

Brookhaven National Laboratory/ Photon Sciences Directorate			
Subject:	NLSL-II Storage Ring Pentant 1 Radiation Safety Component Checklist		
Number:	NLSLII-SRPI-KSR-001	Revision:	6
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Prepared by:	L. Doom		

Except for the Mekometer Port (checkpoint 1704), all configurations must match the associated photograph located near the checkpoint.

Inside Storage Ring Pentant 1

Check 1001 through 1018 in Cell 23:

- 1001. Utility Penetration shielding at 22 ID in place and labeled
- 1002. Vacuum flange and blank off at Cell 23 between Girder 2 and 3 in place and labeled
- 1003. Dipole chamber mounting brackets at Cell 23 Girder 3 in place and labeled
- 1004. Vacuum Absorber at Cell 23 between Girder 3 and 4 in place and labeled
- 1005. Dipole Shadow shield at Cell 23 Girder 4 in place, banded and labeled
- 1006. Ratchet Wall Plug (Front end) shielding at 22BM in place and labeled
(This includes copper 3PW Ratchet Wall Cover Plate installed in the center mounting position)
- 1007. Utility Penetration shielding at 22 BM in place and labeled
- 1008. Dipole Shadow shield at Cell 23 Girder 6 in place, banded and labeled
- 1009. Front End Fixed Aperture Mask at 23ID in place and labeled
- 1010. Front End Burn Through Device #1 at 23ID in place and labeled
- 1011. Front End Collimator #1 shielding at 23ID in place and labeled
- 1012. Reserved for future use.
- 1013. Front End Collimator #2 shielding at 23ID in place and labeled
- 1014. Safety Shutter #1 shielding at 23ID in place and labeled
- 1015. Safety Shutter #2 shielding at 23ID in place and labeled
- 1016. Ratchet Wall Collimator shielding at 23ID in place and labeled (This verifies Burn Through Device #2 in ratchet wall is present)
- 1017. Dipole Girder Assembly Shield at 23ID Front End in place and labeled.
- 1018. Wall Penetration and Beam Pipe Shield at 23ID Front End in place and labeled.

Check 1101 through 1109 in Cell 24:

- 1101. Utility Penetration shielding at 23 ID in place and labeled
- 1102. RF waveguide and utility penetration shielding in place and labeled
- 1103. RF waveguide penetration shielding in place and labeled
- 1104. RF cable tray penetration shielding in place and labeled
- 1105. Dipole Shadow shield at Cell 24 Girder 4 in place, banded and labeled
- 1106. Ratchet Wall Plug (Front end) shielding at 23BM in place and labeled
- 1107. Utility Penetration at 23 BM shielding in place and labeled
- 1108. Dipole Shadow shield at Cell 24 Girder 6 in place, banded and labeled

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1109. Ratchet Wall Plug (Front end) shielding at 24ID in place and labeled

Check 1201 through 1206 in Cell 25:

1201. Utility Penetration shielding at 24 ID in place and labeled

1202. Dipole Shadow shield at Cell 25 Girder 4 in place, banded and labeled

1203. Ratchet Wall Plug (Front end) shielding at 24BM in place and labeled

1204. Utility Penetration shielding at 24 BM in place and labeled

1205. Dipole Shadow shield at Cell 25 Girder 6 in place, banded and labeled

1206. Ratchet Wall Plug (Front end) shielding at 25ID in place and labeled

Check 1301 through 1306 in Cell 26:

1301. Utility Penetration shielding at 25 ID in place and labeled

1302. Dipole Shadow shield at Cell 26 Girder 4 in place, banded and labeled

1303. Ratchet Wall Plug (Front end) shielding at 25BM in place and labeled

1304. Utility Penetration shielding at 25 BM in place and labeled

1305. Dipole Shadow shield at Cell 26 Girder 6 in place, banded and labeled

1306. Ratchet Wall Plug (Front end) shielding at 26ID in place and labeled

Check 1401 through 1406 in Cell 27:

1401. Utility Penetration shielding at 26 ID in place and labeled

1402. Dipole Shadow shield at Cell 27 Girder 4 in place, banded and labeled

1403. Ratchet Wall Plug (Front end) shielding at 26BM in place and labeled

1404. Utility Penetration shielding at 26 BM in place and labeled

1405. Dipole Shadow shield at Cell 27 Girder 6 in place, banded and labeled

1406. Ratchet Wall Plug (Front end) shielding at 27ID in place and labeled

Check 1501 through 1516 in Cell 28:

1501. Utility Penetration shielding at 27 ID in place and labeled

1502. Vacuum flange and blank off at Cell 28 between Girder 2 and 3 in place and labeled

1503. Dipole chamber mounting brackets at Cell 28 Girder 3 in place and labeled

1504. Vacuum Absorber at Cell 28 between Girder 3 and 4 in place and labeled

1505. Dipole Shadow shield at Cell 28 Girder 4 in place, banded and labeled

1506. Ratchet Wall Plug (Front end) shielding at 27BM in place and labeled

1507. Utility Penetration shielding at 27 BM in place and labeled

1508. Dipole Shadow shield at Cell 28 Girder 6 in place, banded and labeled

1509. Front End Fixed Aperture Mask at 28ID in place and labeled

1510. Front End Burn Through Device #1 at 28ID in place and labeled

1511. Front End Collimator #1 shielding at 28ID in place and labeled

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1512. Reserved for future use
1513. Front End Collimator #2 shielding at 28ID in place and labeled
1514. Safety Shutter #1 shielding at 28ID in place and labeled
1515. Safety Shutter #2 shielding at 28ID in place and labeled
1516. Ratchet Wall Collimator shielding at 28ID in place and labeled (This verifies Burn Through Device #2 in ratchet wall is present)

Outside Storage Ring Tunnel Pentant 1

Check 1601 through 1630 along the storage ring outer wall

1601. Utility Penetration shielding at 22 ID in place and labeled
1602. Fixed concrete blocks (2) at 22BM in place and labeled
1603. Ratchet Wall Plug (Front end) shielding at 22BM in place, banded and labeled (inside cabin)
1604. Utility Penetration shielding at 22 BM in place and labeled (inside cabin)
- 1604A. Mirror Assembly Shield at 22 BM in place and labeled (inside cabin)
1605. Ratchet Wall Collimator shielding at 23ID in place, banded and labeled (inside hutch) this also insures Burn through Device #2 in ratchet wall is present.
1606. Utility Penetration shielding at 23 ID in place and labeled
1607. Fixed concrete blocks (2) at 23BM in place and labeled
1608. Ratchet Wall Plug (Front end) shielding at 23BM in place, banded and labeled
1609. Utility Penetration shielding at 23 BM in place and labeled
1610. Ratchet Wall Plug (Front end) shielding at 24ID in place, banded and labeled (inside hutch)
1611. Utility Penetration shielding at 24 ID in place and labeled
1612. Fixed concrete blocks (2) at 24BM in place and labeled
1613. Ratchet Wall Plug (Front end) shielding at 24BM in place, banded and labeled
1614. Utility Penetration shielding at 24 BM in place and labeled
1615. Ratchet Wall Plug (Front end) shielding at 25ID in place, banded and labeled
1616. Utility Penetration shielding at 25 ID in place and labeled
1617. Fixed concrete blocks (4) at 25BM in place and labeled
1618. Ratchet Wall Plug (Front end) shielding at 25BM in place, banded and labeled
1619. Utility Penetration shielding at 25 BM in place and labeled
1620. Ratchet Wall Plug (Front end) shielding at 26ID in place, banded and labeled
1621. Utility Penetration shielding at 26 ID in place and labeled
1622. Fixed concrete blocks (2) at 26BM in place and labeled
1623. Ratchet Wall Plug (Front end) shielding at 26BM in place, banded and labeled

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1624. Utility Penetration shielding at 26 BM in place and labeled
1625. Ratchet Wall Plug (Front end) shielding at 27ID in place, banded and labeled
1626. Utility Penetration shielding at 27 ID in place and labeled
1627. Fixed concrete blocks (2) at 27BM in place and labeled
1628. Ratchet Wall Plug (Front end) shielding at 27BM in place, banded and labeled
1629. Utility Penetration shielding at 27 BM in place and labeled
1630. Ratchet Wall Collimator shielding at 28ID in place, banded and labeled (inside hutch) this also insures Burn through Device #2 in ratchet wall is present

Check 1701 through 1704 on the Storage Ring Mezzanine

1701. RF penetration A pipe dog shed in place and labeled
1702. RF penetration BC pipe dog shed in place and labeled
1703. RF penetration DEF pipe dog shed in place and labeled
1704. Mekometer port cover plate labeled and shielding padlocked below cover plate (at cell 27)

Check 1801 in Service Building 1:

1801. Fixed concrete blocks (8) in place and labeled

Check 1901 through 1903 in the RF Building:

1901. RF waveguide and utility penetration shielding in place and labeled
1902. RF waveguide penetration shielding in place and labeled
1903. RF cable tray penetration shielding in place and labeled

Prepared by:

1/3/2018

Approved by:

1/2/2018

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 Lewis Doom Signature: Lewis Doom Date: 9/11/18

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