li> <li>N95 dust mask (or better)</li> </ul>
Machinery 05	List task or activity:	N/A			List hazard(s):	List as appropriate:	Generate required SOP(s)	List appropriate PPE:
Chemical 01	Corrosives: liquids and/or solids	< 4 liters, < 1 lb			<ul style="list-style-type: none"> <li>Eye/skin damage</li> <li>Splash</li> </ul>	<ul style="list-style-type: none"> <li>Chemical fume hood</li> <li>Ventilated cabinet</li> <li>Local ventilated area</li> </ul>	<ul style="list-style-type: none"> <li>General SOP for corrosives</li> <li>Chemical-specific SOP</li> </ul>	<ul style="list-style-type: none"> <li>Splash goggles or safety glasses</li> <li>Chemical-resistant gloves</li> <li>100% cotton lab coat</li> <li>Chemical-resistant apron</li> </ul>
Chemical 02	Corrosives: liquids and/or solids	> 4 liters, > 1 lb			<ul style="list-style-type: none"> <li>Poisoning</li> <li>Greater potential for eye/skin damage</li> <li>Splash</li> </ul>	<ul style="list-style-type: none"> <li>Chemical fume hood</li> <li>Ventilated cabinet</li> <li>Local ventilated area</li> </ul>	<ul style="list-style-type: none"> <li>General SOP for corrosives</li> <li>Chemical-specific SOP</li> </ul>	<ul style="list-style-type: none"> <li>Splash goggles</li> <li>Chemical-resistant gloves</li> <li>100% cotton lab coat</li> <li>Chemical-resistant apron</li> </ul>
Chemical 03	Flammable/combustible solvents; organic fixatives	< 4 liters			<ul style="list-style-type: none"> <li>Eye/skin damage</li> <li>Potential poisoning through skin contact</li> <li>Fire</li> </ul>	<ul style="list-style-type: none"> <li>Chemical fume hood</li> <li>Ventilated cabinet</li> <li>Local ventilated area</li> </ul>	<ul style="list-style-type: none"> <li>General SOP for flammables/combustibles</li> <li>Chemical-specific SOP</li> </ul>	<ul style="list-style-type: none"> <li>Safety glasses or splash goggles</li> <li>Chemical-resistant gloves</li> <li>Flame-resistant lab coat or Nomex</li> <li>Flame-resistant apron</li> </ul>
Chemical 04	Flammable/combustible solvents; organic fixatives	> 4 liters			<ul style="list-style-type: none"> <li>Major eye/skin damage</li> <li>Potential poisoning through skin contact</li> <li>Fire</li> </ul>	<ul style="list-style-type: none"> <li>Chemical fume hood</li> <li>Ventilated cabinet</li> <li>Local ventilated area</li> </ul>	<ul style="list-style-type: none"> <li>General SOP for flammables/combustibles</li> <li>Chemical-specific SOP</li> </ul>	<ul style="list-style-type: none"> <li>Safety glasses or splash goggles</li> <li>Chemical-resistant gloves</li> <li>Nomex</li> </ul>
Chemical 05	Toxic substances	Any amount			<ul style="list-style-type: none"> <li>Exposure through inhalation, ingestion, injection, or absorption</li> </ul>	<ul style="list-style-type: none"> <li>Chemical fume hood</li> <li>Ventilated cabinet</li> <li>Local ventilated area</li> </ul>	<ul style="list-style-type: none"> <li>General SOP for toxic materials</li> <li>Chemical-specific SOP</li> </ul>	<ul style="list-style-type: none"> <li>Safety glasses or splash goggles</li> <li>Chemical-resistant gloves</li> <li>100% cotton lab coat</li> </ul>
Chemical 06	Chemical spill	< 4 liters			<ul style="list-style-type: none"> <li>Skin or eye damage</li> <li>Respiratory damage</li> </ul>	List engineering control(s):	List SOPs or documents:	<ul style="list-style-type: none"> <li>Safety glasses or splash goggles</li> <li>Chemical-resistant gloves</li> <li>Chemical-resistant apron or suit</li> <li>Boot/shoe covers for high risk activities</li> </ul>
Chemical 07	List task or activity:	List amount:			List hazard(s):	List as appropriate:	Generate required SOP(s)	<ul style="list-style-type: none"> <li>Respirator as needed</li> </ul> List appropriate PPE:

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			Yes	No		Engineering	Administrative	PPE
Laser 01	Work with Class 3B laser open beam that can produce a direct exposure or specular reflection	5-500 mW or pulsed 10 J/cm <sup>2</sup>			Eye and Skin Damage	Beam dumps for stray beam Barriers, shrouds, beam stops, etc. Interlocks	Access restriction Area controls with NHZ calculation Administrative and/or procedural controls Education and training	Protective eyewear appropriate to wavelength with correct optical density
Laser 02	Work with Class 4 laser open beam that could result in direct exposure or specular or diffuse reflection	>500mW or pulsed >10J/cm			Eye and Skin Damage	Beam dumps for stray beam Barriers, shrouds, beam stops, etc. Interlocks	Access restriction Area controls with NHZ calculation Administrative and/or procedural controls Education and training	Protective eyewear appropriate to wavelength with correct optical density
Laser 03	Enclosed Beam - Exposure during servicing a Class 3B or 4 laser system enclosed within a Class 1 device housing.	N/A			Eye and Skin Damage	Protective housings should be interlocked	Lock out tag out during service	During Service - Protective eyewear appropriate to wavelength with correct optical density
Laser 04	View a Class 3R laser beam with magnifying optics (including eyeglasses)	N/A			Eye and Skin Damage	List as appropriate:	Laser Satey Manual	Appropriately shaded goggles/glasses with optical density based on individual beam parameters
Laser 05	Non-Beam: Repair/service of power source in laser system	N/A			Electrocution and fire	Earthing, good housekeeping	Lock out tag out during service	Electrical isolation mat, flame-resistant lab coat or coveralls
Laser 06	Non-Beam: Working with dyes, solvents and chemicals	N/A			Fire, Carcinogens, Chemical exposure	Containment of chemicals and proper segregation	MSDS access for chemicals	Lab coats for chemicals, Gloves and appropriate eye protection
Laser 07	List task or activity:	N/A			List hazard(s):	List as appropriate:	Generate required SOP(s)	List appropriate PPE:
Physical 01	Cryogenic temperatures	N/A			<ul style="list-style-type: none"> <li>Burns</li> <li>Frost bite</li> <li>Splash</li> </ul>	Ventilated area	<ul style="list-style-type: none"> <li>General SOP for cryogenic materials</li> <li>Cryogen-specific SOP</li> </ul>	<ul style="list-style-type: none"> <li>Safety glasses or splash goggles</li> <li>Thermal gloves</li> <li>100% cotton lab coat (cryogenic)</li> </ul>
Physical 02	High pressure or vacuum	N/A			<ul style="list-style-type: none"> <li>Flying debris</li> <li>Severe skin/eye damage</li> <li>Gas/fluid embolism</li> </ul>	Chemical fume hood with blast shield	General SOP for high pressure or vacuum systems	<ul style="list-style-type: none"> <li>Safety glasses or splash goggles</li> <li>Face shield</li> <li>Chemical-resistant gloves</li> <li>100% cotton lab coat</li> </ul>
Physical 03	Highly energized sources (> 600 V)	N/A			Burns; electrocution ARC flash	List as appropriate:	Electrical Safety; LOTO; ARC flash hazard assesment	<ul style="list-style-type: none"> <li>Safety glasses or splash goggles</li> <li>Non-conductive apparel including gloves</li> <li>Hard-soled shoes</li> <li>Non-conductive hard hat</li> </ul>
Physical 04	Welding, brazing, cutting, glassblowing	N/A			Burns; fire Fumes, heavy metal poisoning	Non-combustible work surface; ventilated area; fire extinguisher Fume extraction	Hot work program Periodic air sampling	<ul style="list-style-type: none"> <li>Safety glasses, goggles, or welding mask for welding operations</li> <li>Welding fume-rated respirator</li> <li>Insulated gloves</li> <li>Welding apron; jacket; pants; long-sleeved shirt; or cape as appropriate</li> <li>Long pants; closed-toe, leather shoes.</li> <li><b><u>NO nylon, acetate, or polyester clothing</u></b></li> <li>Flame-resistant lab coat or Nomex</li> </ul>
Physical 05	Open flame (e.g. bunsen burner, alcohol lab burner, etc.)	N/A			Burns; fire	Non-combustible work surface; ventilated area; fire extinguisher	Generate required SOP(s) for work with open flames	<ul style="list-style-type: none"> <li>Safety glasses or splash goggles</li> <li>Face shield</li> <li>Chemical-resistant gloves</li> <li>Flame-resistant lab coat</li> </ul>

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Physical 06	Sharp tools (awls; razor blades; etc.)	N/A			needlestick; puncture; laceration	work bench	Generate required SOP(s)	<ul style="list-style-type: none"> <li>• Puncture-resistant gloves</li> <li>• Cut-resistant gloves</li> </ul>
Physical 07	Elevated areas (4 feet or more)	N/A			Falling objects; head injuries; falls	List as appropriate:  Handrails, railings	OSHA Elevated Platforms	<ul style="list-style-type: none"> <li>• Hard hat</li> <li>• Harness</li> </ul>
Physical 08	Exposed beams or machine parts	N/A			Head injuries	List as appropriate:  Padding	Generate required SOP(s)  Warning markers	<ul style="list-style-type: none"> <li>• Hard hat</li> </ul>
Physical 09	Heavy tools, objects, or equipment	N/A			Leg/foot injuries	List as appropriate:	Generate required SOP(s)	<ul style="list-style-type: none"> <li>• Shin guards, metatarsal protection, work boots or steel-toe boots.</li> </ul>
Physical 10	Vibrating or increased motion tools	N/A			Decreased grip; white finger	List as appropriate:  Low vibration tools	Generate required SOP(s)	<ul style="list-style-type: none"> <li>• Anti-vibration gloves</li> </ul>
Physical 11	Confined spaces	N/A			Bodily injury; fall above six feet; oxygen deficiency or hazardous atmosphere	Retrieval winch  Self-retracting lifeline	OSHA Confined Space Entry; rescue plan	<ul style="list-style-type: none"> <li>• Safety glasses or splash goggles</li> <li>• Hard hat</li> <li>• Chemical-resistant suit</li> <li>• Steel-toe shoes or boots</li> <li>• Body harness and shock absorbing lanyard; self-retracting lifeline</li> <li>• SCBA</li> </ul>
Physical 12	Slippery or wet areas	N/A			Fall below six feet	List as appropriate:	Generate required SOP(s)	<ul style="list-style-type: none"> <li>• Slip-resistant safety shoes</li> </ul>
Physical 13	List task or activity:	N/A			List hazard(s):	List as appropriate:	Generate required SOP(s)	List appropriate PPE:



# Shop PPE Training Record

Department:

Shop Location:

Contact:

Phone:

Employee Name	Training received (e.g., on-line, in-house, vendor-provided)	Date	PPE received	Date