

# ATAP Hazards, Equipment, and Authorizations Review Form

1. *Location Information:*

**Building:** \_\_\_\_\_ **Room:** \_\_\_\_\_ **Date Reviewed:** \_\_\_\_\_

**Reviewers** \_\_\_\_\_

2. *Project Information*

**ATAP Program** \_\_\_\_\_

**WPC Project** \_\_\_\_\_ **WPC Project Lead** \_\_\_\_\_

**WPC Activity** \_\_\_\_\_ **WPC Activity Lead** \_\_\_\_\_

**Area Safety Lead** \_\_\_\_\_

**Other Assigned Personnel** \_\_\_\_\_

**Description/ Notes:**

\_\_\_\_\_  
\_\_\_\_\_

3. *Summary:*

**This experiment/operation requires:**

<input type="checkbox"/> Authorization through WPC Activities.
<input type="checkbox"/> Other <b>Formal authorizations</b> as listed below.
<input type="checkbox"/> Inclusion of chemicals in Chemical Management System <input type="checkbox"/> Inclusion of hazards in Hazards Management System. <input type="checkbox"/> Inclusion of lasers in Laser Inventory.
<input type="checkbox"/> Inform Area Safety Lead for inclusion of hazards and controls on door placards.

#### 4. Hazard Information

Hazard	Formal Authorization	Comments
<p><b>__ Biohazards</b> – pathogenic/opportunistic organisms, recombinant DNA, cell cultures, human blood or body fluids; human or animal subjects</p>	<p>Contact EHS for further guidance.</p>	
<p><b>__ Chemicals</b>  <b>– Health Hazard</b> toxic, carcinogenic, reproductive toxin, sensitizer, corrosive  <b>__ Physical Hazard</b> reactive (e.g. alkali metals, peroxide formers, explosives), pyrophoric  <b>__ Oil Spill</b> any equipment containing <math>\geq 42</math> gallons of oil</p>	<p><b>__ Hazard Evaluation</b> required for reactive; pyrophoric; chemicals possessing lethal or incapacitating toxicity, whenever glovebox is required for safety, or whenever failure of other primary engineering controls would result in a significant exposure or safety hazard  <b>__ Risk Assessment</b> for quantities that could pose a human health or environmental risk if released.  <b>__ SPCC Plan</b> inclusion in LBNL SPCC Plan for equipment containing <math>\geq 55</math> gal. oil</p>	<p>May require Hazard Evaluation by Industrial Hygiene.</p> <p>Notify EHS Environmental Services of any equipment containing <math>&gt; 42</math> gallons of oil; secondary containment is required.</p> <p>Increase in quantity or hazard may impact categorization of building and emergency planning.</p>
<p><b>__ Compressed Gas</b>  <b>__ Inert</b> pressure and/or oxygen displacement  <b>__ Physical Hazard</b> flammable, pyrophoric, reactive  <b>__ Health Hazard</b> toxic, carcinogenic, reproductive toxin, sensitizer, corrosive</p>	<p><b>__ Engineering Safety Note</b> and/or <b>__ Hazard Evaluation</b> required for:</p> <ul style="list-style-type: none"> <li>• Any pressure system with <math>&gt;75,000</math> lb-feet stored energy, (not including cylinders);</li> <li>• Flammable <math>&gt;2</math> full size cylinders (400 cu. ft.) per room;</li> <li>• any pyrophoric, reactive or health hazard gases; or</li> <li>• any potential oxygen deficiency</li> </ul>	<p>May require Hazard Evaluation by Industrial Hygiene.</p> <p>Increase in quantity or hazard may impact categorization of building and emergency planning.</p>
<p><b>__ Confined Space</b></p>	<p><b>__ Confined Space Permit</b> required for Administrative or Permit-Required Confined Space</p>	<p>See also <b>Working Alone</b> below.</p>
<p><b>__ Cryogenics</b>  <b>__ Mobile</b> usage  <b>__ Installed</b> system</p>	<p><b>__ Hazard Evaluation</b> required for stored energy greater than 75,000 ft-lb or where there is a possibility of asphyxiation (e.g., confined or unventilated space)</p>	<p>May require Oxygen Deficiency Hazard evaluation by Industrial Hygiene.</p> <p>Increase in quantity or hazard may impact categorization of building and emergency planning.</p>

Hazard	Formal Authorization	Comments
<input type="checkbox"/> <b>Digging or Surface Penetration</b>	<input type="checkbox"/> <b>Penetration Permit</b> required for any penetration of concrete, or other surfaces > 1 1/2"	See HMS for legacy radiation information.
<input type="checkbox"/> <b>Electrical</b> <input type="checkbox"/> exposure to ≥50V and ≥5mA <input type="checkbox"/> <b>high voltage / high energy</b> -- >100V or 10kW <input type="checkbox"/> <b>repair, assembly, testing</b> <input type="checkbox"/> work requiring LOTO <input type="checkbox"/> non-NRTL equipment	To be determined in consultation with EHS Liaison and Electrical Safety Subject Matter Expert.  <input type="checkbox"/> <b>Approved LOTO procedure</b> is required for LOTO of 2 or more sources of energy.	Evaluation required for non-NRTL equipment. Electrical work requires authorization from the employee's supervisor (see <b>Health &amp; Safety Manual, Section 8.8.2</b> ). See also <b>Working Alone</b> below.
<input type="checkbox"/> <b>Environmental releases</b> -- <input type="checkbox"/> air emissions <input type="checkbox"/> wastewater treatment or discharge <input type="checkbox"/> spill capable of causing damage or permit violation	Depends upon specific permit; contact EHS Environmental Services group for assessment.	Notify EHS Environmental Services of all equipment containing ≥ 42 gallons of oil.
<input type="checkbox"/> <b>Ergonomic issues</b> -- <input type="checkbox"/> lab/industrial <input type="checkbox"/> computer workstation		Recommend contacting EHS Ergonomist for evaluation.
<input type="checkbox"/> <b>Lasers</b> <input type="checkbox"/> Class 1,2, 3a <input type="checkbox"/> Class 3b or 4	<input type="checkbox"/> <b>LSO Evaluation</b> required for Class 3b or 4	Laser eye exam and training required.
<input type="checkbox"/> <b>Lead</b> <input type="checkbox"/> Shielding <input type="checkbox"/> >5 Bricks		See Ionizing Radiation below.
<input type="checkbox"/> <b>Machine Tools</b> <input type="checkbox"/> machine shop <input type="checkbox"/> lab equipment		Authorization from Shop Manager and PI/Work Lead. See also <b>Working Alone</b> below.
<input type="checkbox"/> <b>Material Handling</b> <input type="checkbox"/> manual lift > 50 lbs or repetitive <input type="checkbox"/> forklift/industrial truck <input type="checkbox"/> crane/hoist	<input type="checkbox"/> <b>Critical Lift Procedure</b> required for high value/consequence lifts <input type="checkbox"/> <b>Engineering Safety Note</b> required for custom-built or modified lifting fixtures	Training/certification required for crane or industrial truck operation
<input type="checkbox"/> <b>Non-Ionizing Radiation</b> > background outside enclosure <input type="checkbox"/> infrared <input type="checkbox"/> ultraviolet <input type="checkbox"/> RF & Sub-RF <input type="checkbox"/> microwaves		Contact Subject Matter Expert for evaluation.

Hazard	Formal Authorization	Comments
<b>__ Non-Ionizing Radiation</b> <b>-- Magnetic Fields</b> > 5 Gauss outside enclosure		Contact Subject Matter Expert for evaluation. 5 Gauss field area must be marked.
<b>__ Pressure</b> >150 psi (not including gas cylinders) or 1500 psig (liquid) or large volume <b>__ non-commercial</b> or modified pressure vessel	<b>__ Engineering Safety Note</b> and <b>__ EHS Evaluation</b> required for <ul style="list-style-type: none"> <li>• Non-commercial or modified pressure vessel;</li> <li>• Stored energy greater than 75,000 ft-lb (not including gas cylinders);</li> <li>• Pressure &gt;150 psig (gas) or 1500 psig (liquid);</li> </ul>	Radioactive contents: see Ionizing Radiation below.
<b>__ Radiation – Prompt Ionizing</b>	<b>__ Radiological Work Authorization</b> or <b>__ X-Ray Authorization</b> or <b>__ Low Dose Machine Authorization</b> may be required (contact Health Physicist). <b>__ Safety Analysis Document</b> and <b>Accelerator Readiness Review</b> may be required for Accelerators (contact DOE representative)	Contact EHS Radiation Safety for evaluation of all radiation-producing equipment and documentation of accelerator / non-accelerator status determination.
<b>__ Radiation – Ionizing Isotope</b>	<b>__ Radiological Work Authorization</b> or <b>__ Radiological Work Permit</b> required for any amount	Increase in quantity or hazard may impact categorization of building and emergency planning.
<b>__ Radiation – Ionizing Sealed Source</b>	<b>__ Sealed Source Authorization</b> required for all amounts	Increase in quantity or hazard may impact categorization of building and emergency planning.
<b>__ Subcontractors</b> performing hands-on work	<b>__ Subcontractor JHA</b>	
<b>__ Thermal joining or cutting</b> – welding, soldering, silver soldering, brazing	<b>__ Hot Work/Open Flame Permit</b> (Fire Department) required for open flame or arc	
<b>__ Thermal</b> - e.g., oven, furnace, heat tape		
<b>__ Vacuum</b> — stored energy > 75,000 ft.-lb.	<b>__ Engineering Safety Note</b> <b>__ EHS Hazard Evaluation</b>	

Hazard	Formal Authorization	Comments
__ <b>Waste</b> – hazardous, mixed or radioactive; medical/bio hazard waste	__ <b>Satellite Accumulation Area</b> required for <55 gallons; __ <b>Waste Accumulation Area</b> required for >55 gallons	
__ <b>Working alone</b> – hazards that remain after controls could incapacitate a person so that he/she cannot self-rescue or activate emergency services	Document restrictions in WPC Activity work authorization	
__ <b>Other Hazards</b>	Contact EHS Liaison	

5. *Equipment Information*

Equipment	Comments
__ <b>Autoclave</b>	
__ <b>Approved Storage Cabinet</b> (flammables, toxic gas, biohazard)	
__ <b>Clean Room</b> (portable)	
__ <b>Crane, Hoist</b> (not maintained by Facilities)	
__ <b>Ultracentrifuge</b>	
Other	

6. *Environmental Performance*

Environmental Performance	Comments
<b>Waste Reduction</b>	
<b>Emissions Reduction</b>	
<b>Resource Conservation</b>	