

Brookhaven National Laboratory/ Photon Sciences Directorate			
Subject:	NSLS-II Storage Ring Pentant 3 Radiation Safety Component Checklist		
Number:	PS-R-ESH-KSR-005	Revision:	10
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Prepared by:	L. Doom	Approved by:	R. Chmiel

Except for the Mekometer Port (checkpoint 3701), all configurations must match the associated photograph located near the checkpoint.

Inside Storage Ring Pentant 3

Check 3001 through 3016 in Cell 5:

- 3001. Utility Penetration shielding at 4 ID in place and labeled
- 3002. Vacuum flange and blank off at Cell 5 between Girder 2 and 3 in place and labeled
- 3003. Dipole chamber mounting brackets at Cell 5 Girder 3 in place and labeled
- 3004. Vacuum Absorber at Cell 5 between Girder 3 and 4 in place and labeled
- 3005. Dipole Shadow shield at Cell 5 Girder 4 in place, banded and labeled
- 3006. Ratchet Wall Plug (Front end) shielding at 4 BM in place and labeled
- 3007. Utility Penetration shielding at 4 BM in place and labeled
- 3008. Dipole Shadow shield at Cell 5 Girder 6 in place, banded and labeled
- 3009. Front End Fixed Aperture Mask at 5ID in place and labeled
- 3010. Front End Burn Through Device #1 at 5ID in place and labeled
- 3011. Front End Collimator #1 shielding at 5ID in place and labeled
- 3012. Front End Burn Through Device #2 at 5ID in place and labeled
- 3013. Front End Collimator #2 shielding at 5ID in place and labeled
- 3014. Safety Shutter #1 shielding at 5ID in place and labeled
- 3015. Safety Shutter #2 shielding at 5ID in place and labeled
- 3016. Ratchet Wall Collimator shielding at 5ID in place and labeled (This verifies Burn Through Device #3 in ratchet wall is present)

Check 3101 through 3106 in Cell 6:

- 3101. Utility Penetration shielding at 5 ID in place and labeled
- 3102. Dipole Shadow shield at Cell 6 Girder 4 in place, banded and labeled
- 3103. Ratchet Wall Plug (Front end) shielding at 5 BM in place and labeled
- 3104. Utility Penetration shielding at 5 BM in place and labeled
- 3105. Dipole Shadow shield at Cell 6 Girder 6 in place, banded and labeled
- 3106. Ratchet Wall Plug (Front end) shielding at 6 ID in place and labeled

Check 3201 through 3206 in Cell 7:

- 3201. Utility Penetration shielding at 6 ID in place and labeled
- 3202. Dipole Shadow shield at Cell 7 Girder 4 in place, banded and labeled
- 3203. Ratchet Wall Plug (Front end) shielding at 6 BM in place and labeled
- 3204. Utility Penetration shielding at 6 BM in place and labeled

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3205. Dipole Shadow shield at Cell 7 Girder 6 in place, banded and labeled

3206. Ratchet Wall Plug (Front end) shielding at 7 ID in place and labeled

Check 3301 through 3321 in Cell 8:

3301. Utility Penetration shielding at 7 ID in place and labeled

3302. Vacuum flange and blank off at Cell 8 between Girder 2 and 3 in place and labeled

3303. Dipole chamber mounting brackets at Cell 8 Girder 3 in place and labeled

3304. Vacuum Absorber at Cell 8 between Girder 3 and 4 in place and labeled

3305. Dipole Shadow shield at Cell 8 Girder 4 in place, banded and labeled

3306. Ratchet Wall Plug (Front end) shielding at 7 BM in place and labeled

3307. Utility Penetration a shielding at 7 BM in place and labeled

3308. Dipole Shadow shield at Cell 8 Girder 6 in place, banded and labeled

3309. Front End Fixed Aperture Mask at 8ID in place and labeled

3310. Front End Burn Through Device #1 at 8ID in place and labeled

3311. Front End Collimator #1 shielding at 8ID in place and labeled

3312. Reserved for future use.

3313. Front End Collimator #2 shielding at 8ID in place and labeled

3314. Safety Shutter #1 shielding at 8ID in place and labeled

3315. Safety Shutter #2 shielding at 8ID in place and labeled

3316. Ratchet Wall Collimator shielding at 8ID in place and labeled (This verifies Burn Through Device #2 in ratchet wall is present)

3317. Reserved for future use

3318. Reserved for future use

3319. Fixed mask #1 at 8BM in place and labeled

3320. Fixed mask #2 at 8BM in place and labeled

3321. Lead Collimator #1 at 8BM in place and labeled

Check 3401 through 3412 in Cell 9:

3401. Utility Penetration shielding at 8 ID in place and labeled

3402. Fixed mask #3 at 8BM in place and labeled

3403. Lead Collimator #2 at 8BM in place and labeled

3404. Fixed mask #4 at 8BM in place and labeled

3405. Lead Collimator #3 at 8BM in place and labeled

3406. Safety Shutter #1 shielding at 8BM in place and labeled

3407. Safety Shutter #2 shielding at 8BM in place and labeled

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3408. Ratchet Wall Collimator shielding at 8BM in place and labeled
3409. Dipole Shadow shield at Cell 9 Girder 4 in place, banded and labeled
3410. Utility Penetration shielding at 8 BM in place and labeled
3411. Dipole Shadow shield at Cell 9 Girder 6 in place, banded and labeled
3412. Ratchet Wall Plug (Front end) shielding at 9 ID in place and labeled

Check 3501 through 3516 in Cell 10:

3501. Utility Penetration shielding at 9 ID in place and labeled
3502. Vacuum flange and blank off at Cell 10 between Girder 2 and 3 in place and labeled
3503. Dipole chamber mounting brackets at Cell 10 Girder 3 in place and labeled
3504. Vacuum Absorber at Cell 10 between Girder 3 and 4 in place and labeled
3505. Dipole Shadow shield at Cell 10 Girder 4 in place, banded and labeled
3506. Ratchet Wall Plug (Front end) shielding at 9 BM in place and labeled
3507. Utility Penetration shielding at 9 BM in place and labeled
3508. Dipole Shadow shield at Cell 10 Girder 6 in place, banded and labeled
3509. Front End Fixed Aperture Mask at 10ID in place and labeled
3510. Front End Burn Through Device #1 at 10ID in place and labeled
3511. Front End Collimator #1 shielding at 10ID in place and labeled
3512. Reserved for future use.
3513. Front End Collimator #2 shielding at 10ID in place and labeled
3514. Safety Shutter #1 shielding at 10ID in place and labeled
3515. Safety Shutter #2 shielding at 10ID in place and labeled
3516. Ratchet Wall Collimator shielding at 10ID in place and labeled (This verifies Burn Through Device #2 in ratchet wall is present)

Outside Storage Ring Tunnel Pentant 3

Check 3601 through 3630 along the storage ring outer wall

3601. Utility Penetration shielding at 4 ID in place and labeled
3602. Fixed concrete blocks (2) at 4 BM in place and labeled
3603. Ratchet Wall Plug (Front end) shielding at 4 BM in place, banded and labeled
3604. Utility Penetration shielding at 4 BM in place and labeled
3605. Ratchet Wall Collimator shielding at 5ID in place, banded and labeled (inside hutch) this also insures Burn through Device #3 in ratchet wall is present.
3606. Utility Penetration shielding at 5 ID in place and labeled (inside hutch)
3607. Fixed concrete blocks (2) at 5 BM in place and labeled (inside hutch)

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3608. Ratchet Wall Plug (Front end) shielding at 5 BM in place, banded and labeled
3609. Utility Penetration shielding at 5 BM in place and labeled
3610. Ratchet Wall Plug (Front end) shielding at 6 ID in place, banded and labeled (inside hutch)
3611. Utility Penetration shielding at 6 ID in place and labeled
3612. Fixed concrete blocks (2) at 6 BM in place and labeled
3613. Ratchet Wall Plug (Front end) shielding at 6 BM in place, banded and labeled
3614. Utility Penetration shielding at 6 BM in place and labeled
3615. Ratchet Wall Plug (Front end) shielding at 7 ID in place, banded and labeled
3616. Utility Penetration shielding at 7 ID in place and labeled
3617. Fixed concrete blocks (4) at 7 BM in place and labeled
3618. Ratchet Wall Plug (Front end) shielding at 7 BM in place, banded and labeled
3619. Utility Penetration shielding at 7 BM in place and labeled
3620. Ratchet Wall Collimator shielding at 8ID in place, banded and labeled (inside hutch) this also insures Burn through Device #2 in ratchet wall is present.
3621. Utility Penetration shielding at 8 ID in place and labeled
3622. Fixed concrete blocks (2) at 8 BM in place and labeled
3623. Ratchet Wall Collimator shielding at 8 BM in place, banded and labeled(inside hutch)
3624. Utility Penetration shielding at 8 BM in place and labeled
3625. Ratchet Wall Plug (Front end) shielding at 9 ID in place, banded and labeled
3626. Utility Penetration shielding at 9 ID in place and labeled
3627. Fixed concrete blocks (2) at 9 BM in place and labeled
3628. Ratchet Wall Plug (Front end) shielding at 9 BM in place, banded and labeled
3629. Utility Penetration shielding at 9 BM in place and labeled
3630. Ratchet Wall Collimator shielding at 10ID in place and labeled (This verifies Burn Through Device #2 in ratchet wall is present)

Check 3701 on the Storage Ring Mezzanine at Cell 9

3701. Mekometer port cover plate labeled and shielding padlocked (below cover plate)

Check 3801 in Service Building 3:

3801. Fixed concrete blocks (8) in place and labeled

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5/27/2016

Approved By:

5/27/2016

X Lewis Doom

Lewis Doom
Storage Ring Engineer
Signed by: Doom, Lewis

X Robert Chmiel

Robert Chmiel
Safety Officer
Signed by: Chmiel, Robert

Inspected by

Print Name _____ Signature: _____ Date: _____

********Removal of any shielding or opening of any locks listed on this checklist requires posting an approved Photon Sciences Safety System Work Permit ********