

Subject:	NSLS-II Beamline 17-ID Radiation Safety Component Checklist		
Number:	PS-R-XFD-CHK-009	Revision:	1
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All Configuration Controlled Devices must be in PLACE, LABELED, and MATCH the associated photograph located near the checkpoint when so stated in the checklist.

Check the following items inside 17-ID-A hutch (FOE):

- | | | | |
|------------------------------|-------------------|---------|---|
| #01 <input type="checkbox"/> | 17IDA- PPS-01 | AMX&FMX | PPS Aperture connected to Fixed Mask |
| #02 <input type="checkbox"/> | 17IDA-MSK-01 | AMX&FMX | Fixed Mask and DI cooling water connected |
| #03 <input type="checkbox"/> | 17IDA-BRS-01 | AMX&FMX | Bremsstrahlung Shield 1 |
| #04 <input type="checkbox"/> | 17IDA-LBYR-01 | | Labyrinth located on the outboard hutch wall closed and secured |
| #05 <input type="checkbox"/> | 17IDA-DCM-01 AMX | AMX | MONOCHROMATOR. DCM DI Water and Liquid Nitrogen cooling hoses connected. Located inside the DCM chamber are two configuration controlled devices: the AMX White Beam Stop (WBS-01-AMX) and the tungsten Bremsstrahlung Shield 2 (BRS-02-AMX). |
| #06 <input type="checkbox"/> | 17IDA-SBRS-01 AMX | | Secondary Bremsstrahlung Shield 1 |
| #07 <input type="checkbox"/> | 17IDA-MSK-02 FMX | FMX | Fixed Mask and DI cooling water connected |
| #08 <input type="checkbox"/> | 17IDA-BRS-03 FMX | | Bremsstrahlung Shield 3 |
| #09 <input type="checkbox"/> | 17IDA-DCM-02 FMX | FMX | MONOCHROMATOR. DCM DI Water and Liquid Nitrogen cooling hoses connected. Located inside the DCM chamber are two configuration controlled devices: the FMX White Beam Stop (WBS-02-FMX) and the tungsten Bremsstrahlung Shield 4 (BRS-04-FMX). |
| #10 <input type="checkbox"/> | 17IDA-SBRS-02 AMX | | Secondary Bremsstrahlung Shield 2 |
| #11 <input type="checkbox"/> | 17IDA-PHS-01 AMX | AMX | Photon Shutter |
| #12 <input type="checkbox"/> | 17IDA-GU-01 AMX | AMX | Guillotine secured |
| #13 <input type="checkbox"/> | 17IDA-PHS-02 FMX | FMX | Photon Shutter |
| #14 <input type="checkbox"/> | 17IDA-GU-02 FMX | FMX | Guillotine secured |
| #15 <input type="checkbox"/> | 17IDA-LBYR-02 | | Labyrinth located on the outboard hutch wall downstream of the hutch door closed and secured |

Check the following items on the roof of 17-ID-A hutch (FOE) and the 17-ID-B hutch (AMX):

- | | | | |
|------------------------------|------------------|--|--|
| #16 <input type="checkbox"/> | 17ID-CLLR-01 AMX | | Upstream Collar on AMX beam pipe |
| #17 <input type="checkbox"/> | 17ID-CLLR-02 FMX | | Upstream Collar on FMX beam pipe |
| #18 <input type="checkbox"/> | 17ID-VA-01 AMX | | AMX beam transport pipe lead-shield is secured |
| #19 <input type="checkbox"/> | 17ID-VA-02 FMX | | FMX beam transport pipe lead-shield is secured |
| #20 <input type="checkbox"/> | 17ID-CLLR-03 AMX | | Downstream Collar on AMX beam pipe |
| #21 <input type="checkbox"/> | 17ID-CLLR-04 FMX | | Downstream Collar on FMX beam pipe |

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Check the following items between hutches 17-ID-B hutch (AMX):

- | | | |
|------------------------------|------------------|---|
| #22 <input type="checkbox"/> | 17IDB-GU-03 AMX | Guillotine on AMX beam pipe is closed and secured |
| #23 <input type="checkbox"/> | 17IDB-GU-04 FMX | Guillotine on FMX beam transport pipe is closed and secured |
| #24 <input type="checkbox"/> | 17IDB-LBYR-03 | Labyrinth located on the upstream hutch wall closed and secured |
| #25 <input type="checkbox"/> | 17IDB-BLW-01 FMX | Bellow box on FMX beam transport pipe is closed and secured |
| #26 <input type="checkbox"/> | 17IDB-BLW-02 FMX | Bellow box on FMX beam transport pipe is closed and secured |
| #27 <input type="checkbox"/> | 17IDB-VA-03 FMX | FMX beam transport pipe lead-shield is secured |
| #28 <input type="checkbox"/> | 17IDB-PGU-01 FMX | Pass-through Guillotine for FMX beam pipe between 17IDB and 17IDC hutches is closed and secured |
| #29 <input type="checkbox"/> | 17IDB-MBS-01 AMX | AMX Monochromatic Beam Stop |
| #30 <input type="checkbox"/> | 17IDB-LBYR-04 | Labyrinth located on the outboard hutch wall upstream of the hutch door closed and secured |

Check the following items inside the 17-ID-C hutch (FMX):

- | | | |
|------------------------------|------------------|---|
| #31 <input type="checkbox"/> | 17IDC-PGU-02 | Pass-through Guillotine for FMX beam pipe between 17IDB and 17IDC hutches is closed and secured |
| #32 <input type="checkbox"/> | 17IDC-LBYR-05 | Labyrinth located on the outboard hutch wall downstream of the entry door closed and secured |
| #33 <input type="checkbox"/> | 17IDC-MBS-02 FMX | FMX monochromatic beam stop |

Check the following items on the roof of 17-ID-A hutch (FOE):

- | | | |
|------------------------------|---------------|--|
| #34 <input type="checkbox"/> | 17IDA-LBYR-R1 | LN2 Labyrinth closed and secured – AMX mono LN2 |
| #35 <input type="checkbox"/> | 17IDA-LBYR-R2 | Cable/utilities Labyrinth closed and secured – Capillaries |
| #36 <input type="checkbox"/> | 17IDA-LBYR-R3 | Cable/utilities Labyrinth closed and secured – Controls 1, motor controls |
| #37 <input type="checkbox"/> | 17IDA-LBYR-R4 | Cable/utilities Labyrinth closed and secured – Communication and Vacuum Controls |
| #38 <input type="checkbox"/> | 17IDA-LBYR-R5 | Cable/utilities Labyrinth closed and secured – A/C power |
| #39 <input type="checkbox"/> | 17IDA-LBYR-R6 | LN2 Labyrinth closed and secured – FMX mono LN2 |
| #40 <input type="checkbox"/> | 17IDA-LBYR-R7 | Cable/utilities Labyrinth closed and secured – Controls 2, motor controls |
| #41 <input type="checkbox"/> | 17IDA-LBYR-R8 | Cable/utilities Labyrinth closed and secured – Spare |
| #42 <input type="checkbox"/> | 17IDA-LBYR-R9 | Cable/utilities closed and secured – Fluids |

Check the following items on the roof of hutches 17-ID-B hutch (AMX):

- | | | |
|------------------------------|----------------|--|
| #43 <input type="checkbox"/> | 17IDB-LBYR-R10 | Cable/utilities Labyrinth closed and secured – A/C power |
| #44 <input type="checkbox"/> | 17IDB-LBYR-R11 | LN2 Labyrinth closed and secured – AMX LN2 |

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#45 17IDB-LBYR-R12 Cable/utilities Labyrinth closed and secured – Controls and Vacuum

Check the following items on the roof of hutches 17-ID-C hutch (FMX):

#46 17IDC-LBYR-R13 Cable/utilities Labyrinth closed and secured – A/C power
 #47 17IDC-LBYR-R14 Cable/utilities Labyrinth closed and secured – Controls and Vacuum
 #48 17IDC-LBYR-R15 Cable/utilities Labyrinth closed and secured – Controls and Vacuum
 #49 17IDC-LBYR-R16 Cable/utilities Labyrinth closed and secured – Controls
 #50 17IDC-LBYR-R17 LN2 Labyrinth closed and secured – FMX LN2
 #51 17IDC-LBYR-R18 Cable/utilities Labyrinth closed and secured – Fluids

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X Robert Chmiel

Robert Chmiel
 NSLS-II Safety Officer
 Signed by: Chmiel, Robert

X Dieter Schneider

Dieter Schneider
 AMX Lead Beamline Scientist
 Signed by: Schneider, Dieter

X Martin Fuchs

Martin Fuchs
 FMX Lead Beamline Scientist
 Signed by: Fuchs, Martin

Inspection Performed By:

Print Name _____ Signature: _____ Date: _____

******Removal of any radiation safety components or opening of any locks listed on this checklist requires posting an approved NSLS-II Safety System Work Permit******