Prepared by: Vincent Schoefer
Date: December 28, 2010
Reviewed by: [signature]
Date: 12/29/10
Approved by: [signature]
T. Roser
Date: 12/29/10

AtR RSC Check-Off List for Low Intensity Protons to be Transported to the W-Dump only

Completion of this AtR RSC Check-Off List is a prerequisite for transporting proton beam, produced by the polarized proton source, down to 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._____(LEU) U-line upstream area shielding and barriers inspected and acceptable.

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

6._____(LEU) 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:
Radiation Area, Controlled area, RWP required, RWP located at the bldg. 911 training office. Contact MCR prior to entry at x-4662.

11._____(ACG) Chipmunks required for U-line-upstream in place (See attached list).

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

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

14._____(IGH) The AGS B15 Current transformer is functional and will allow an upper limit of **$2.5x10^{12}$ protons per AGS cycle.**

15._____(MCRGL) Procedure in place to limit the number of protons lost in Upstream AtR (U & W).

16. _____(ACG) Active temporary changes/bypasses in place for AtR have been reviewed with RSCC.

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

18. _____ (LPU) Steel block in place before U stub tunnel.

19._____(ACG) The B15 current transformer interlocks have been functionally tested.

20._____(MCRGL) Procedure in place for setup, testing and calibration of the B15 current transformers.

21._____(LPU) U, V, W, lines ready for polarized proton Beam to the W dump.

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

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

ES&H	Env. and Safety Coord. A. Etkin
LEU	D. Phillips
LPU:	V. Schoefer
LPRHIC:	A. Drees
MCRGL:	MCR Group Leader: Peter Ingrassia (or designate)
RSCC:	Radiation Safety Committee Chairperson: D. Beavis or designate
RCD:	Radiological Control Division (P. Bergh or designate)
ACG:	Security Group Leader J. Reich (or designate)
OC:	Operations Coordinator
RCT:	Radiation Control Technician

U-LINE CHIPMUNKS

Name	Location	Interlock (Alarm) Level [mrem/hr]	Comments
NMO210	Above UD5	NA(4)	
NMO213	Outside gate UGE1 (upstream entrance to U-line)	20.0 (4)	
NMO81	Inside UGE2	20.0 (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.	2.5 (1.0)	
NMO217	South edge of Thompson Rd. above X-line. Inside	2.5 (1.0)	
NMO218	weather door at gate WGE2	20. (2.0)	
NMO238	Thompson road X-line	2.5 (1.0)	
NMO237	Thompson Rd. Y-line	2.5 (1.0)	