

<b>X3B SAFETY CHECKLIST</b>			BROOKHAVEN NATIONAL LABORATORY NATIONAL SYNCHROTRON LIGHT SOURCE
<b>Rev: C</b>	<b>Effective: 5/24/2010</b>	<b>Page 1 of 1</b>	Number: LS-SCL-0090
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1. Valid Padlock Index and log, no padlocks open.

**The following must be checked starting from the shield wall  
on the X4 side of the beamline.**

2. Bremsstrahlung shield (BS1) in place and secure under EZ 1.  
 3. Exclusion Zone (EZ1) in place and secure as per photo.  
 4. Exclusion Zone (EZ2) in place and secure on both sides of beamline from EZ1 to BS2  
 5. Bremsstrahlung shield (BS2) in place and secure as per photo.  
 6. Scatter shield covering Ion pump 1as per photo 2.  
 7. Exclusion Zone (EZ3) in place and secure on both sides of beamline from A,B BS-2 to BS3.  
 8. Bremsstrahlung shield (BS3) in place and secure.  
 9. Exclusion Zone (EZ4) in place and secure on both sides of beamline from BS3 to X3A hutch.

**Inside of X3A hutch**

10. Exclusion Zone (EZ5) in place and secure on both sides of beamline.

**Downstream of X3A hutch on the X4 side of the beamline**

11. Exclusion Zone (EZ6) in place and secure on both sides of beamline from hutch to BS4.  
 12. Bremsstrahlung shield (BS4) in place and secure.  
 13. Scatter shield covering monochromator and lead covers on 3 view ports as per photo..  
 14. Bremsstrahlung shield (BS5) in place and secure.  
 15. Vacuum Bellows 1 wrapped in lead.  
 16. Vacuum Bellows 2 wrapped in lead.  
 17. View ports (2) covered with lead glass (Check from X2 side of beamline).

OPCO / Beamline Staff: \_\_\_\_\_ Date: \_\_\_\_\_