Prepared by: C. Carlson
Date: April 16, 2014
Reviewed by: _____ (RSCR)
Date: 4/29/14
Approved by: _____
(C-A Dept. Chairman)
Date: 4/29/14

Target Room 2, 28 MeV Proton Radiation Safety Checklist

April 16, 2014

Proton beams > 20 MeV and > 100 nA should not be delivered to Target room 2 - 40 degree line until the following checklist is completed.

TR 2 - 40 degree beam plug should be inserted and locked until completion of the checklist items. (If necessary, equivalent devices and/or procedures may be substituted with appropriate LP or RSC approval.

TR 2 40 degree beam plug LOTO'd (Building 901A):

Tag No. _____ Lock No._____
Person _____ Date _____

____ (TOC) Functional check of Tandem primary interlocks is current.

____ (ACG) Functional check of Tandem redundant interlocks complete

____ (BCG) All Tandem and target room radiation monitor calibrations current

____ (RCD) Gates/doors inspected and properly posted:
a. Tandem control room / accelerator room
b. Target Room 2

____ (LPT) Beam stops in place and functioning:
a. MP6 LE
b. MP7 LE

____ (TOC) The Tandem VDG shielding is intact and has not been modified.

____ (RSCR) Calculation for the activation of the cooling liquid nitrogen conducted and results reviewed.

____ (RSCR) The ODH hazard calculation conducted for the failure of the 160 liter dewar and acceptable.

____ (RCD) Target Removal/Transport procedure is approved and RWP with guidance for the same is in place.

____ (RCD) A dry run/test of the target removal/transport procedure conducted, if necessary procedure and RWP modified.

____ (RCD) 801 Personnel to be notified of target material transfer.

____ (LPT) Target temperature monitor is in place and remote latching alarm has been tested.

____ (LPT) Tandem operators have been notified of the administrative limit of 1uA beam current on target. To immediately insert image faraday cup if temperature alarm activates and contact supervisor for guidance. Only supervisor can reset alarm.

____ (LPT) Tandem operators notified of the requirement to keep TARGET ROOM 2 secured for at least two hours following the irradiation.

____ (LPT) All above TTB radiation safety checklist items have been initialed as complete.

ACG	C-A Access Controls Group (J. Reich, or designee)
LPT	Liaison Physicist for the TVDG (J. Alessi, or designee)
OC	MCR Operations Coordinator
DC	C-AD Chair (T. Roser, or designee)
RCD	Radiation Controls Division (P. Bergh, or designee)
RSCR	Radiation Safety Committee Representative (D. Beavis, or designee)
TOC	Tandem Operations Coordinator (C. Carlson, or designee)
BCG	Beam Components and Instrumentation Group (T. Curcio or designee)