Brookhaven National Laboratory – Photon Sciences - National Synchrotron Light Source							
Beamline Hazard Analysis - Beamline X17C							
LS-BHA-X17C	Revision:	02	Effective: 10/17/1	1	Page 1 of 1		
<b>T C U S S U</b>	L				<u> </u>		

The following tasks are included in the beamline safety review. Any operations not listed here, or performed by others than those listed, need additional review by ES&H personnel and/or beamline personnel.

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Tasks / Equipment	Performed by:		Controls	
	Beamline Staff	Users		
Inert compressed gas	Y	Y	<ul> <li>Compressed gas training – TQ-COMPGAS1 or NSLS User training</li> <li>Transport cylinders using a cylinder cart</li> <li>Properly secure cylinders</li> <li>Wear safety glasses with side shields while connecting lines</li> <li>Leak check gas lines</li> </ul>	
Pouring cryogens ≤ 5L	N	Y	<ul> <li>Use goggles</li> <li>Long pants and sleeves - avoid clothing which can trap cryogens (pockets, cuffs)</li> <li>Cryogen or heavy gloves</li> <li>Enclosed shoes</li> <li>Never pour from above chest level</li> </ul>	
Using the LN2 Fill Station or pressurized transfer	Y	Y	<ul> <li>LS-PROC-LN2FILL-MANL training for fill station</li> <li>Use full face shield along with goggles or safety glasses</li> <li>Long pants and sleeves - avoid clothing which can trap cryogens (pockets, cuffs)</li> <li>Cryogen or heavy gloves</li> <li>Enclosed shoes</li> </ul>	
Ergonomics concerns – moving/lifting – changing detector	Y	N	<ul><li>Be aware of body posture,</li><li>Ask for help in moving or lifting</li></ul>	
Ergonomics concerns – pinch points/sharp edges – hutch door	Y	Y	<ul><li>Warning signs</li><li>Training</li></ul>	
High temperature	Y	Y	<ul> <li>Inaccessible when hot</li> <li>Training</li> </ul>	
High pressure	Y	Y	<ul> <li>DAC inaccessible when under pressure</li> <li>Training</li> </ul>	
Cutting/razor blades	Y	Y	<ul> <li>Be aware of hand positioning</li> <li>Use safety knife when possible</li> <li>Consider using cut resistant gloves for frequent cutting tasks</li> </ul>	