

## MATERIALS LICENSE

Amendment No. 06

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 purposes(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.

OFFICIAL RECORD COPY

Licensee		In accordance with the letter dated May 21, 1997,	
1. Nucletron Corporation		3. License Number 19-28772-01 is amended in its entirety to read as follows:	
2. 7080 Columbia Gateway Drive Columbia, Maryland 21046-2133		4. Expiration Date	March 31, 2003
		5. Docket or Reference No.	030-32842
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. Iridium 192	A. Sealed sources (Byk Mallinckrodt Model CI-L-BV and BV Mallinckrodt Model CI-2)	A. Not applicable	
B. Cesium 137	B. Sealed sources (Amersham Model CDC.SP1 and CDC K series)	B. Not applicable	
C. Cobalt 60	C. Sealed sources (Amersham Model CDC.SP1)	C. Not applicable	
9. Authorized use			
A. For possession incident to the installation, maintenance, repair, and source exchange of Nucletron MicroSelectron-HDR and MicroSelectron-PDR remote afterloading devices.			
B. For possession incident to the installation, maintenance, repair and source exchange of Nucletron MicroSelectron-LDR and Selectron-LDR remote afterloading devices.			
C. For possession incident to the installation, maintenance, repair and source exchange of Nucletron Selectron-HDR remote afterloading devices.			

## CONDITIONS

10. Licensed material may be used only at temporary job sites of the licensee anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
11. A. Licensed material shall be used by, or under the supervision of, Hal Archibald, Jim Cowan, Dave Glessner, Charles Hicks, Mark Irvin, Chuck Jones, E.J. Kromhout van der Meer, Brent Loudy, C. Mellink, Chris Scott, Jason Shirdon, M. Slot, Arno Rood, G.J. ten Brinke, Chuck Tow, Larry Vincent, A. Casey Valentine, Alan Taylor, James T. Coyle, David Kuligowski, Ralph E. Shuping, James Wilson, Jeffrey Clay, Bill Riebau, Jack Kinsey, Richard Nusspickel, Keith Truesdell, and Andres Guevara.
- B. The Radiation Safety Officer for this license is Ovila J. Dionne, Jr.

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PDR ADOCK 03032842  
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**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

19-28772-01

Docket or Reference Number

030-32842

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12. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders or detector cells by the licensee.
13. A. Sealed sources and detector cells containing licensed material shall be tested for leakage and/or contamination at intervals not to exceed six months or at such other intervals as are specified by the certificate of registration referred to in 10 CFR 32.210, not to exceed three years.
- B. Notwithstanding Paragraph A of this Condition, sealed sources designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed three months.
- C. In the absence of a certificate from a transferor indicating that a leak test has been made within six months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
- D. Each sealed source fabricated by the licensee shall be inspected and tested for construction defects, leakage, and contamination prior to any use or transfer as a sealed source.
- E. Sealed sources and detector cells need not be leak tested if:
- (i) they contain only hydrogen-3; or
  - (ii) they contain only a radioactive gas; or
  - (iii) the half-life of the isotope is 30 days or less; or
  - (iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or
  - (v) they are not designed to emit alpha particles, are in storage, and are not being used. However, when they are removed from storage for use or transfer to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
- F. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission and the source or detector cell shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within five days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region I, ATTN: Chief, Nuclear Materials Safety Branch, 475 Allendale Road, King of Prussia, Pennsylvania 19406. The report shall specify the source or detector cell involved, the test results, and corrective action taken.

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- G. The licensee is authorized to collect leak test samples for analysis by RSO, Inc. Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
14. 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 30.35(d), 40.36(b), and 70.25(d) for establishing financial assurance for decommissioning.
15. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
16. 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. Application dated July 3, 1992
  - B. Letter dated October 12, 1992
  - C. Letter dated December 2, 1992
  - D. Letter dated January 12, 1993
  - E. Letter dated February 24, 1993
  - F. Letter dated March 1, 1993
  - G. Letter dated July 11, 1994
  - H. Letter dated September 21, 1994
  - I. Letter dated January 4, 1996
  - J. Letter dated June 17, 1996
  - K. Letter dated January 13, 1997
  - L. Facsimile dated February 4, 1997
  - M. Facsimile dated February 5, 1997
  - N. Letter dated May 21, 1997

Date

JUN 20 1997

For the U.S. Nuclear Regulatory Commission

**ORIGINAL SIGNED BY:**

By

**JUDITH A. JOUSTRA**

Division of Nuclear Materials Safety  
Region I  
King of Prussia, Pennsylvania 19406

JUN 20 1997

Mr. Ralph E. Shuping, Sc.D  
Regulatory Affairs Manager  
Nucletron Corporation  
7080 Columbia Gateway Drive  
Columbia, Maryland 21046-2133

Dear Mr. Shuping:

This refers to your license amendment request. Enclosed with this letter is the amended license.

Please review the enclosed document carefully and be sure that you understand and fully implement all the conditions incorporated into the amended license. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region I Office, Licensing Assistance Team, (610) 337-5093 or 5239, so that we can provide appropriate corrections and answers.

Thank you for your cooperation.

Sincerely,

**ORIGINAL SIGNED BY:  
JUDITH A. JOUSTRA**

Judith A. Joustra  
Division of Nuclear Materials Safety

License No. 19-28772-01  
Docket No. 030-32842  
Control No. 124665

Enclosure:  
Amendment No. 06

DOCUMENT NAME: R:\WPS\MLTR\1928772.01

To receive a copy of this document, indicate in the box: "C" = Copy w/o attach/encl "E" = Copy w/ attach/encl "N" = No copy

OFFICE	DNMS/RI	N	DNMS/RI				
NAME	JJoustra						
DATE	06/16/97		06/ /97		06/ /97		06/ /97

OFFICIAL RECORD COPY ML 10



**Nucletron**

Nucletron Corporation  
7080 Columbia Gateway Drive  
Columbia, MD 21046-2133  
410-312-4100  
Fax 410-312-4199  
<http://www.nucletron.com>

030-32842

May 21, 1997

Mr. John R. McGrath  
Nuclear Materials Safety Branch  
U.S. NRC Region 1  
475 Allendale Road  
King of Prussia, PA 19406-1415

**REFERENCE: Amendment Request for NRC Radioactive Materials License  
No. 19-28772-01**

Dear Mr. McGrath:

Nucletron Corporation wishes to Amend its' NRC Radioactive Materials License  
No.19-28772-01 with the following changes:

Condition No. 11A: Please remove the following name from our License.  
Kagan Ertugrul  
Perry Koonce

Please add the following names to our License.  
Jeffrey Clay  
Bill Riebau  
Jack Kinsey  
Richard Nusspickel  
Keith Truesdell  
Andres Guevara

Enclosed is a check in the amount of \$ 590.00 to cover the cost of amendment fees.  
Attached also find the training certificates for the additional 6 engineers.

If any additional information is needed or if you have any questions, please contact me  
directly at 410-312-4103.

Respectfully submitted,

Ralph E. Shuping, Sc.D  
Regulatory Affairs Manager

cc: Ovila J. Dionne, Jr.  
Radiation Safety Officer

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124665

JUN - 9 1997





**Nucletron**

## Training Certificate

given to:

***Jeffrey Clay***

for having completed the following training course:

Radiation Safety Procedures for Source Handlers

Course Date: December 13, 1996

Ralph Shuping, Sc.D.  
Instructor/ Regulatory Affairs Manager

Ovila J. Dionne, Jr.,  
Radiation Safety Officer



**Nucletron**

*This certifies that*

*Jeff Clay*

*has successfully completed our course on*

***microSelectron High Dose Rate Version 1***

***given the 12<sup>th</sup> through the 16<sup>th</sup> day of May, 1997***

*at Nucletron Corporation  
Columbia, MD*

*Chuck Tow*

Chuck Tow  
Technical Support Specialist

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**Nucletron**

## Training Certificate

given to:

**Bill Riebau**

for having completed the following training course:

Radiation Safety Procedures for Source Handlers

Course Date: May 21, 1997

Ralph A. Shuping

Ralph Shuping, Sc.D.  
Instructor/ Regulatory Affairs Manager

Ovilla J. Dionne, Jr.

Ovilla J. Dionne, Jr.,  
Radiation Safety Officer





**Nucletron**

*This certifies that*

***Bill Riebau***

*has successfully completed our course on*

***microSelectron High Dose Rate Version 1***

***given the 12<sup>th</sup> through the 16<sup>th</sup> day of May, 1997***

*at Nucletron Corporation  
Columbia, MD*

*Chuck Tow*

Chuck Tow  
Technical Support Specialist

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**Nucletron**

## Training Certificate

given to:

***Jack Kinsey***

for having completed the following training course:

Radiation Safety Procedures for Source Handlers

Course Date: May 21, 1997

Ralph Shuping, Sc.D.  
Instructor/ Regulatory Affairs Manager

Ovila J. Dionne, Jr.,  
Radiation Safety Officer



**Nucletron**

*This certifies that*

*Jack Kinsey*

*has successfully completed our course on*

***microSelectron High Dose Rate Version 1***

***given the 12<sup>th</sup> through the 16<sup>th</sup> day of May, 1997***

*at Nucletron Corporation  
Columbia, MD*

*Chuck Tow*

Chuck Tow  
Technical Support Specialist



**Nucletron**

## Training Certificate

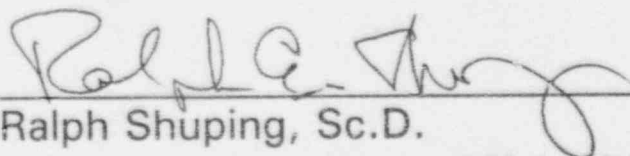
given to:

***Richard Nusspickel***

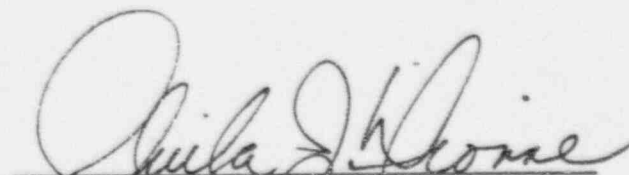
for having completed the following training course:

Radiation Safety Procedures for Source Handlers

Course Date: April 24, 1997



Ralph Shuping, Sc.D.  
Instructor/ Regulatory Affairs Manager



Ovilla J. Dionne, Jr.,  
Radiation Safety Officer





**Nucletron**

*This certifies that*

***Richard Nusspickel***

*has successfully completed our course on*

**microSelectron High Dose Rate Version 1**

**given the 12<sup>th</sup> through the 16<sup>th</sup> day of May, 1997**

*at Nucletron Corporation  
Columbia, MD*

*Chuck Tow*

Chuck Tow  
Technical Support Specialist





**Nucletron**

## Training Certificate

given to:

***Keith Truesdell***

for having completed the following training course:

Radiation Safety Procedures for Source Handlers

Course Date: December 13, 1996

*Ralph E. Shuping*

Ralph Shuping, Sc.D.  
Instructor/ Regulatory Affairs Manager

*Ovila J. Dionne, Jr.*

Ovila J. Dionne, Jr.,  
Radiation Safety Officer



**Nucletron**

*This certifies that*

*Keith Truesdell*

*has successfully completed our course on*

***microSelectron High Dose Rate Version 1***

***given the 12<sup>th</sup> through the 16<sup>th</sup> day of May, 1997***

*at Nucletron Corporation  
Columbia, MD*

Chuck Tow  
Technical Support Specialist



**Nucletron**

## Training Certificate

given to:

***Andres Guevara***

for having completed the following training course:

Radiation Safety Procedures for Source Handlers

Course Date: May 21, 1997

Ralph Shuping, Sc.D.  
Instructor/ Regulatory Affairs Manager

Ovila J. Dionne, Jr.,  
Radiation Safety Officer



**Nucletron**

*This certifies that*

*Andres Guevara*

*has successfully completed our course on*

***microSelectron High Dose Rate Version 1***

***given the 12<sup>th</sup> through the 16<sup>th</sup> day of May, 1997***

*at Nucletron Corporation  
Columbia, MD*

*Chuck Tow*

Chuck Tow  
Technical Support Specialist

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BETWEEN:

License Fee Management Branch, ARM  
and  
Regional Licensing Sections

(FOR LFMS USE)  
INFORMATION FROM LTS

Program Code: 03225  
Status Code: 0  
Fee Category: 3N  
Exp. Date: 20030331  
Fee Comments: \_\_\_\_\_  
Decom Fin Assur Reqd: N  
.....

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: NUCLETRON CORPORATION  
Received Date: 970609  
Docket No: 3032842  
Control No.: 124665  
License No.: 19-28772-01  
Action Type: Amendment

2. FEE ATTACHED

Amount: \$ 590.00  
Check No.: 16876

3. COMMENTS

Signed Baughn, R. J.  
Date 6/12/97

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

1. Fee Category and Amount: 3N 8590

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

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

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

Signed \_\_\_\_\_  
Date \_\_\_\_\_

I (93)

Log	<u>June 10</u>
Receiver	
Check No.	<u>16876</u>
Amount	<u>8590</u>
Fee Category	<u>3N</u>
Exp. Date	<u>20030331</u>
Fee Comments	<u>Amendment</u>
Decom Fin Assur Reqd	<u>0</u>
Signed	<u>BB</u>

7 JUN 17 AM 7:19

EXPEDITE REQUESTED - Told RI to process  
07 for 6/20/97 WITH REVIEW.  
SBS