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## SMD Operations Procedures Manual

### 8.1.1.12 SAFETY COMMUNICATION PROCEDURE FOR NON-MAGNET TEST GROUP PERSONNEL ENTERING RED FENCED AREAS

Text Pages 1 through 3

#### Hand Processed Changes

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### **8.1.1.12 Safety Communication Procedure for Non-Magnet Test Group Personnel Entering Red Fenced Areas**

#### **1.0 Purpose and Scope**

Precautions and actions for test group personnel and for visitors who must enter red fenced areas during operations.

#### **2.0 Responsibilities**

The operator is responsible for performing this procedure and documentation.

#### **3.0 Prerequisites**

- 3.1 Personnel who perform the procedure shall be listed as an Authorized Magnet Test Group Control Room Operator. The list is available from the Magnet Test Control Room Supervisor. Operators performing this procedure are to make a complete descriptive entry in the Control Room Log.

#### **4.0 Precautions**

- 4.1 Anyone wishing access to magnet testing areas should check in with Control Room Supervisor or Test Operator(s) for entry.

#### **5.0 Procedure**

Area of coverage:

- A. Red fenced dewar areas (dewar #2, #3, diode test dewar).
- B. Red fenced calibration lab area.
- C. Other areas that are set up and marked off for magnet testing.

Hazards are:

- A. High electrical currents.
- B. Supercritical helium gas and liquid nitrogen (both at low temperature and high pressure).
- C. Static magnetic fields.

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Inside the red fenced areas are potential hazards at various times of usage. The Control Room Operator(s) must warn non-Magnet Test Group (MTG) personnel of potential hazards, and to document egress event. Observe the following rules:

- 5.1 Personnel who must be in these areas must be informed of the potential safety hazards which are present.
- 5.2 The Operator shall walk untrained personnel through the area and verbally/visually point out all potential hazards. Note any hazards that are accessible from a ladder, or not ordinarily a danger at floor level.
- 5.3 Note warning signs (lights, indicators, warning or startling sounds, mechanical/electrical condition status indicators, etc.) that warn of presence of active potential hazard of equipment in the area.
- 5.4 Note all exits from area. Note phone locations and control room extension. Note also any padlocks and hasps used to secure area from unauthorized entry during operation. The control room Operator will hold on to the padlock key and relock the entry gates when ready to proceed with testing. Inform the worker which operator will unlock the area for him/her.

#### **CAUTION**

**If 110 vac power is needed for work, instruct personnel to use GFIS or GFI outlets on side of dewar.**

- 5.5 In the Vertical Dewar area, note vulnerable spots on cryo plumbing (bellows, trees, flex pipes ) and water lines. Because of multiple potential hazards in vertical dewar areas and the calibration lab area (as well as lead can area in MAGCOOL bays), no personnel shall be allowed in vertical dewar areas and calibration lab (or magcool lead can) while a magnet is powered.
- 5.7 Note in the Log the personnel who were informed of hazards, their name(s) and extension(s), and the name of the Operator who gave instruction. Note the time he/she entered and exited the red fenced areas. Note any lockout/tagout performed by other personnel that will affect MTG equipment.
- 5.8 Make it clear that the worker must inform/alert an Operator every time he/she needs to enter red fenced areas, regardless of the length of time.

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- 5.9 Any difficulties, unknowns (on proper procedure, new hazards, etc.), or violations of this procedure should be noted in detail and immediate notification shall be given to a supervisor and RHIC ES&H Coordinator. If personnel working inside red fenced areas will delay magnet testing, consult with the Magnet Test Control Room supervisor or crew chief.

### **CAUTION**

**DO NOT operate if there is any danger of injury!**

- 5.10 For multiple shifts, Operators to inform the incoming Operators at turnovers and inform non-MTG personnel that testing will continue past normal working hours. At start of shift, prior to testing, the Operator shall check for non-MTG personnel presence in red fenced areas. Randomly walk through test areas and/or scan test areas with control room monitors/cameras. Even if testing is not going to be resumed on second shift the access gate shall be secured.

### **6.0 Documentation**

Magnet Test Group Control Room Log

### **7.0 References**

- 7.1 8.1.1.3, "Operation of 8.5kA Power Supply For Vertical Magnet Testing.
- 7.2 8.1.1.30, "Operation of Dual ACME Power Supplies".

### **8.0 Attachments**

None