

# Memorandum

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**Date:** April 7, 2022  
**To:** Maddie Schoell, RPO Department Head  
Matthew Quinn, SRSO

**From:** Joel Fulgham, RCT Group Leader

**Re:** Down posting of Controlled Areas/Radioactive Material Areas to Controlled Area

**Message:**

This memo is to lay out justification to reduce the areas around the lab that are currently posted as, Controlled Areas/Radioactive Material Areas to only Controlled Areas

## FRCM Articles

232.1 Areas within the site boundary should be clearly posted to alert personnel to the presence of radiation and radioactive materials above natural background levels. Each access point to such an area shall be posted "CAUTION, CONTROLLED AREA" whenever one or more radiological areas or radioactive material areas exist within a larger area that is accessible to Laboratory personnel.

232.4 If the boundaries of the Controlled Area and Radiological Area or Radioactive Material Area are congruent, the appropriate sign identifying the greater hazard is considered to be sufficient. However, if multiple Radiological Areas (Articles 234, 235) or Radioactive Material Areas (Articles 233) are found within a given Controlled Area, the latter may be specifically posted. If there is the potential for prompt radiation to be present in an area, additional posting specified in Article 236 is also required.

233.2 Areas within a Controlled Area (see Article 232) accessible to individuals in which items or containers of radioactive material exist shall be posted "CAUTION -- RADIOACTIVE MATERIAL" or "CAUTION, RADIOACTIVE MATERIAL AREA", unless:

- a. the area boundary is congruent with a Radiological Area boundary, in which case the Radiological Area posting is sufficient.
- b. each item or container is labeled in accordance with Article 413 such that individuals entering the area are made aware of the hazards; or
- c. the radioactive material of concern consists solely of structures or installed components which have been activated.

Survey requirements will be:

1. An analyst survey will be completed on all areas using the 2000 cpm>Bkg or 2X background whichever is less for the structure. Any readings higher than background will be noted and explained as 'rad material locker or correctly labeled rad material'. If any discrepancies are noted the rad material labels will be updated and correctly filled out.

2. A contamination survey will be completed using a map that is marked off with 10'X10' boxes, taking a contamination wipe at least every 100 square feet, ensuring areas of interest (i.e., offices, areas where radioactive material had been worked on, etc.) are sufficiently surveyed. Planned survey maps will be reviewed and approved by the RSO prior to performing the survey to ensure sufficient coverage. The precise location will be determined at the time of the survey depending on furniture and cabinet locations. Wipes will be submitted to RAF for gross alpha/beta counting and if any are flagged, they will be resubmitted for API analysis. The number of wipes submitted shall be limited to 80 wipes, limited to the capacity of the gross alpha/beta counter. Some large areas may require multiple surveys to complete with this requirement.

Prior to down posting:

The completed survey package, maps and wipe reports, will be submitted to the Assigned RSO for review and approval.

Following these rules, plans will be developed to reduce the areas that are posted as Radioactive Material Areas and discussed with the SRSO, RPO Department Head and effected groups, Department Heads and building management. Once the down posting is completed the new configurations will be indicated on the semi-annual posting audit maps.

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Maddie Schoell – Radiation Physics Operation Department Head

Date: \_\_\_\_\_

\_\_\_\_\_  
Matthew Quinn – Senior Radiation Safety Officer (SRSO)  
*Distributed via e-mail.*

Date: \_\_\_\_\_

cc:  
Radiation Safety Officers