

OFFICIAL RECORD COPY

Amendment No. 01

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee		In accordance with letter dated May 10, 1996	
1. Neutron Products, Inc.		3. License Number	SUB-1551
2. 22301 Mt. Ephraim Road P.O. Box 68 Dickerson, Maryland 20842		is amended in its entirety to read as follows:	
		4. Expiration Date	May 31, 2002 (extended)
		5. Docket or Reference No.	040-09007
6. Byproduct, Source, and/or Special Nuclear Material	7. Chemical and/or Physical Form	8. Maximum Amount that Licensee May Possess at Any One Time Under This License	
A. Uranium	A. Depleted uranium metal teletherapy components and/or shielding	A. 20,000 kilograms	
9. Authorized Use:			
A. For possession and use incident to receipt, storage, and/or transfer to licensed recipients.			

## CONDITIONS

10. Licensed material shall be stored only at 412 North Fairfax Boulevard, Building No. 8, Ranson, West Virginia
  11. Radiation Safety Officer: Marvin M. Turkanis
  12. Licensed material shall be stored by, or under the supervision of, Marvin M. Turkanis.
  13. The licensee shall maintain records of receipts, transfers and/or disposals of licensed material and shall conduct a physical inventory at intervals not to exceed 12 months to account for all material received and possessed under this license. Records shall be maintained until this license is terminated by the Commission.
  14. This license does not authorize the chemical, physical, or metallurgical treatment or processing of licensed material.
  15. The licensee shall maintain records of information important to safe and effective decommissioning at 22301 Mt. Ephraim Road, Dickerson, Maryland in accordance with the provisions of 10 CFR 40.36(f) until this license is terminated by the Commission.
- 9/1  
ml20

210011

9611210040 960610  
PDR ADOCK 04009007  
C PDR

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number SUB-1551

Docket or Reference Number 040-09007

Amendment No. 01

(continued)

**CONDITIONS**

16. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 40.36 for establishing decommissioning financial assurance.
17. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- A. Letter dated April 21, 1992
- B. Letter dated May 10, 1996 (Increase in authorized possession limit and extension of expiration date in accordance with 10 CFR 40.42)

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

JOHN M. PELCHAT

Date

JUN 10 1996

By

Region II, Division of Nuclear Materials Safety  
101 Marietta Street, N.W., Suite 2900  
Atlanta, Georgia 30323

1996 MAY 31 PM 1:04

## NEUTRON PRODUCTS inc

22301 Mt. Ephraim Road  
P.O. Box 68  
Dickerson, Maryland 20842 USA  
301-349-5001 FAX: 301-349-5007

May 29, 1996

Nuclear Regulatory Commission  
ATTN: Ms. Rita Messier  
Mail Stop T9E10  
Washington DC 20555

RE: Control Number: 257064  
Materials License SUB-1551  
Request for License Amendment dated May 10, 1996

Dear Ms. Messier:

Per your request during our telephone conversation of May 20, 1996, enclosed is Neutron Products check for an additional \$ 170.00.

We believe that the correct licensing category should be 2.B. "Licenses which authorize the possession, use and/or installation of source material for shielding" because:

- the authorized use under the referenced license is "for receipt, storage, and/or transfer" of teletherapy component in which the "source material is for shielding" (Condition 9A); and,
- "the chemical, physical, or metallurgical treatment or processing of the depleted uranium is specifically prohibited (Condition 14).

However, to expedite the issuance of the requested Amendment, we are enclosing the additional \$ 170.00 which is the difference between the fee for license amendments under 2.B. and 2.C. "All other source material licenses".

We look forward to the prompt receipt of the requested amendment. However, if there are any further questions or problems, please call or fax me.

Sincerely,  
NEUTRON PRODUCTS, INC.

Marvin M. Turkanis  
Vice President

Enclosure: Check for \$ 170.00  
MMT/afc

BETWEEN:

License Fee Management Branch, ARM  
and  
Regional Licensing Sections

: (FOR LFMS USE)  
: INFORMATION FROM LTS  
: -----  
: Program Code: 11210  
: Status Code: 0  
: Fee Category: 2C  
: Exp. Date: 20020531  
: Fee Comments: \_\_\_\_\_  
: Decom Fin Assur Req'd: N  
: ::::::::::::::::::::::::::::::

LICENSE FEE TRANSMITTAL

A. REGION II

1. APPLICATION ATTACHED

Applicant/Licensee: NEUTRON PRODUCTS INC.  
Received Date: 960513  
Docket No: 4009007  
Control No.: 257064  
License No.: SUB-1551  
Action Type: Amendment

2. FEE ATTACHED

Amount: \$230.00  
Check No.: 23822

3. COMMENTS

Signed NWitt  
Date 5/15/96

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /V/)

1. Fee Category and Amount: 2C \$400

2. Correct Fee Paid. Application may be processed for:

Amendment /  
Renewal \_\_\_\_\_  
License \_\_\_\_\_

3. OTHER \_\_\_\_\_

Signed Rita Messier  
Date 5/31/96

Log	<u>May 2 II</u>
Remitter	<u>23822/23864</u>
Check No.	<u>23822</u>
Amount	<u>\$230 + \$170</u>
Fee Category	<u>2C</u>
Type of Fee	<u>Amend</u>
Date Check Rec'd.	<u>5/31/96</u>
Date Completed	<u>5/31/96</u>
By:	<u>Rita</u>

1996 MAY 20 PM 12:00

# NEUTRON PRODUCTS inc

22301 Mt. Ephraim Road  
P.O. Box 68  
Dickerson, Maryland 20842 USA  
301-349-5001 FAX: 301-349-5007

May 10, 1996

U.S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, N.W., Suite 2900  
Atlanta, Georgia 30323  
Attn: Mr. Dave Collins

Re: Materials License SUB-1551  
Request for Amendment

Dear Mr. Collins:

This is to request that the referenced license be amended to increase the maximum amount of depleted uranium that may be possessed from 10,000 kilograms to 20,000 kilograms.

Enclosed is a check for \$230.00 for the amendment, per my telephone conversation of March 7, 1996 with Ms. Rita Messier.

Per your recommendation during our telephone conversation of March 7, 1996, we met with Mr. Ed Smith, the Fire Chief of Ranson, on April 12, 1996 to familiarize him with the facility and the materials which we store there. At that time, Chief Smith performed a fire inspection of the storage facility, and he found no fire hazards.

For your information, we have leased another contiguous storage bay in the same building, which is of the same concrete block construction.

There are no other changes requested.

If there are any questions or problems, please call me.

Sincerely,

NEUTRON PRODUCTS, INC.



Marvin M. Turkanis  
Vice President

MMT/afc

257064

## MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-433) and Title 10 Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 39, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below, to use such material for the purpose(s) and at the place(s) designated below, to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

*Keep*  
*I*

1. Licensee		3. License number	SUB-1551
2. 22301 Mt. Ephraim Road P.O. Box 68 Dickerson, Maryland 20842		4. Expiration date	May 31, 1997
		5. Docket or Reference No	040-07007
6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license	
A. Uranium	A. Depleted uranium metal teletherapy components and/or shielding	A. 10,000 kilograms	
<i>They do activities other than shielding only</i>			
9. Authorized Use:			
A. For receipt, storage, and/or <u>transfer</u> to licensed recipients.			

## CONDITIONS

10. Licensed material shall be stored only at 412 North Fairfax Boulevard, Building No. 8, Ranson, West Virginia
11. Radiation Safety Officer: Marvin M. Turkanis
12. Licensed material shall be stored by, or under the supervision of, Marvin M. Turkanis
13. The licensee shall maintain records of receipts, transfers and/or disposals of licensed material and shall conduct a physical inventory at intervals not to exceed 12 months to account for all material received and possessed under this license. Records shall be maintained until this license is terminated by the Commission.
14. This license does not authorize the chemical, physical, or metallurgical treatment or processing of licensed material.

9206170328 920512  
REC2 LIC30  
MATLSLICENSING PDR

*Joe*

MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License number SUB-1551

Docket or Reference number (FAR) 7

## CONDITIONS

Continued-

15. The licensee shall maintain records of information important to safe and effective decommissioning at 22301 Mt. Ephraim Road, Dickerson, Maryland in accordance with the provisions of 10 CFR 40.36(f) until this license is terminated by the Commission.
16. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 40.36 for establishing decommissioning financial assurance.
17. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations and procedures in the licensee's application and correspondence are more restrictive than the regulations.

A. Letter dated April 21, 1992



FOR THE U. S. NUCLEAR REGULATORY COMMISSION

EARL G. WRIGHT

Date

MAY 12 1992

By

*Earl G. Wright*Region II, Nuclear Materials Safety Section  
101 Marietta Street, Suite 2000  
Atlanta, GA 30323

—BETWEEN:

```

PROGRAM CODE:
STATUS CODE: 2
FEE CATEGORY:
EXP. DATE: 0
FEE COMMENTS:
DECOM FIN ASSUR REQ:

```

~~A. REGION~~ 11

~~2. FEE ATTACHED~~

040-07007  
SUB-1551

SIGNED J. L. Williams  
DATE 7/24/92

1. FEE CATEGORY AND AMOUNT: 2c \$750

AMENDMENT  
RENEWAL  
LICENSE

SIGNED \_\_\_\_\_  
DATE \_\_\_\_\_ 3/8/32

5/12/72

TELEPHONE OR VERBAL CONVERSATION RECORD

TIME

☐ AM  
☐ PM

☐ INCOMING CALL

☐ OUTGOING CALL

☐ VISIT

PERSON CALLING

OFFICE/ADDRESS

PHONE NUMBER

EXTENSION

HQS

964-2456

PERSON CALLED

OFFICE/ADDRESS

PHONE NUMBER

EXTENSION

CONVERSATION

SUBJECT

SUB-1551

SUMMARY

Checked with HQs on reporting requirements on RSI number for this license because of 10,000 kg quantity. If the material is not of foreign origin then no reporting requirements.

ACTION REQUESTED

☐ ADVISE ME OF ACTION TAKEN.

INITIALS

CH

DATE

5/12/72

ACTION TAKEN

INITIALS

DATE

254692  
-32780

Log	.....
Remitter	Neutron Products Inc
Ct	.....
An	.....
Fe	.....
T	.....
D	.....
L	.....
By	.....

## NEUTRON PRODUCTS inc

22301 Mt. Ephraim Road, P.O. Box 68  
Dickerson, Maryland 20842 USA  
301/349-5001 TWX: 710-828-0542  
FAX: 349-5007

April 21, 1992

92 MAY -1 P3:23

U.S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, N.W., Suite 2900  
Atlanta, Georgia 30323  
Attention: Mr. Earl Wright

Dear Mr. Wright:

This is to request a license to store depleted uranium in industrial products at:  
412 North Fairfax Blvd., Bldg m. 8  
Ranson, West Virginia 25438

The depleted uranium will be in the form of metal as shielding in the heads, collimators, cores, etc. of cobalt-60 teletherapy units. No cobalt-60 will be used or stored at the requested site.

The building is of concrete block construction and will be locked at all times except when a Neutron Products employee or agent is on the site.

I will be the individual responsible for the depleted uranium at the requested site. A copy of my resume is attached. The driving time from our primary facility to the requested site is approximately 50 minutes. All correspondence should be addressed to me at the address on this letterhead.

The total amount of depleted uranium requested at the site is 10,000 kilograms.

The teletherapy units may be stripped for parts, reconditioned at the requested site or shipped to another site for reconditioning.

The depleted uranium parts will not be introduced into a chemical, physical, or metallurgical treatment or process.

A log shall be maintained for all items containing depleted uranium that are delivered to or removed from the requested site.


The depleted uranium shall be transferred only to those authorized to possess the depleted uranium.

A survey for contamination shall be performed twice a year with a calibrated Geiger Mueller tube survey meter.

Enclosed is our check for \$790, which is the fee that Ms. Marinelli Rodriguez told me was the proper fee for the site.

If you have any questions or problems, please call me.

Very truly yours,



Marvin M. Turkanis  
Vice President

NEUTRON PRODUCTS inc

22301 Mt. Ephraim Road • P.O. Box 68 • Dickerson, Maryland 20842 USA • 301/349-5001  
TWX: 710-828-0542 • FAX: 301/349-5007

## CURRICULUM VITAE

MARVIN M. TURKANIS  
15113 Westbury Road  
Rockville, Maryland 20853

### Education:

S.M. Metallurgy, Massachusetts Institute of Technology, 1955  
S.B. Metallurgy, Massachusetts Institute of Technology, 1953

### Experience:

#### 1966-to Present

Neutron Products, Inc., Dickerson, MD.

Vice-President and Director,

Initiated, developed and managed the production, fabrication, distribution, marketing and installation of cobalt-60 teletherapy and radiation processing sources.

Radiation Safety Officer from 1973 to 1985.

#### 1960-1966

Nuclear Materials and Equipment Corporation, Apollo, PA.

Manager of New Product Development

Developed and initiated the first commercial production of plutonium-239 neutron sources in the United States.

Developed and fabricated specialty plutonium-239 sources and foils for commercial and government applications.

#### 1957-1960

M&C Nuclear Inc., Texas Instruments, Attleboro, MA.

Chief Metallurgist

Designed and managed the metallographic laboratory for the quality control of nuclear fuel fabrication.

#### 1955-1957

Watertown Arsenal Laboratories, Watertown, MA.

Assistant to the Director

Developed and executed titanium alloy development programs and supervised research on the titanium-aluminum-oxygen phase diagram.

#### 1953-1955

Massachusetts Institute of Technology

Research Assistant

Investigated the kinetics and mechanism of the activation of sphalerite using silver-110 radiotracer.

#### 1954

Metals and Controls Company, Attleboro, MA.  
Metallurgist

Developed form rolling process for titanium metal  
airfoils for aircraft compressor blades.

Professional Societies and Organizations:

American Society for Testing and Materials  
American Society for Testing and Materials, Committee E10  
American National Standards Institute, Committee N43  
American National Standards Institute, Committee N44  
American Nuclear Society  
International Working Party for Cancer of the Cervix  
Maryland International Trade Association, President  
1990-1992  
Society of Sigma Xi

Publications:

Cobalt-60 Therapy in the 1980's, Diagnosis and Treatment of  
Carcinoma of the Cervix in Developing Areas, Edited by R.P. Mould  
and Kaver Tungsubuhs, Adam Hilger Ltd. 1986

Activation and Deactivation of Sphalerite with Silver and  
Cyanide Ions, January 1957, Mining Engineering

Time: 1 46 pm

NRC - PC MatAnn

Record #:

## PC MatAnn -- Matann Database

Invoice ID	Invoice Date	Fee Amount	Surcharge or Credit	Category	License Number	SBA	A	CAN
Top of listing - Select to return to original record.								
AM2438-95	07/22/95	1800.00	0.00	2C	SUB-1551	2	N	N
AM2438-95	07/22/95	8600.00	0.00	2C	SUB-1551		Y	N
AM2501-94	08/20/94	8700.00	1670.00	2C	SUB-1551		N	N
AM3135-93	08/21/93	7700.00	1220.00	2C	SUB-1551		N	N
No more records - Select to return to original record.								

Use cursor key(s) to make selection and press &lt;ENTER&gt;.