

METHOD

1. WIPE TEST

The appropriate accessible surfaces of the device in which the Cobalt-60 sources are permanently mounted shall be wiped thoroughly with a piece of filter paper of high wet strength and absorption capacity, which has been slightly moistened with water. The paper is allowed to dry and the radioactivity on the paper is then measured with an appropriate detector. If the measurement indicates the total activity removed to be less than 0.05 microcuries the result is described as negative, i.e. no removable contamination is detected (applies for US NRC Regulated Facilities - see DG-0347).

2. NOTE ON MEASUREMENT

Tests should be made with equipment comparable to the BERTHOLD RATO/F Survey Meter (as used by the Service Department of AECL) which has been calibrated to AECL standards. With this instrument, a scale reading of 400 counts per minute above background is equal to 0.05 microcuries of Cobalt-60 contamination. A typical "natural background" on this instrument is 20 - 30 counts per minute. Thus the limit of detection may be considered to be equal to the background reading or equivalent to 30 counts per minute or 0.004 microcuries of Cobalt-60. At this level of activity the service representative should use great care to ensure he is not observing random fluctuations in background.

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ATOMIC ENERGY OF CANADA LIMITED COMMERCIAL PRODUCTS P.O. BOX 6300, Postal Station J, OTTAWA, CANADA. K2A 3W1		TITLE REMOVABLE CONTAMINATION TEST FOR AECL EQUIPMENT CONTAINING COBALT-60 SOURCES	
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