

**MUCOOL TEST AREA
SOLENOID MAGNET PRE-OPERATIONAL SURVEY
FOR FERROUS MATERIALS AND VERIFICATION OF POSTINGS
Revision 1**

The superconducting test magnet in the MTA experimental hall has an open bore configuration and is rated for 5 Tesla on-axis inside the bore. The magnetic field falls off rapidly away from the center of the magnet. Any ferrous objects left around the magnet could be pulled in with great force and cause damage to the magnet and other equipment inside and around it. In addition, any personnel standing between such an object and the magnet would be at risk of serious injury. Therefore, a clearly marked buffer zone, demarcated with warning signs and barricade, shall be maintained around the magnet when the magnetic field is present and a visual check performed before powering the magnet to ensure no potential projectiles have been introduced.

THIS SURVEY AND VERIFICATION MUST BE PERFORMED AND DOCUMENTED ON THIS FORM EVERY TIME THAT THE MAGNET DC POWER SUPPLY GOES FROM A DE-ENERGIZED STATE TO AN ENERGIZED STATE. THE SURVEY AND VERIFICATION MUST BE PERFORMED IMMEDIATELY PRIOR TO ENERGIZING THE MAGNET DC POWER SUPPLY.

It is expected that the survey and verification will be performed after the MTA Hall has been secured, i.e., the survey and verification should occur after the MTA Hall is in Controlled Access mode.

The following individuals are authorized to perform the ferrous materials survey and perform the verification that the hoist chain lock, postings, and barricades are in place:

Michael Backfish;
Al Moretti; and
Yagmur Torun.

Completed forms are to be sent to AD/ESH MS 371 where they will be filed.

Verification of Removal of Unapproved/Uncontrolled Ferrous Materials from the >300 Gauss Region Around the Solenoid Magnet

Signature/ID/Date/Time _____

Verification of Hoist Travelling Chain Lockout to Ensure the Hoist Cannot Be Moved into the >300 Gauss Region Around the Solenoid Magnet

Signature/ID/Date/Time _____

Verification of Magnetic Field Postings and Barricade Around the >300 Gauss Region Around the Solenoid Magnet

Signature/ID/Date/Time _____