



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
BOLLING AFB DC 20332-6188

0299

8 AUG 1985

REPLY TO: AFOMS SGPR
ATTN OF: BROOKS AFB TEXAS 78235-5000

SUBJECT: NRC License Application Deficiency, Nellis AFB NV (Mail Control No. 18940)

TO: Radioisotopes Licensing Branch
Division of Fuel Cycle and Material Safety
U.S. Nuclear Regulatory Commission
Washington DC 20555

1. Forwarded for your information, per your request, is subject letter from the user organization dated 1 August 1985.
2. Request any questions pursuant to this correspondence be addressed to the undersigned at HQ AFOMS/SGPR, Brooks AFB TX 78235-5000.

James H. Dunlap
JAMES H. DUNLAP, Major, USAF, BSC
USAF Radioisotope Committee
Office of the Surgeon

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a/s

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DEPARTMENT OF THE AIR FORCE

USAF HOSPITAL NELLIS (TAC)
NELLIS AIR FORCE BASE NV 89191REPLY TO
ATTN OF:

SGPB (AV 682-3316)

AUG 1 1985

SUBJECT:

NRC License Application Deficiency (Yr Ltr, undated)

TO: AFOMS/SGPR (Capt Donovan)

1. The following paragraphs contain the additional information for the byproduct material license application as requested by the 14 Jun 85 USNRC Material Licensing Branch letter.

2. Swipe samples to determine if there is any removable radioactive contamination on the exterior surface of the sealed source are to be taken at 6-month intervals by the user, the RPO, or his designated representative. A description of the swipe technique is as follows:

a. Complete the following information on an AF Form 495, "Swipe Container" (attached):

- (1) Name and address of the submitting activity.
- (2) Date submitted.
- (3) Name and AUTOVON number of the person performing the swipe test.
- (4) List Cs-137 and Am-241 as the specific radioisotopes for which analyses is to be done.
- (5) Provide the name, model number, and serial number of the density meter.
- (6) Provide a locally-generated sample ID number (include in Sample No. block).

b. Use a filter paper disc 45 mm (1 3/4 inches) or less in diameter (Whatman #41, NSN 6640-00-836-6870).

c. Place a small "X" in **pencil only** on the outer edge of the disc **on the side which is to touch** the radioactive source or area being tested for contamination.

d. Remove the density meter front panel electronic module in accordance with the manufacturer's instructions (Troxler 3400-B Series Surface Moisture-Density Gauges manual, paragraph VII-C).

Readiness is our Profession

e. Observe the radiation warning label just forward of the printed circuit board assembly. This locates the Americium-241:Beryllium neutron source.

f. Using tongs and a wooden dowel rod of appropriate diameter, wipe this label with the filter paper. **Do not** touch any part of this filter paper with the hands after wiping this first source.

g. With the gauge on its side and the base **away** from the operator, position the handle in the 4-inch direct transmission position.

h. Using the tongs and wood dowel rod for pressure, wipe the weld area (locates the Cesium-137 gamma source) above the source rod tip with the filter paper. Retract the source and sit the gauge in an upright position.

i. Using the tongs, place the unfolded, dry disc in the envelope (AF Form 495). Do not seal this envelope.

j. Do not use the AF Form 495 as a mailing envelope. Place the unsealed form containing the disc in another envelope to mail.

k. Mail to:

USAF OEHL/RZA
Brooks AFB TX 78235-5000

l. Analyses results will be provided by return mail. Retain all results on permanent file for inspection by appropriate authorities.

m. Forward a copy of all swipe sample analyses results to the installation Radiation Protection Officer, USAF Hospital/SGPB, Nellis AFB NV 89191-5300, for review.

3. Swipe Sample Analyses:

a. Analyses will be performed by the USAF Occupational and Environmental Health Laboratory, Radiation Services Division, Radioanalytical Services Branch (RZA), Brooks AFB TX 78235-5000, (512) 536-3486, AUTOVON 240-3486.

b. Analytical Equipment Specifications:

(1) Cs-137 - Sodium Iodide (NaI) scintillation detector spectrometer with a detection limit of less than 50 picoCurie per 100 square centimeters of surface area swiped.

(2) Am-241 - Windowless alpha gas proportional counter with a detection limit of less than one (1) picoCurie per 100 square centimeters of surface area swiped.

FOR THE COMMANDER



NICK A. FARINACCI, Major, USAF, BSC
Chief, Bioenvironmental Engineering Services

1 Atch
AF Form 495 (2 Cys)

cc (w/o Atch):
820 CES/HR (MSgt Armijo)