

Brookhaven National Laboratory/ Photon Sciences			
Subject:	NSLS-II Storage Ring Pentant 3 Radiation Safety Component Checklist		
Number:	PS-R-ESH-KSR-005	Revision:	12
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Prepared by:	L. Doom		

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 3026 in Cell 5:

- 3001. Utility Penetration shielding at 4 ID in place and labeled
- 3002. Flange absorber #1 at 4BM in place and labeled
- 3003. Reserved for Future Use
- 3004. Vacuum flange and blank off at Cell 5 between Girder 2 and 3 in place and labeled
- 3005. Dipole chamber mounting brackets at Cell 5 Girder 3 in place and labeled
- 3006. Vacuum Absorber at Cell 5 between Girder 3 and 4 in place and labeled
- 3007. Flange absorber #2 at 4BM in place and labeled
- 3008. Front end Collimator #2 shielding at 4BM in place and labeled
- 3009. Safety Shutter #1 shielding at 4BM in place and labeled
- 3010. Safety Shutter #2 shielding at 4BM in place and labeled
- 3011. Ratchet Wall Collimator shielding at 4BM in place and labeled
- 3012. Dipole Shadow shield at Cell 5 Girder 4 in place, banded and labeled
- 3013. Utility Penetration shielding at 4 BM in place and labeled
- 3014. Reserved for Future Use
- 3015. Reserved for Future Use
- 3016. Reserved for Future Use
- 3017. Reserved for Future Use
- 3018. Front End Fixed Aperture Mask at 5ID in place and labeled
- 3019. Front End Burn Through Device #1 at 5ID in place and labeled
- 3020. Front End Collimator #1 shielding at 5ID in place and labeled
- 3021. Dipole Shadow shield at Cell 5 Girder 6 in place, banded and labeled
- 3022. Front End Burn Through Device #2 at 5ID in place and labeled
- 3023. Front End Collimator #2 shielding at 5ID in place and labeled
- 3024. Safety Shutter #1 shielding at 5ID in place and labeled
- 3025. Safety Shutter #2 shielding at 5ID in place and labeled
- 3026. Ratchet Wall Collimator shielding at 5ID in place and labeled (this verifies Burn Through Device #3 in ratchet wall is present)

Check 3101 through 3113 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

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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. Vacuum flange and blank off at 6BM Cell 6 Girder 4 in place and labeled
3106. Reserved for future use
3107. Exit Absorber at 6BM Cell 6 Girder 6 in place and labeled
3108. Dipole Shadow shield at Cell 6 Girder 6 in place, banded and labeled
3109. Ratchet Wall Plug (Front end) shielding at 6 ID in place and labeled
3110. Fixed mask #1 at 6BM in place and labeled
3111. Lead Collimator #1 shielding at 6BM in place and labeled
3112. Fixed mask #2 at 6BM in place and labeled
3113. Shadow shield at 6BM in place and labeled

Check 3201 through 3230 in Cell 7:

3201. Utility Penetration shielding at 6 ID in place and labeled
3202. Reserved for Future Use
3203. Reserved for Future Use
3204. Reserved for Future Use
3205. Reserved for Future Use
3206. Fixed mask #3 at 6BM in place and labeled
3207. Fixed mask #4 at 6BM in place and labeled
3208. Lead Collimator #2 shielding at 6BM in place and labeled
3209. Safety Shutter #1 shielding at 6BM in place and labeled
3210. Safety Shutter #2 shielding at 6BM in place and labeled
3211. Ratchet Wall Collimator shielding at 6BM in place and labeled
3212. Dipole Shadow shield at Cell 7 Girder 4 in place, banded and labeled
3213. Utility Penetration a shielding at 6 BM in place and labeled
3214. Reserved for future use
3215. Reserved for future use
3216. Reserved for future use
3217. Fixed mask at 7ID in place and labeled **NOT INSTALLED**
3218. Front End Burn Through Device #1 at 7ID in place and labeled
3219. Front End Collimator #1 shielding at 7ID in place and labeled
3220. Dipole Shadow shield at Cell 7 Girder 6 in place, banded and labeled
3221. Front End Burn Through Device #2 at 7ID in place and labeled **NOT INSTALLED**
3222. Front End Collimator #2 shielding at 7ID in place and labeled
3223. Safety Shutter #1 shielding at 7ID in place and labeled

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3224. Safety Shutter #2 shielding at 7ID in place and labeled
3225. Ratchet Wall Collimator shielding at 7ID in place and labeled
3226. Fixed mask #1 at 7BM in place and labeled
3227. Front End Collimator #1 shielding at 7BM in place and labeled
3228. Fixed mask #2 at 7BM in place and labeled
3229. Shadow shield at 7BM in place and labeled
3230. Fixed mask #3 at 7BM in place and labeled

Check 3301 through 3324 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. Fixed mask #4 at 7BM in place and labeled
3307. Front End Collimator #2 shielding at 7BM in place and labeled
3308. Safety Shutter #1 shielding at 7BM in place and labeled
3309. Safety Shutter #2 shielding at 7BM in place and labeled
3310. Ratchet Wall Collimator shielding at 7BM in place and labeled
3311. Utility Penetration a shielding at 7 BM in place and labeled
3312. Dipole Shadow shield at Cell 8 Girder 6 in place, banded and labeled
3313. Front End Fixed Aperture Mask at 8ID in place and labeled
3314. Front End Burn through Device #1 at 8ID in place and labeled
3315. Front End Collimator #1 shielding at 8ID in place and labeled
3316. Reserved for future use.
3317. Front End Collimator #2 shielding at 8ID in place and labeled
3318. Safety Shutter #1 shielding at 8ID in place and labeled
3319. Safety Shutter #2 shielding at 8ID in place and labeled
3320. Ratchet Wall Collimator shielding at 8ID in place and labeled (this verifies Burn Through Device #2 in ratchet wall is present)
3321. Reserved for future use.
3322. Fixed mask #1 at 8BM in place and labeled
3323. Fixed mask #2 at 8BM in place and labeled
3324. 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

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- 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
- 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 Collimator shielding at 4BM in place, banded and labeled inside hutch.

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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 ensures 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)
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 Collimator shielding at 6BM in place, banded and labeled inside hutch.
3614. Utility Penetration shielding at 6 BM in place and labeled
3615. Ratchet Wall Collimator shielding at 7ID in place, banded and labeled inside hutch.
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 Collimator shielding at 7BM in place, banded and labeled inside hutch.
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 ensures 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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5/17/2017

Approved by:

5/17/2017

X Lewis Doom

 Lewis Doom
 Storage Ring Engineer
 Signed by: Doom, Lewis

X Sushil Sharma

 Sushil Sharma
 Technical Authority
 Signed by: Sharma, Sushil

Inspected by

Print Name _____ Signature: _____ Date: _____

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