

## **Maine Radiation Control Program Policy and Guidance 93-01**

April 23, 1993

SUBJECT: Cobalt-57 Sources in Medical use.

The State of Maine Rules Relating to Radiation Protection (Rules) section G.19 authorizes calibration and reference sources for people licensed under G.3 (medical use). Part G.19 further stipulates that the sealed sources must be manufactured and distributed by people specifically licensed pursuant to NRC, Licensing State, or Agreement State regulations. The primary manufacturers of Cobalt-57 sources are CIS-US, Dupont, and Amersham. CIS-US and Dupont are both Massachusetts residents, which is neither a licensing state or an agreement state and therefore the manufacture of Co-57 sources is not licensed in Mass. and these sources do not fall under G.19.

The RCP understands that the use of Co-57 in dose calibrator constancy and accuracy tests is generally accepted as the norm. We also understand that Co-57 flood sources are easier to handle and in general safer than the technetium-99m liquid flood sources used in the past. The Co-57 flood sources being easier to handle and use may actually increase quality assurance of nuclear medicine procedures due to increased flood checks of camera equipment.

In the past no Co-57 sources have been found to leak in the biannual leak tests regularly conducted. Due to the lack of manufacturer oversight a problem may occur in the future which is to be avoided due to the sensitivity of the dose calibrator and camera equipment and the difficulties of decontaminating such equipment.

We have decided that Co-57 sources can be used in nuclear medicine but additional oversight must be included. The Co-57 sources will be added to specific licenses and increased wipe tests shall be performed. Co-57 sources that are used as calibration and reference sources under Part G of the Rules shall be wipe tested before initial use and added to the weekly wipe test records required by G.25.E. Records may be kept in disintegrations per minute as are other records required by G.25.E and action levels shall be set. This new requirement does not change or negate any other requirements in these regulations.

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