

10000 : Hillings

Enclosure 1

Department of Energy Richland Operations Office P.O. Box 550 Richland, Washington 99352 MAR 25

March 15, 1982

ALL HOLDERS OF PLUTONIUM-BERYLLIUM MEUTRON SOURCES

SUBJECT: INSPECTION OF PLUTONIUM-BERYLLIUM NEUTRON SOURCES

Your organization is on record as having acquired one or more plutonium-beryllium (PuBe) neutron sources through a plutonium loan, grant, or sale administered by the former U. S. Atomic Energy Commission (now the Department of Energy).

The purpose of this notice is to suggest that you inspect all of your Pube sources to assure that the end caps are welded in place circumferentially, as required by fabrication specifications. Refer to Enclosure 2 as representative of source fabrication. Recently a source was discovered with an unwelded outer end cap which came loose (Enclosure 1). If there is a defect in the inner capsule as well, a contamination problem may occur.

We recommend inspection of the outer cap weld by qualified nondestructive testing personnel. Proper procedures should be used during inspection to assure control of radiation and possible contamination. If any problem is detected, notify your licensing authority at once.

If you should desire to dispose of a PuBe neutron source, you may contact the following office for instructions:

> U. S. Department of Energy Savannah River Operations Office Attn: L. C. Sjostrom, Tech. & Prod. Div. P. O. Box A Aiken, SC 29801

Information regarding source return may be obtained from W. D. Conner, FTS 239-3776, or commercial 803/725-5227, Ext. 3776.

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George J./ Myskho, Director

Nuclear Materials Production Division

MMP: RER

Enclosures:

1. Photograph

2. Fabrication drawing

cc w/encl.

V. L. Miller, NRC/NMMSS

C. Michelson, NRC/OAEOD

