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Date: Oct, 19, 2007
Reviewed by: 10/22/07 Tom Sears
Date: 10/22/07
Approved by: D. I. Lowenstein
Date: 10/22/07

AtR RSC Check-Off List for Au and d-ions Transport to W-Dump only

Completion of this AtR RSC Check-Off List is a prerequisite for introducing either Au-beam or d-beam into the W-dump.

The "NO FEB" Check off List at the MCR must be complete and must remain in effect until the completion of this AtR Check off List. After the completion of this List the LOTO imposed by the "NO FEB" Check off List may be removed to allow Au-beam or d-beam into the AtR Line.

1. _____ _(LP_FEB) The FEB Check off List has been completed

_____ _____(Date/Time)
_____ _____(Person)

The V line MUST remain LOTO during the AtR and RHIC operations.

2. _____(RSCC) VD3&4 DC cables disconnected and RS LOTOed.

_____(Tag #)
_____(Lock #)

The following devices of the AtR Line (mentioned in item #3 below) MUST remain LOTO during the duration of the test of the U-W line with Au-beam or d-beam.

3. _____(LPRHIC) RHIC RSC Check off List complete.

OR

3.1 _____ (LPRHIC) RHIC RSC LOTOed off .

OR

3.3.1 ATR Switch magnet power supply (psswm) or leads LOTO
_____(LPRHIC) _____lock# _____tag# _____date

3.3.2 X-line arc (psxarc90) power supply or leads LOTO
_____(LPRHIC) _____lock# _____tag# _____date

3.3.3 Y-line arc (psyarc90) power supply or leads LOTO
_____(LPRHIC) _____lock# _____tag# _____date

4._____(LEUup) U-line upstream area shielding and barriers inspected and acceptable.

5._____(LEUdown) U-line downstream area shielding and barriers inspected and acceptable.

6._____(LEV) V-Block house shielding and barriers inspected and acceptable for AtR operations.

7._____(LEW) W-line area shielding and barriers inspected and acceptable.

8._____(LEU) Berm Fence Inspected.

9._____(RCD) Post AtR Berm Fence as follows:
Radiation Area, Controlled area, RWP required, RWP located at the bldg. 911 training office. Contact MCR prior to entry at x-4662.

10._____(RCD) Post AtR beam Access gates as follows:
High Radiation Area w/Beam On, Radiation Area, Controlled area, RWP required, RWP located at the bldg. 911 training office. Contact MCR prior to entry at x-4662.

11._____(RSCC) Shield plug for TOF port reviewed and approved for AtR operation.

12._____(SGL) Chipmunks required for U-line-upstream in place (See attached list).
_____(IG)

13._____(SGL) Chipmunks required for W-line tested, in place, including interlock function as
_____(IG) needed (See attached list).

14._____(SGL) PASS tests complete for running beam to the W-line dump.

15. _____(LPU) LTB RS LOTOed off to prevent protons from LINAC.

16. _____(OC) Berm fenced area swept and secured.

17. _____(RSCC) Issues of stripping Au beam in the transfer line have been removed.

18._____(LPW) U, V, W, lines ready for Heavy Ion Beam to the Wdump.

19. _____ (OC) List completion verified by on-duty operations coordinator.

When the list above is complete then Au may be extracted from the AGS to the W-line Beam Dump.

Note: SGL signs for the interlock functioning on the chipmunk. The instrumentation group signs for the placement, computer readout and testing.

ES&H	Env. and Safety Coord. A. Etkin
RCD:	Radiation Controlled Division (D. Ryan or designate)
LEUdown)	J. Scaduto
LEUup:	D. Phillips
LEW:	D. Phillips
LEV:	C. Pearson
LPFEB:	N. Tsoupas
LPU:	N. Tsoupas
LPV:	N. Tsoupas
LPW:	N. Tsoupas
LPRHIC:	A. Drees
MCRGL:	MCR Group Leader: Peter Ingrassia (or designate)
RSC:	Radiation Safety Committee member
RSCC:	Radiation Safety Committee Chairperson: D. Beavis or designate
SEP:	AGS S&EP representative
SGL:	Security Group Leader J. Reich (or designate)
IG:	Instrumentation Group (R. Atkins or designate)
OC:	Operations Coordinator
ACG	Access Control Group (J. Reich or designate)
RCT	Radiation Control Technician

U-LINE CHIPMUNKS

Name	Location	Interloc (Alarm) Level [mrem/hr]	Comments
NMO208	Outside gate VPGE1 (outer entrance blockhouse)	By-Pass	
NMO209	On berm downstream of VQ9 next to NMO210	20.0	
NMO210	On berm downstream of VQ9 next to NMO209	20.0	
NMO211	Dehumidifier room (igloo)	2.5	
NMO213	Outside gate UGE1 (upstream entrance to U-line)	20.0	
NMO222	On berm besides vent shaft over 0-degrees alcove	20.0	Optional
NMO223	At corner of substation nearest upstream U-line	20.0	Optional
NMO81	Inside UGE2	20.0	
NMO82	U/S WEST-U LINE-1	2.5	
NMO83	U/S WEST-U LINE-2	2.5	
NMO84	U/S WEST-Hg TGT	2.5	
NMO85	D/S ULINE BLOCKHSE	2.5	
NMO86	Inside UGE3	50.0 (20.0)	

W-LINE CHIPMUNKS

Name	Location	Interlock (Alarm) Level mrem/hr	Comments
NMO216	South edge of Thompson Rd. above Y-line. Another chipmunk connected in series placed on North edge	2.5	
NMO217	South edge of Thompson Rd. above X-line. Another chipmunk connected in series placed on North edge	2.5	
NMO218	Inside weather door at gate WGE2	2.5	
NMO219[1]	Downstream of W-line shield wall	2.5	

[1] NMO219 interlock is disabled when beam is allowed in W-line