

Prepared by: Vincent Schoefer *VS*
 Date: November 9, 2009
 Reviewed by: *James Beasly*
 Date: *11/9/09*
 Approved by: *D. I. Lowenstein*
 Date: *11/9/09*

**AIR CHECK-OFF LIST
 AGS INJECTION AND CIRCULATING BEAM
 WITH NO BEAM EXTRACTED TO U LINE**

NOTE: Completion of this check-list is required in order to inject any ion species, including polarized protons, into the AGS. High Intensity proton operation is prohibited. No beam is to be extracted from the AGS to the U Line.

FEB LOCKED OUT BY:

1. ____ (LP) H10 Ejector Magnet Power Supply Locked out
 _____ (Date/Time)
 _____ (Tag No.)
 _____ (Lock No.)
 _____ (Date/Time Tag Removed)

2. ____ (LP) UD1 and D2 (UARC4) Power Supply Locked Out
 _____ (Date/Time)
 _____ (Tag No.)
 _____ (Lock No.)
 _____ (Date/Time Tag Removed)

NOTE: When **BOTH** the [G09C_DC Bump] **AND** [H11C_DC Bump] are in RS LOTO, **EITHER** the H10 Ejector (item #1 above) **OR** UD1&2 (item #2 above) (**NOT BOTH**) may have the RS LOTO removed.

The following RS LOTO (items #3 and #4 below) are in place of, (Liaison Physicist initial only ONE of the items in the line below),

____ (LP) H10 Ejector OR ____ (LP) UD1&2

3. ____ (LP) G09C_DC Bump Power Supply Locked Out
 _____ (Date/Time)
 _____ (Tag No.)
 _____ (Lock No.)
 _____ (Date/Time Tag Removed)

4. ____ (LP) H11C_DC Bump Power Supply Locked Out
 _____ (Date/Time)
 _____ (Tag No.)
 _____ (Lock No.)
 _____ (Date/Time Tag Removed)

Comments: _____

- 5. ____ (RCT) Radiation Postings on UGE1 Gate and UGI1 (Interior to U line) Gate.
- 6. ____ (LP) U Line ready for AGS injection and acceleration of all ion species, including polarized protons but NOT high intensity protons..
- 7. ____ (OC) Completion of above list items verified by on duty operations coordinator.

The Main Control Room may now inject and accelerate beam in the AGS.
NO BEAM EXTRACTION TO U LINE IS PERMITTED.

MCR OC is responsible to ensure Radiation Surveys of the area are done at the earliest possible time.

ACG	Access Controls Group (J. Reich or designate)
IG	Instrumentation Group (R. Atkins or designate)
LP	Liaison Physicist AtR (V. Schoefer, K. Brown or designate)
RCT	Health Physics (Radiation Control Technician on duty)
OC	MCR Operations Coordinator (O.C. on duty)