

Director, Division of Licensing and Regulation
United States Atomic Energy Commission
Washington 25, D. C.

Gentlemen:

This report is being filed to comply with item 17C of the product Material License No. 20-1537-2 Amendment No. 5.

Twelve pressure measuring devices each containing approximately 375 mg of H₃ were purchased by the licensee from NRC Equipment Corporation, Needham, Massachusetts, the first delivered in June, 1959 and the remaining eleven in January 1960. The H₃ is incorporated in the form of Titanium tritide (reportedly deposited electrolytically) on a stainless steel foil. The area of the foil in each device is 3/8 inch². The foil was purchased with activity by NRC Equipment Corporation from Radiation Research Corporation, New York City, N. Y., the manufacturer. It is designated by the manufacturer as a model tritium source and is classified as a sealed source.

Initial tests were taken by the licensee on the outside surfaces of the pressure measuring devices as they were received from the manufacturer. Removable activity found at that time was well within permissible limits. Periodic checks at intervals prescribed in condition 17C of the above license also showed removable activity well within permissible limits. Recently, however, it became necessary to open one of these devices to make repairs. At that time, the source-foil was removed and the interior of the device was checked for contamination. In this check approximately 0.5 mc was detected on a wipe of the inside of the device at that time. Similarly, 0.5 mc was easily wiped from the active surface of the source itself. The more of the devices were then opened and checked as above with similar results. A sample of the oil from the vacuum pump on the system these devices were coupled to was measured also and results indicated that the oil in the pump contained a total of 0.02 mc.

ITEM # 5

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transfer of the device to the Bureau of Health, Dept. of Health, 100
of available.

The device may be disassembled and the contents of the device being
disassembled and the contents of the device being disassembled under well
The foil containing the activities may be being removed from the device
sent Corporation, also plan to return them to the Bureau of Health
after inspection.

Please do not hesitate to contact us if any further information
is required.

Yours truly,

J. W. G. [Signature]

Frank B. [Signature]

Asst. Subbiological Society of [Signature]

PH/SPC

C.C. Manager, M.C. [Signature] Office, A.E.C.

MRC Equipment Corporation

Radio and [Signature] Corporation

Executive Office, [Signature] U.S.

Dr. [Signature] [Signature]

Prof. [Signature] [Signature]

[Signature] [Signature]

[Signature] [Signature]