

# NATIONAL SYNCHROTRON LIGHT SOURCE SAD RISK ASSESSMENT

## APPENDIX 4

**SYSTEM:** Building 725 activities

**SUBSYSTEM:** Environmental issues

**HAZARD:** Contamination of the environment

**HAZARD IMPACT:**

Chemicals, gases and oils are used in NSLS operations. Improper handling of these materials could result in a release to the soil, groundwater, air or sanitary system.

**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 checked="" 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 checked="" type="checkbox"/> II Moderate	<input type="checkbox"/> III Low	<input type="checkbox"/> IV Routine

**MITIGATING FACTORS:**

- \*\*The NSLS has organized its environmental management program based on the requirements set forth under ISO 14001. Chemical usage is minimized through review; less hazardous chemicals and processes are substituted where possible. Controls are based on:
  - Environmental Systems Management Manual
  - Significant Environmental Aspects matrix
  - Process Assessment Forms
  - Environmental Management System checklist
  - ESH Committee, Beamline Review Committee, design reviews
  - Work Planning, Experiment Safety Reviews, Tier I inspections
  - NSLS Complex Environmental Assessment, Finding of No Significant Impact
  - NESHAPS evaluation

**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 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