Town Meeting July 29, 2014

Safety Update

- Injuries / Events
- NSLS Stabilization
- PPE
- NSLS II Beamline Readiness

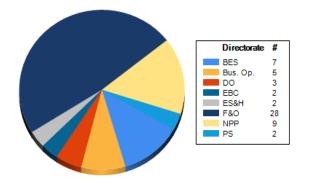
BNL Injuries FY 14

DART Days Away, Restricted, or Transferred

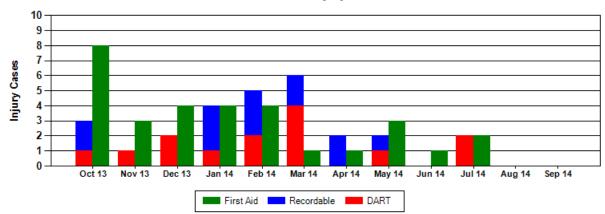
Recordable More than just first aid

First Aid Minor treatment

FY2014 Injuries by Directorate



Fiscal Year 2014 Injury Cases



	YID Cases	Rate
DART:	14	0.56
Recordable:	27	1.17
First Aid:	31	N/A

Total Injuries: 58

Rates As Of: June 2014

Most Recent Injury: 07/21/2014



1

PS Injuries (Staff & Users) FY 14

3 Total

• Fall; shoulder, arm Staff (Non-PS) DART Dec '13

Tool drop; fractured finger
 Staff
 Recordable
 Feb

Fall; knee
 Staff
 First aid
 May





PSD Events (No Injuries); 15 Total FY 14

 Booster to VUV transport line shutter vacuum leak 	Nov '13
 Switch gear failure; Power interruption to 740 	Nov '13
 Motor Vehicle Accident; Parked car struck 	Jan
 Emergency response; Flammable gas release bldg. 522 	Jan
 Damaged PPS door switch, NSLS II 	Jan
 Bake out smoke 	Feb
 Fork lift propane leak 	Feb
 X27 Water leak 	April
 X21 Water leak 	May
 Loading dock fluid leak 	May
 Sprinkler head break 	May
• LOTO	Jun
 Magnet; electrical 	Jul
 Damaged compressed air line 	Jul
 Vacuum relief 	Jul





NSLS Stabilization

- Remove hazardous reagents and gasses.
 - 23,000 lbs; 4000+ containers (500 gas cylinders)
- Remove hazardous wastes.
- Drain water systems.
- Remove equipment with an identified use at NSLS II
 - Lead removed and cleaned
 - U4 & U1 chamber removed before end of ops

Activity	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	Мау-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15
Operations																										
Preparations for Shutdown																										\Box
Equipment Removal																										П
Chemical Removal																										\neg
Hazards Assessment																										\Box
Machine Shutdown																			1							
Ready for Decommissioning																									4	





PPE

PPE is required for all manual work

Task (725 & 740)

- Posting
- Permits (SAF; Green Sheet)
- Procedures

- Area (Labs)
- Posting
- Permits (ESR)
- Procedures

- Technical basis
- Permits, JRA's, Procedures



U.S. DEPARTMENT OF ENERGY







Beamline Readiness

Project Beamlines

ID	Name								
03	HXN	Hard X-ray Nanoprobe							
٥.	ODV	Out of an about the second							
05	SRX	Submicron Resolution X-ray Spectroscopy							
10	IXS	Inelastic X-ray Scattering							
11	CHX	Coherent Hard X-ray Scattering							
23	CSX	Coherent Soft X-ray Scattering							
28	XPD	X-ray Powder Diffraction							





Readiness Planning

Formal Process

- Ready means
 - Hardware and infrastructure to start <u>commissioning</u>:
 - Technical (safe photon beam delivery)
 - Science
- Instrument Readiness Plan
 - Criteria
 - Actions to meet criteria
 - Status tracking
 - Managed as three "Pillars"
 - Hardware
 - Procedures
 - Personnel

ID

Front End

Beamline





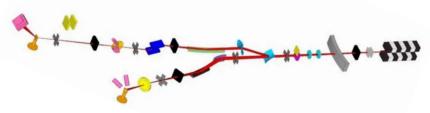
Readiness Planning

- Hardware Systems (13)
 - Hutches and beam line layout
 - Optics; steer and focus
 - Radiation Safety Components
 - Shielding
 - End station equipment (diagnostic)
 - Other Beamline Components
 - O₂ Sensors
 - Utilities (water, electrical power)
 - EPS
 - PPS
 - Area Radiation Monitors
 - Vacuum
 - Controls

Travelers

- ~30 Procedures
- Personnel Training
 - Lead Beam Line Scientist
 - Authorized Beamline Staff
 - Machine Operator
 - Floor Coordinator

Design; Install; Test







END

Readiness Planning

Pillar I; Documentation & Procedures

- Authorization basis (SAD/ASE) / ESH / QA
- Commissioning Procedures (29 Total)
 - Facility (17)
 - Commissioning Activity Approval
 - Enable
 - Ray trace
 - Configuration control
 - PPS Secure ...
 - Beam Line Specific (12)
 - Rad survey plan
 - PPS Certification ...



