Post Beam Checklist for an extended Maintenance

Last revised 8/11/08 **Date _____time _____**

This checklist will be performed when the maintenance period is expected to last more that 2 weeks

Person responsible for checklist _____
People checking list _____

Power supplies

Left

Q1

___ set current to 0 amps by remote control

Q2

___ set current to 0 amps by remote control

Q3

___ set current to 0 amps by remote control

Dipole

___ set current to 0 amps by remote control

Right

Q1

___ set current to 0 amps by remote control

Q2

___ set current to 0 amps by remote control

Q3

___ set current to 0 amps by remote control

Dipole

___ set current to 0 amps by remote control

Target

___ **NOTE : LOOK FOR "RADIATION AREA" SIGN and OBEY**

___ Ensure that the protective shields for the vacuum windows for the cryo target chamber and spectrometers are installed if a vacuum is present.

___ **NOTE : DO NOT** bleed up target chamber without the concurrence of the Cryo target group or **CELL RUPTURE** could result! Bleeding up the target chamber is NOT part of this checklist.

Spectrometers

___ **NOTE : LOOK FOR "RADIATION AREA" SIGN and OBEY**

___ Right Spectrometer turbo valve closed
Switch located in rack 1H72B01

___ Right Spectrometer turbo off and its fans are unplugged
Switch located in rack 1H72B01
Pump located at Dipole entrance

___ Right Spectrometer backing pump off and vented to atm.
Pump located at Dipole entrance

___ Right Spectrometer cold cathode gage off
located in rack 1H72B01

___ Right Spectrometer convectron gage on
located in rack 1H72B01

___ Install guards on entrance and exit vacuum windows

___ Bleed up spectrometer vacuum to Atm.
Valve located on turbo manifold at dipole entrance

___ Left Spectrometer turbo valve closed

Switch located in rack 1H71B01

___ Left Spectrometer turbo off and its fans are unplugged
Switch located in rack 1H71B01
Pump located at Dipole entrance

___ Left Spectrometer backing pump off and vented to atm.
Pump located at Dipole entrance

___ Left Spectrometer cold cathode gage off
located in rack 1H71B01
___ Left Spectrometer convectron gage on
located in rack 1H71B01

___ Install guards on entrance and exit vacuum windows

___ Bleed up spectrometer vacuum to Atm.
Valve located on turbo manifold at dipole entrance

Left

Q1

___ ensure 0 current status on local readout
___ If maintenance is required, turn off power at the disconnect switch and lock it out using an administrative lock and tag. You must have electrical worker training and proper PPE to complete this step.

Q2

___ ensure 0 current status on local readout
___ If maintenance is required, turn off power at the disconnect switch and lock it out using an administrative lock and tag. You must have electrical worker training and proper PPE to complete this step.

Q3

___ ensure 0 current status on local readout
___ If maintenance is required, turn off power at the disconnect switch and lock it out using an administrative lock and tag. You must have electrical worker training and proper PPE to complete this step.

Dipole

___ ensure 0 current status on local readout
___ If maintenance is required, turn off power at the disconnect switch and lock it out using an administrative lock and tag. You must have electrical worker training and proper PPE to complete this step.

Right

Q1

___ ensure 0 current status on local readout

___ If maintenance is required, turn off power at the disconnect switch and lock it out using an administrative lock and tag. You must have electrical worker training and proper PPE to complete this step.

Q2

___ ensure 0 current status on local readout

___ If maintenance is required, turn off power at the disconnect switch and lock it out using an administrative lock and tag. You must have electrical worker training and proper PPE to complete this step.

Q3

___ ensure 0 current status on local readout

___ If maintenance is required, turn off power at the disconnect switch and lock it out using an administrative lock and tag. You must have electrical worker training and proper PPE to complete this step.

Dipole

___ ensure 0 current status on local readout

___ If maintenance is required, turn off power at the disconnect switch and lock it out using an administrative lock and tag. You must have electrical worker training and proper PPE to complete this step.

Entrance beam tube

___ **NOTE : LOOK FOR "RADIATION AREA" SIGN and OBEY**

___ ensure that all of the local beam line switches are in the off position

___ Turn beam line valve control key switch to maintenance

These switches are located in rack 1H75B20

___ ensure that the beam line vacuum valves are closed

___ unplug the all metal VAT valve upstream of the target

___ E P turbo valve located between the turbo and the EP chamber is closed

___ E P turbo controller located under EP chamber in the lead bricks is off

___ E P backing pump located on the balcony under the turbo is off and vented.

___ Girder turbo valve closed at the turbo and the backing pump

___ Girder turbo off

___ Girder backing pump off and vented to atm.

___ instrument air compressor functioning normally

Exit beam tube

___ **NOTE : LOOK FOR "RADIATION AREA" SIGN and OBEY**

___ Have MCC close the exit beam line valve

___ beam line valve closed and unplugged

This plug is below the exit beam line valve downstream of the target

___ exit beam line turbo backing pump valve at turbo closed
___ exit beam line turbo off at rack 1H75B04 and the turbo fans unplugged
___ exit beam line backing pump off and vented to atm.
___ Convectron gages on in rack 1H75B09

Dump

___ **NOTE : LOOK FOR "RADIATION AREA" SIGN and OBEY**
___ turn off diffuser cooler and unplug its fan
___ Inspect visible areas for water leaks

Hall

___ **NOTE : LOOK FOR "RADIATION AREA" SIGN and OBEY**
___ Inspect power supply platforms, spectrometers, and the rest of the Hall, looking for water leaks and cryogenic plumes
___ Make the following entries into the HALOG
___ ensure that the tech on call strip charts are running on the computer in the Hall

"Checklist Complete and Target Window and spectrometer Guards are installed"
"The tech on call at shutdown is _____"
Note any outstanding issues not completed on the checklist
Note any special requirements or restrictions