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C-A OPERATIONS PROCEDURES MANUAL

ATTACHMENT

4.56.af RHIC Zone 12z1 Sweep Checklist

Text Pages 2 through 3

C-A OPM Procedures in which this Attachment is used.		
4.56		

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
_____	_____	_____	_____
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Approved: _____ *Signature on File* _____
 Collider-Accelerator Department Chairman Date

P. Ingrassia, W. MacKay

RHIC Zone 12z1 Sweep Checklist

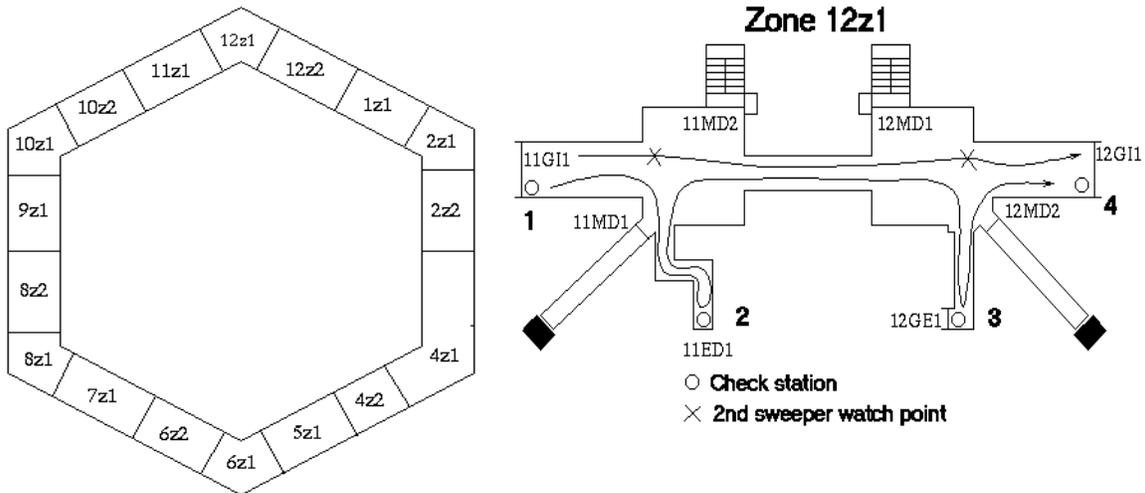
Team Leader (TL) _____ Sweeper#2 (S2) _____

Time: _____ Date: _____

Warning:
IF any workers are encountered during the sweep, **THEN** contact the OC to see if the sweep should be aborted. Workers shall leave the enclosure **WITH** the sweep team. **IF** the workers crash out of the enclosure **AND** do not exit with the sweep team, **THEN** the sweep shall be re-started.

Prerequisites

- Two persons to perform the sweep,
- At least one sweeper not restricted from working at heights over five feet.
- RHIC Zone 12z1 Sweep Checklist (two pages)
- Zones 11z1 and 12z2 should be swept first.
- Required Tools: at least **ONE FLASHLIGHT**,
- Walkie-talkies
- All Doors closed THEN 12z1 set to Controlled Access
- Approved padlocks (4) for Monitored Doors (may be in place)
- Keys: **TWO** Sweep Reset keys S/R015 (one each sweeper), Controlled Access key CA014 (Team leader), two padlock keys.



Note:
References to positions in the tunnel are made using the RHIC magnets. The identity of the local magnet can be determined by looking up at the "lower" cable tray and reading the magnet name on a blue (B) or yellow (Y) label. For example, the convention used is: I05Q17 (Inside, Q17) or O-05Q17 (Outside, Q17).
References are for inside locations and are visible only by the Team Leader

CONTINUED ON REVERSE SIDE

Check

- ___ 1. Sweep team enters 12z1 after TL requests simultaneous release from MCR (12GE1 is the recommended entry door).
- ___ 2. TL opens 12GE1 gate by turning the CA014 key clockwise, in the Controlled Access key-switch while Operator in MCR presses simultaneous release for 12GE1.
- ___ 3. Sweeper 2 passes under the RHIC rings to the outside.

<p>Note: 11MD1, 11MD2, 12MD1, and 12MD2 doors MUST be reset before the sweep begins.</p>

- ___ 4. TL verifies 11MD1 and 12MD2 are RESET by looking for the amber reset lamp on the 11MD1 and 12MD2 security boxes.
- ___ 5. IF one or both doors are not reset, THEN TL shall open the door, walk to the orange door at the end of the tunnel, sweep back to 11MD1/12MD2, close the door, padlock the door, and RESET the gate by turning the S/R015 key in the RESET keyswitch on the security box. TL observes each amber RESET lamp light.
- ___ 6. S2 verifies 11MD2 and 12MD1 are RESET by looking for the amber reset lamp on the 11MD2 and 12MD1 security boxes.
- ___ 7. IF one or both doors are not reset, THEN S2 shall open the door, walk to the bottom of the stairs, go under the stairs, sweep back through 11MD2/12MD1, close the door, padlock the door, and RESET the door by turning the S/R015 key in the RESET keyswitch on the 11MD2/12MD1 security box. TL observes each amber RESET lamp light.
- ___ 8. Sweep Team walks Counter Clockwise (CCW) around RHIC to 11GI1 gate (S2 on the outside).
- ___ 9. TL resets gate 11GI1 using the S/R015 key in the RESET keyswitch.
- ___ 10. TL observes the yellow RESET lamp is lit.
- ___ 11. TL STARTS SWEEP by turning the S/R015 key CW in the SWEEP key-switch (12XCS1)
- ___ 12. TL observes AREA SECURED lamp blink once.
- ___ 13. Sweep Team sweeps Clockwise (CW) to the electrical panels at I-11D5.
- ___ 14. Sweep Team checks behind electrical panels and overhead.
- ___ 15. Sweep Team sweeps CW around RHIC.
- ___ 16. Sweep Team halts and S2 stands static watch at end of I11WTCQ2.
- ___ 17. TL walks down labyrinth to 11ED1.
- ___ 18. TL resets gate 11ED1 using the S/R015 key in the RESET keyswitch.
- ___ 19. TL observes the yellow RESET lamp is lighted.
- ___ 20. TL sets check station #2 (12XCS2) by turning S/R015 key in the SWEEP keyswitch
- ___ 21. TL observes AREA SECURED lamp blink once.
- ___ 22. TL sweeps out the labyrinth and rejoins S2.
- ___ 23. TL checks overhead cryogenic penetration tunnel with a flashlight
- ___ 24. S2 checks the Exhaust Fan Vent Barrier at 11DX magnet.
- ___ 25. Sweep Team sweeps CW through the vapor barrier (door) in the Interaction Region (IR) and closes the door behind them.
- ___ 26. S2 checks the Exhaust Fan Vent Barrier at 12DX magnet.
- ___ 27. TL checks overhead cryogenic penetration tunnel with a flashlight
- ___ 28. Sweep Team halts and S2 stands static watch between I-12 DX& I-12D0.
- ___ 29. TL walks down labyrinth to 12GE1.
- ___ 30. TL sets check station #3 (12XCS3) by turning S/R015 key in the SWEEP keyswitch
- ___ 31. TL observes AREA SECURED lamp blink once.
- ___ 32. TL sweeps out the labyrinth and rejoins S2.
- ___ 33. View overhead utility tube at I-12D1.
- ___ 34. Sweep Team sweeps Clockwise (CW) to the electrical panels at I-12D5.
- ___ 35. Sweep Team checks behind and above electrical panels including overhead alcove barricade is in place.
- ___ 36. Sweep Team sweeps to 12GI1 and verifies both gates are closed.
- ___ 37. TL resets gate 12GI1 using the S/R015 key in the RESET keyswitch.
- ___ 38. TL observes the yellow RESET lamp is lighted
- ___ 39. TL ENDS SWEEP by turning the S/R015 key SWEEP key in the SWEEP keyswitch on 12XCS4. The sweep check station is located **adjacent** to the gate reset box
- ___ 40. TL observes the yellow AREA SECURED lamp is lighted

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- ___41. Sweep Team walks to 12GE1
- ___42 TL contacts MCR for simultaneous release for gate 12GE1.
- ___43 Sweep Team sweeps out zone 12z1 through the 12GE1 door (12GE1 is an RCA gate RESETable from MCR).
- ___44 TL contacts MCR and confirms that gates are reset and 12z1 zone indicates sweep is good.

Note:

IF the AREA SECURED lamp is not lit THEN contact MCR to verify sweep is good.

- ___45 After returning keys to keytree in MCR, TL RESETS 12GE1 from the RHIC panel view in MCR.
- ___46 After returning to MCR and verifying that all information is filled out completely, TL files the checklist in FY_xx Sweep Log binder.