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C-A OPERATIONS PROCEDURES MANUAL

8.13.2 C-A Procedure for Radioactive Material Control

Text Pages 1 through 3

Attachments

Hand Processed Changes

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Approved: _____ *Signature on File* _____
Collider-Accelerator Department Chairman Date

P. Cirnigliaro

8.13.2 C-A Procedure for Radioactive Material Control

1. Purpose

To provide guidance in the identification, transport, and use of, radioactive equipment and shielding.

1.1 Definitions:

1.1.1 Activation Areas: examples are AGS Ring, Primary Caves, and selected secondary beam lines. The Radiation Safety Committee designates these areas.

1.1.2 In-Use Radioactive Materials: radioactive materials that are part of an active/available process or system. The radioactive material can be an actual physical part of a system (e.g. installed beam line, magnets, etc.), or support the operation of a system (e.g. shielding, rebuilt equipment, etc.). Such “in-use” materials are exempt from the labeling requirements of Reference 7.2. These areas do not need RMA custodians assigned or material inventories, and have concurrence of the C-A FS Representative.

1.1.3 Radioactive Materials Areas: examples are Buildings 912, 922, 923, the Steel Yard, and the Block Yard. These areas are to be designated by the C-A Radiological Control Coordinators and C-A FS Representative.

2. Responsibilities

2.1 It is the responsibility of any individual removing C-A equipment from posted areas, to have these items surveyed.

2.2 It is the responsibility of the supervisor to ensure that any equipment which is activated, and is located in his area, or worked upon, or moved by individuals reporting to him, is properly surveyed and labeled by RCT's.

2.3 Radiological Control Technicians (RCT's) are responsible for providing routine surveys of Radioactive Materials Areas. Health Physics shall perform the monitoring and labeling of items.

3. Prerequisites

3.1 Training shall include, at a minimum, Radiation Worker I Training.

3.2 Monitoring of Radioactive Materials Areas shall be performed by RCT's using properly calibrated and source checked instruments.

- 3.3 Confinement requirements for Radioactive Materials Areas are established by the use of signs, shielding, and fences, in order to properly contain and work with activated equipment or shield blocks.
- 3.4 RMA responsible persons shall be trained on their responsibilities as outlined in Reference 72.
- 3.5 Individuals who remove materials from a Radioactive Area shall be appropriately trained radiation workers.

4. Precautions

- 4.1 Failure to follow survey and labeling requirements can result in unnecessary exposure to workers.

5. Procedures

- 5.1 Materials moving from Radioactive Materials Areas to another Radioactive Materials Area, or to a low background area for subsequent monitoring by RCTs, shall be in control of the person making the transfer at all times, or must be monitored and labeled as per attachment 8.1, [C-A-OPM-ATT 8.13.2.b, "Activated Materials Rules"](#).
- 5.2 Materials moving from Radioactive Materials Areas shall be monitored and labeled as per attachment 8.1, [C-A-OPM-ATT 8.13.2.b](#), by a RCT.
- 5.3 Materials moving from Radioactive Materials Areas to the radioactive waste stream, shall have an indication of the radiation level as to reduce the dose of those persons who handle radioactive waste. All material removed to the waste stream shall comply with [C-A-OPM 8.20.2](#), "Radioactive Waste Disposal".
- 5.4 When a large activated item is to be broken down into component parts, the Radioactive Materials Area where the item is broken down, must be monitored and labeled by RCT's. Rope, stanchions, and signs, are appropriate to control a temporary area of this type.

6. Documentation

None

7. **References**

- 7.1 [C-A-OPM 8.20.2 “Radioactive Waste Disposal”](#).
- 7.2 RCD Sitewide [SOP, FS-SOP-3010, Labeling, Documentation and Handling of Radioactive Material](#).
- 7.3 [C-A RMA Custodian Listing](#).

8. **Attachments**

- 8.1 [C-A-OPM-ATT 8.13.2.b, "Activated Material Rules"](#).