

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.

<b>Monitor #</b> <i>FRM-BM-11</i>	<b>ID #</b> <i>IN0747</i>	<b>Beamline:</b> <i>11-BM</i>
<b>Test Reason:</b> <input checked="" type="checkbox"/> <b>Beamline Certification</b> <input type="checkbox"/> <b>Replacement/Repair</b>		
<b>Test Date:</b> <i>7/13/16</i>	<b>Test Result</b> <input checked="" type="checkbox"/> <b>Passed</b> <input type="checkbox"/> <b>Failed</b>	
<b>Tester:</b> <i>Thomas McDonald</i>	<b>RCD:</b> <i>Kim Webunt</i>	
<b>Tester Signature:</b> <i>Thomas McDonald</i>	<b>RCD Signature:</b> <i>Kim Webunt</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"/>
<b>RCD ensures ARM is locked</b>	<b>ARM is locked</b> <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	<b>Yellow light on Monitor</b> <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	<b>Yellow light on Monitor</b> <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	<b>Red light on Monitor</b> <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):** \_\_\_\_\_