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Date: 12/22/14

AtR CHECK-OFF LIST
AGS INJECTION AND ACCELERATED BEAM
WITH NO BEAM EXTRACTED TO U LINE

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 not allowed by this list. No beam is to be extracted from the AGS to the U Line.

NOTE: When **BOTH** the [G09C_DC Bump] **AND** [H11C_DC Bump] are in RS LOTO, **EITHER** the H10 Septum **OR** UD1&2 **NOT BOTH** may have the RS LOTO removed.

One of the following boxes A or B needs to be filled out in its entirety in order to satisfy this check-off list.
FEB Locked out by: H10 Septum and UD1&2, use lockout option A
FEB Locked out by: (H10 Septum OR UD1&2) AND (G09 Bump AND H11 Bump), use lockout option B

Lockout option A	**Lockout option B**
A1._____(LPU) H10 Septum Magnet Power Supply Locked out **AND** A2._____(LPU) UD1 and D2 (UARC4) Power Supply Locked Out	B1. _____(LPU) ***Either*** the H10 Septum ***or*** the UD1&2 power supply has been locked out. Indicate which here:_____ **AND** B2._____(LPU) The G09C DC Bump ***and*** the H11C DC Bump power supplies have been locked out.
H10 Septum Magnet Power Supply Locked out _____*(Date/Time)* _____*(Tag No.)* _____*(Lock No.)* *UD1 and D2 (UARC4) Power Supply Locked Out* _____*(Date/Time)* _____*(Tag No.)* _____*(Lock No.)*	*H10 Septum or UD1&2 Power Supply Locked out (item indicated in B1)* _____*(Date/Time)* _____*(Tag No.)* _____*(Lock No.)* *G09C_DC Bump Power Supply Locked Out* _____*(Date/Time)* _____*(Tag No.)* _____*(Lock No.)* *H11C_DC Bump Power Supply Locked Out* _____*(Date/Time)* _____*(Tag No.)* _____*(Lock No.)*

3. _____(RCT) Radiation Postings on UGE1 Gate and UGI1 (Interior to U line) Gate in place.

4. _____(ACG) Functional checks of U upstream interlocks complete.

5._____(ACG) Any active bypasses in the U upstream interlocks have been discusses with the RSCC.

5._____(LPU) U Line ready for injection and acceleration of all ion species in the AGS, including polarized protons (this item does not allow high intensity protons).

6. _____(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)
LPU	Liaison Physicist AtR (V. Schoefer or designate)
RCT	Health Physics (Radiation Control Technician on duty)
OC	MCR Operations Coordinator (O.C. on duty)