

OCT 29 1969

DML:IB:JPV  
(2107)

Tracerlab Division of International  
Chemical and Nuclear Corporation  
1601 Trapelo Road  
Waltham, Massachusetts 02154

Attention: Mr. William Karp, Manager  
Sources and Accessories

Gentlemen:

To enable us to continue our evaluation of your Model X-1 and X-2  
sealed sources, please provide the following information:

- a. Specify the methods and materials used to seal Parts 1 and 2 of  
capsules X-1 and X-2. For the 100 millicurie americium 241 sources,  
explain how the X-1 capsule will be placed and sealed within the X-2  
capsule. It appears that placing the X-1 inside the X-2 will produce  
an overall capsule length greater than 0.500 inches.
- b. Explain how the radioactive pellet or foil (the aluminum oxide  
pellet containing americium 241 and copper foil plated with  
cadmium 109) will be mounted within the body of each of the  
source capsules. If a filler material will be used in either  
the X-1 or X-2 capsules, you should specify the type and quantity  
of filling material.
- c. Identify the equipment and procedures used for the helium leak test,  
which you have stated is a part of the quality control of each sealed  
source capsule.

Sincerely,

bcc: St. Br. Dist.  
S.S. Files  
DML

ORIGINAL SIGNED BY  
JAMES C. MALARO

James C. Malaro  
Isotopes Branch  
Division of Materials Licensing

9702240171 950908  
PDR RC \*  
SSD PDR

OFFICE ▶	DML:IB					
SURNAME ▶	JCMalaro					
DATE ▶	10/29/69					

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Gentlemen:

To enable us to continue our evaluation of your Model X-1 and X-2 sealed sources, please provide the following information:

- a. Specify the methods and materials used to seal Parts 1 and 2 of capsules X-1 and X-2. For the 100 millicurie americium 241 sources, explain how the X-1 capsule will be placed and sealed within the X-2 capsule. It appears that placing the X-1 inside the X-2 will produce an overall capsule length greater than 0.500 inches.
- b. Explain how the radioactive pellet or foil (the aluminum oxide pellet containing americium 241 and copper foil plated with cadmium 109) will be mounted within the body of each of the source capsules. If a filler material will be used in either the X-1 or X-2 capsules, you should specify the type and quantity of filling material.
- c. Identify the equipment and procedures used for the helium leak test, which you have stated is a part of the quality control of each sealed source capsule.

Sincerely,

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ORIGINAL SIGNED BY  
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James C. Malaro  
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