

NATIONAL SYNCHROTRON LIGHT SOURCE SAD RISK ASSESSMENT

APPENDIX 4

SYSTEM: Building 725 activities

SUBSYSTEM: Personnel safety

HAZARD: Chemical and Other Experiment Materials

HAZARD IMPACT:

Hazardous experimental materials (toxins, biohazards, radiologicals) and equipment could result in injury to personnel.

RISK ASSESSMENT PRIOR TO MITIGATION:

Consequence	<input type="checkbox"/> I High	<input checked="" type="checkbox"/> II Moderate	<input type="checkbox"/> III Low	<input type="checkbox"/> IV Routine
Probability	<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		
Risk Category	<input type="checkbox"/> I High	<input checked="" type="checkbox"/> II Moderate	<input type="checkbox"/> III Low	<input type="checkbox"/> IV Routine

MITIGATING FACTORS

- **Experiment review and approval by the NSLS Experiment Review Coordinator (ERC) through use of the NSLS Safety Approval Form imposes the following controls:
- Require less hazardous substitutes, minimize quantities, and require registration of selected chemicals with the BNL Chemical Management System
- Review and require controls on such variables as pressure, temperature, shielding, exhaust systems, electrical systems, magnetic fields, full-time attended operations, etc.
- BNL Institutional Review Board
- Institutional Animal Use and Care Committee
- Institutional Biosafety Committee
- NSLS ESH Committee
- Radiological Work Permit
- Each experiment, where required, has an assigned and trained person to monitor and properly dispose of wastes

RISK ASSESSMENT FOLLOWING MITIGATION:

Consequence	<input type="checkbox"/> I High	<input checked="" type="checkbox"/> II Moderate	<input type="checkbox"/> III Low	<input type="checkbox"/> IV Routine
Probability	<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		
Risk Category	<input type="checkbox"/> I High	<input type="checkbox"/> II Moderate	<input checked="" type="checkbox"/> III Low	<input type="checkbox"/> IV Routine