

# NATIONAL SYNCHROTRON LIGHT SOURCE SAD RISK ASSESSMENT

## APPENDIX 4

**SYSTEM:** Building 725 activities

**SUBSYSTEM:** Personnel safety

**HAZARD:** Ozone

**HAZARD IMPACT:**

Impairment of breathing and mucous membranes resulting in possible injury to personnel.

**RISK ASSESSMENT PRIOR TO MITIGATION:**

<b>Consequence</b>	<input type="checkbox"/> I High	<input type="checkbox"/> II Moderate	<input checked="" type="checkbox"/> III Low	<input type="checkbox"/> IV Routine
<b>Probability</b>	<input type="checkbox"/> A Frequent	<input type="checkbox"/> D Remote		
	<input type="checkbox"/> B Probable	<input type="checkbox"/> E Extremely Remote		
	<input checked="" type="checkbox"/> C Occasional	<input type="checkbox"/> F Impossible		
<b>Risk Category</b>	<input type="checkbox"/> I High	<input type="checkbox"/> II Moderate	<input checked="" type="checkbox"/> III Low	<input type="checkbox"/> IV Routine

**MITIGATING FACTORS**

- \*\*The methods of protecting NSLS staff and users are through the Experimental and Beamline review programs. Additional controls include:
- Direct beam path through evacuated or inert gas atmosphere containing pipes.
- Minimize horizontal x vertical beam dimensions.
- Minimize beam path length.
- Filter beam to eliminate lower photon energies.
- Scrub beam path air with ozone filters.
- Delay personnel entry time to allow degradation of ozone.

**RISK ASSESSMENT FOLLOWING MITIGATION:**

<b>Consequence</b>	<input type="checkbox"/> I High	<input type="checkbox"/> II Moderate	<input checked="" type="checkbox"/> III Low	<input type="checkbox"/> IV Routine
<b>Probability</b>	<input type="checkbox"/> A Frequent	<input checked="" type="checkbox"/> D Remote		
	<input type="checkbox"/> B Probable	<input type="checkbox"/> E Extremely Remote		
	<input type="checkbox"/> C Occasional	<input type="checkbox"/> F Impossible		
<b>Risk Category</b>	<input type="checkbox"/> I High	<input type="checkbox"/> II Moderate	<input checked="" type="checkbox"/> III Low	<input type="checkbox"/> IV Routine