# National Synchrotron Light Source

**Subject:** NSLS EMS Aspects Matrix

**Revision** 11 **Effective:** 1/29/09 **Page:** 1 **of** 1

*Approval Signature on file with master copy.*

| ACTIVITY DESCRIPTION | | Regulated Industrial Waste | Hazardous Waste | Radioactive Waste | Mixed Waste | Regulated Medical Waste | Work with Nano | Atmospheric Discharges | Liquid Discharges | Chemical (C) Storage/Use or Radioactive Material (R) | | Water Consumption | Power Consumption | Engineered Nanomaterials | Soil Activation | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Title | Number | | | | | | | | | C | R | | | | | |
| Machine shop operations | NSLS-462-MS | a | a | | | | | a*,b** | b | f | | x | x | | | *Can Puncturer is on TV permit. **Filters on grinders are engineering controls. |
| Photographic dark room | NSLS-463-PO | a | a | | | | | x | b | f | | x | x | | | |
| Vacuum system maintenance | NSLS-470-VSM | a | a | | | | | | b | f | | | x | | | |
| Electrical/Mechanical equipment maintenance | NSLS-466-EMM | a | a | | | | | x | b | a*, f | | x | x | | | *B729 Klystrons - Art 12 tanks. |
| Experimental program | | a | a | a | a | | a | b* | b | f | x | x | x | a | | *HEPA used for nano particulate work |
| Cooling Water System | NSLS-469-CWS | a | | | | | | x | a*, b | f | | x | x | | | *Water treatment tanks registered 'exempt' under Art 12. |
| Haz Stor shed | | | | | | | | x | | f | x | | x | | | |
| Silicon Crystal Etching & Cutting | NSLS-591-CE | a | a | | | | | x | | f | | x | x | | | |
| General facility operation | | | | | | | | | | b**,f | | x | x | | a* | * Soil activation calculated in SAD; does not exceed Action Levels as per SBMS Accelerator Safety Subject Area.<br>**System backflow devices tested and maintained as part of F&O's O&M System |
| Administration | | | | | | | | | | | | x | x | | | |

**Note:**
1. A blank cell indicates that the aspect is not present.
2. An x in a cell indicates that the aspect is present, but is not significant.
3. A letter other than x indicates that the aspect is significant. (Key below)

Revision Log

**Key:**

**Aspects Applicable to the NSLS** (Definitions taken from the "Environmental Aspects and Impacts" SBMS Subject Area)

**All Wastes**
a) Any amount of regulated industrial, haardous, radioactive, or mixed waste generattion

**Atmospheric Discharge**
a) Any process that requires a point source air permit or inclusion in the Title V permit as an emissions unit, or contributes to a regulated emission point.
b) Operations or activities that use engineering controls to reduce hazardous air pollutant or radionuclide emissions.

**Liquid Discharge**
a) Radionuclides that are detectable at the point of discharge from the facility.
b) Discharges of any of the chemicals listed on the BNL State Pollutant Discharge Elimination System (SPDES) Permit Chemicals exhibit.

**Chemical Storage/Use or Radioactive Material**
a) Storage or use of chemicals or radioactive materials requiring engineering controls specified in the Storage and Transfer of Hazardous Materials subject area.
b) System configuration requires back-flow prevention.
f) Storage or use in quantities capable of resulting in a spill, as defined in the Spill Response Subject Area.

**Soil Activation:**
a) Any soil activation