

PURDUE UNIVERSITY



OFFICE OF HEALTH PHYSICS AND
RADIOLOGICAL CONTROL

April 14, 1986

U.S. Nuclear Regulatory Commission,
Region III
Materials Licensing Section
799 Roosevelt Road
Glen Ellyn, IL 60137

13-02812-04
03800696
5/31/85

A
no fees

Dear Sirs:

This letter is to request an amendment to our U.S. Nuclear Regulatory Commission broad scope license 13-02812-04 for the addition of the following transuranics which may be contained in ash from a nuclear power plant incinerator.

Pu-239	1 μ Ci
Pu-238	1 μ Ci
Pu-241	100 μ Ci
Am-241	1 μ Ci
Cm-242	1 μ Ci
Cm-244	1 μ Ci

Incinerator ash from a nuclear power plant will be analyzed for the presence of the above isotope and returned to the power plant when finished.

If any additional information is required to expedite your review of this request, I will be pleased to provide you with such information. I may be reached by phone at (317) 494-6232.

Sincerely,

Gordon S. Born, Ph.D.
Radiological Control Officer

GSB:mjw

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REGION III

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REG3 LIC30
13-02812-04 PDR

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fee exempt

PURDUE UNIVERSITY

OFFICE OF HEALTH PHYSICS AND
RADIOLOGICAL CONTROL

March 25, 1986

U.S. Nuclear Regulatory Commission, Region III
Materials Licensing Section
799 Roosevelt Road
Glen Ellyn, IL 60137

Renewal
78802

Dear Sirs:

This letter is to request an amendment to our U.S. NRC broad scope license 13-02812-04 for the addition of the following isotopes and amounts:

Gd-153	300 Ci	^{T_{1/2}} 142 days	1172 mCi
Dy-159	300 Ci	144 d	1347 mCi
Tm-170	300 Ci	128 d	1084 mCi
Tb-160	300 Ci	72 d	81,312

These isotopes are to be used for research and development as sealed Mossbauer sources. The sources and shields will be fabricated at the University of Missouri so that the sources cannot be removed from the shield without special tools. Sources and shields will only be shipped to Purdue if the exposure rate is less than 10 mR/hr at the surface of the shield.

For use at Purdue University the beam port will be opened by removing two 8-32 screws which allow the beam plug to be removed with tweezers. The beam size will be 0.3 inches in diameter. Sources will not be removed from the shields at Purdue University.

These sources will be leak tested upon receipt and at the interval in our general license. Anyone handling these sources will have extremity monitoring in addition to a whole body badge.

If any additional information is required to expedite your review of this request, I will be pleased to provide you with such information. I may be reached by phone at (317) 494-6232.

Sincerely,

Gordon S. Born

Gordon S. Born, Ph.D.
Radiological Control Officer

GSB/lw

RECEIVED
MAR 28 1986
REGION III



Pharmacy Building
West Lafayette, Indiana 47907

MAR 26 1986

CONTROL NO. 80988

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