

## NEW YORK SHIPBUILDING CORPORATION

MAIN OFFICE AND WORKS

CAMDEN I, NEW JERSEY, U.S.A.

REFERENCE

HMS:633:64

CAMDEN

June 17, 1964

TO:

United States Atomic Energy Commission Division of Licensing and Regulations

Washington 25, D.C.

Attention: Robert E. Brinkman

SUBJECT:

Byproduct Material License No. 29-2204-3 (G64),

Request for Amendment

REFERENCE:

(a)

Code of Federal Regulations, Title 10, Part 31, Radiation Safety Requirements for Radiographic

Operations

(b)

Code of Federal Regulations, Title 10, Part 30, Licensing of Byproduct Material

- 1. Reference (a) is the Code of Federal Regulations on radiation safety requirements for persons utilizing sealed sources of byproduct material for radiography. Reference (b) is the Code of Federal Regulations on special requirements for the issuance of specific licenses for the use of sealed sources of byproduct material in radiography.
- 2. Article 31.105 of Reference (a) details the requirements for leak testing, repairing, tagging, opening, modifying, and replacing sealed sources. Paragraph (c) of Article 31.105 refers to Article 30.24(g) (6), Reference (b), submitting leak test procedures for approval.
- 3. Article 30.24(g) (6), Reference (b), requires that the applicant submit to the Atomic Energy Commission a description of the leak test procedure including:
  - a) Instrumentation to be used.
  - b) Method of performing test.
  - c) Pertinent experience of the personnel who will perform the test.

4. This corporation wishes to apply for the following amendment to subject license:

In addition to the sources listed on Byproduct Material License No. 29-2204-3 (G64), New York Shipbuilding Corporation requests that all sources listed on Byproduct Material License No. 29-2204-2 (H65) be included in License 29-2204-3 (G64) for leak testing. This should include all sources listed on License No. 29-2204-2 (H65) and all sources added and changed on this license by subsequent amendments. The conditions outlined in Item 14 of Byproduct Material License No. 29-2204-3 (G64) will be met.

- The following information is submitted in compliance with References (a) and (b).
  - (a) Instrumentation:
    - (1) Beta-Gamma Determination
      A Beta-Gamma G.M. tube (TGC-1L) mounted in a lead pig
      and connected to a Baird-Atomic Scaler-Timer (Model 135),
      will be used for Beta-Gamma determination.
    - (2) Alpha Determination
      An alpha scintillation crystal adapted to a Nuclear
      Chicago DS-5 probe and connected to a Baird Atomic
      Scaler-Timer (Model 135) will be used for Alpha Determination.
  - (b) Method of Performing Test:

Leak testing will be accomplished in A.E.C. approved source storage areas, with the source in the stowed position inside the camera. The area under the camera will be covered, with a sheet of polyethylene and personnel taking swipe samples will wear nylon gloves.

The protective plug on the front of the camera will be removed and a sample taken by inserting a wetted length of pipe cleaner brush (as manufactured by E. J. Gilbert Mfg. Co., Soduce, N.Y., or equivalent) into the opening until it contacts the source. The brush will be rotated a sufficient number of times to obtain a sample, and then removed from the camera.

The length of pipe cleaner brush will be placed in an envelope marked for identification, and the envelope containing the swipe placed in a polyethylene bag. The bag will be sealed and transferred to the counting facility. Used gloves and polyethylene sheets will be placed in a polyethylene bag and checked for contamination.

## 5. (Continued)

(c) Experience of Personnel who will Perform the Test:

The testing will be accomplished by or under the direct supervision of those personnel listed on Byproduct Material License No. 29-2204-3 (G64), Item 12, as qualified to use byproduct materials.

NEW YORK SHIPBUILDING CORPORATION

H. M. Sandberg Executive Vice President

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