

National Synchrotron Light Source II, Brookhaven National Laboratory			
Doc No. <b>PS-C-ASD-PRC-008</b>	Author: <b>T. McDonald</b>	Effective Date: <b>17 April 2015</b> Review Frequency: <b>3 yrs</b>	Version <b>4</b>
Title: <b>NSLS-II Area Radiation Monitor PPS Test</b>			<b>Technical</b>

### Attachment D

### NSLS-II Beamline (FOE) Area Radiation Monitor Checklist

Note: Signatures below indicate that the test has been completed.

Monitor # <i>IRM-ID19</i>	ID # <i>IN07375</i>	Beamline: <i>18ID</i>
Test Reason: <input checked="" type="checkbox"/> Beamline Certification <input type="checkbox"/> Replacement/Repair		
Test Date: <i>10/17/16</i>	Test Result <input checked="" type="checkbox"/> Passed <input type="checkbox"/> Failed	
Tester: <i>Tom McDonald</i>	RCD: <i>Shawn Buckenlew</i>	
Tester Signature: <i>Tom McDonald</i>	RCD Signature: <i>Shawn Buckenlew</i>	

**Fail Alarm:** Place checkmark (✓) in checkbox (☐) for each correct response.

	Local Expected Observation	HMI/CR Expected Observation	Linac HMI	CR HMI
Operator turns on Gun	Gun HVPS is ON <input checked="" type="checkbox"/>	Gun Contactor ON A Chain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
RCD Disables Monitor		Alarm sounds in Control Room		<input checked="" type="checkbox"/>
	Fail alarm ON HMI (yellow border around ARM icon)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Silence CR Alarm		Alarm silences		<input checked="" type="checkbox"/>
Gun turns OFF	Gun HVPS is OFF <input checked="" type="checkbox"/>	Gun Contactor OFF A Chain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Return monitor to normal	Gun HVPS remains OFF <input checked="" type="checkbox"/>	Fail alarm remains ON HMI	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Reset fault in Control Room		Monitor normal HMI	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
RCD ensures ARM is locked	ARM is locked <input checked="" type="checkbox"/>			

**Low Alarm:** Place checkmark (✓) in checkbox (☐) for each correct response.

	Local Expected Observation	HMI/CR Expected Observation	Beamline HMI	CR HMI/EPICS
Opens FE shutter (w/keypad)	FE Shutters open <input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Apply source until low alarm	Yellow light on Monitor <input checked="" type="checkbox"/>	Radiation level increases on EPICS		<input checked="" type="checkbox"/>
	FE Shutters Closed <input checked="" type="checkbox"/>	Alarm sounds in Control Room		<input checked="" type="checkbox"/>
		Low level alarm ON, HMI	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Return monitor to normal		Monitor normal, HMI	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	FE Critical Device Permit A chain ON		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Apply source until low alarm	Yellow light on Monitor <input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
	FE Critical Device Permit A chain OFF		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Return monitor to normal		Monitor normal, HMI	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**High Alarm:** Place checkmark (✓) in checkbox (☐) for each correct response.

	Local Expected Observation	HMI/CR Expected Observation	Linac HMI	CR HMI/EPICS
Operator turns on Gun	Gun HVPS is ON <input checked="" type="checkbox"/>	Gun Contactor ON A Chain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Apply source until high alarm	Red light on Monitor <input checked="" type="checkbox"/>	Radiation level increases on EPICS		<input checked="" type="checkbox"/>
	Monitor alarm sounds	Alarm sounds in Control Room		<input checked="" type="checkbox"/>
		High level alarm ON, HMI	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Silence Alarm		Alarm silences		<input checked="" type="checkbox"/>
Gun turns OFF	Gun HVPS is OFF <input checked="" type="checkbox"/>	Gun Contactor OFF A Chain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Return monitor to normal	Gun HVPS remains OFF <input checked="" type="checkbox"/>	High level alarm remains ON, HMI	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Reset fault in Control Room		Monitor normal, HMI	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Description of Test Failures (if any): \_\_\_\_\_

The only official copy of this document is the one online in the SharePoint Document Center. Before using a printed copy, verify that it is current by checking the printed document's version history log (p.ii) with that of the online version.

National Synchrotron Light Source II, Brookhaven National Laboratory			
Doc No. <b>PS-C-ASD-PRC-008</b>	Author: <b>T. McDonald</b>	Effective Date: <b>17April 2015</b> Review Frequency: <b>3 yrs</b>	Version <b>4</b>
Title: <b>NSLS-II Area Radiation Monitor PPS Test</b>			<b>Technical</b>

- END-