

Brookhaven National Laboratory/National Synchrotron Light Source														
Subject: NSLS EMS Aspects Matrix										Prepared by: D. Bauer, ECR				
Revision: 10		Effective: 2/4/08		Page: 1 of 1		Approved by: A. Ackerman, EMS/OSHRep								
Approval Signature on file with master copy.														
ACTIVITY DESCRIPTION		Regulated Industrial Waste Hazardous Waste Radioactive Waste Mixed Waste Regulated Medical Waste Atmospheric Discharges Liquid Discharges Chemical (C) Storage/Use or Radioactive Material (R) Water Consumption Power Consumption Historical Monuments / Cultural Resources Sensitive/Endangered Species and Sensitive Habitats Env. Noise Historical Contamination Soil Activation												
		Title	Number											Comments
Mixed resin bed regeneration	NSLS-461-MRB	a	a					b	a,f		x	x		
Machine shop operations	NSLS-462-MS	a	a				a,b	b	f		x	x		
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						a, f		x	x		
Experimental program		a	a	a	a		b	b	f	x	x	x		Atmospheric: HEPA used for nano particulate work
Cooling Water System	NSLS-469-CWS	a	a				x	b	f		x	x		
Haz Stor shed							x		f	x				
Silicon Crystal Etching & Cutting	NSLS-591-CE	a	a					x	f		x	x		
General facility operation Administration								b,f			x	x	a	Soil activation calculated in SAD; does not exceed Action Levels as per SBMS Accelerator Safety Subject Area. System backflow devices tested and maintained by Plant Engineering's (PE) O&M System

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.

(The letter refers to the specific criteria for the aspect which has been met.) See Key:

[Revision Log](#)

Review Guidance [Definitions are taken directly from the "Identification of Significant Environmental Aspects and Impacts" Subject Area \(5/15/2000\)](#)

Aspects Applicable to the NSLS

Any generation of the below waste streams will be coded with an "a":
 Industrial Waste, Hazardous, Radioactive, Mixed, Medical Waste, Transuranic

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.
- c) Radioactive emissions that require monitoring (continuous or confirmatory) by 40 CFR 61 Subpart H of the National Emission Standards for Hazardous Air Pollutants (NESHAPS)

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.
- c) Operations or activities that use engineering controls to reduce the quantity or concentration of pollutant.
- d) Existence of underground injection control devices under the responsibility of the owner organization as specified in the Underground Injection Control subject area.

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.
- c) Transportation of chemicals or dispersible radioactive materials.
- d) Storage or use of PCBs as specified in the Oils/PCB Management subject area.
- e) Any underground pipes or ducts that contain chemical and/or radioactive material/contamination.
- 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

Aspects Not Applicable

Water Consumption

- a) Total organizational water consumption greater than 650,000 gal/day.
- b) Continuous (24/hrs/day), permanent (to continue for the foreseeable future) once-through water use greater than 4 gpm that discharges to the sanitary sewer system.
- c) Daily (8 hrs/day), permanent, once-through water use greater than 10 gpm that discharges to the sanitary sewer system.
- d) Continuous use greater than 10 gpm, or daily use greater than 15 gpm for a period greater than 60 days that discharge to the Sanitary Sewer System.

Power Consumption

- a) Total Organizational Power Consumption Greater than 58 M KWh/yr.

Environmental Noise

- a) Exceed ordinance levels [7am-10pm: 55 dba; 10pm-7am: 50 dba (20 min. average)] at property boundary of off-site location.

Historical/Cultural Resources

Sensitive/Endangered Species And Sensitive Habitats

Environmental Noise

Historical Contamination (groundwater/soil)

Other