



# Northeast Ohio Regional Sewer District

3826 Euclid Avenue • Cleveland, OH 44115-2504 • (216) 881-6600 • FAX: (216) 881-4407

March 23, 1998

FOIA/PA REQUEST

Director, Division of Freedom of Information  
and Publications Services  
Office of Administration  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Case No: 98-125  
Date Recd: 3-26-98  
Action Off: Pugh  
Referral Date: \_\_\_\_\_

Re: FOIA Request for Documents

Dear Director:

The Northeast Ohio Regional Sewer District (NEORSD) hereby requests copies of all expired licenses of all former Nuclear Regulatory Commission and/or Atomic Energy Commission licensees that were located and/or operating in the following U.S. Postal Service Zip Codes:

44017	44109	44120	44130	44141
44056	44110	44121	44131	44142
44067	44111	44122	44133	44143
44087	44112	44124	44134	44144
44102	44113	44125	44135	44146
44103	44114	44126	44136	44147
44104	44115	44127	44137	44195
44105	44117	44128	44138	44286
44106	44118	44129	44139	
44108				

The above request is made pursuant to the Freedom of Information Act and 10 CFR Sec. 9.15. The NEORSD has no commercial interest in the requested documents and requests a waiver of all fees pursuant to 10 CFR Sec. 9.41.

Please call me at (216) 881-6600, ext 826, if you have any questions about the foregoing. Thank you in advance for your assistance.

Very truly yours,

*Lawrence K. English*

Lawrence K. English  
Assistant General Counsel

*1987-present*

9805070048 980430  
PDR FOIA  
ENGLISH98-125 PDR

*"Protecting Your Clean Water Investment"*

9805070048

Licwater

**MATERIALS LICENSE**

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		
1. Eye Lighting International of North America, Inc.		3. License number 34-26741-01
2. 9150 Hendricks Mentor, OH 44060		4. Expiration date August 31, 2001
		5. Docket No. 030-34189 Reference No.
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. Krypton-85	A. Gas	A. 5 curies

## 9. Authorized Use:

- A. To be dispensed into arc tubes which are installed into metal halide lamps as described in application dated June 28, 1996, and letter dated July 31, 1996, incident to exempt distribution.

CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at 9150 Hendricks Road, Mentor, Ohio.
11. Licensed material shall be used by, or under the supervision of, individuals who have satisfactorily completed the licensee's in-house training program described in application dated June 28, 1996.
12. The Radiation Safety Officer for this license is Arthur Kaplan.
13. The licensee shall conduct a physical inventory every 6 months to account for all krypton-85 tanks received and possessed under the license.
14. This license does not authorize commercial distribution of licensed material.
15. The licensee is exempted from the requirement in 10 CFR 30.35(f) to provide a mechanism that guarantees funds for decommissioning. This exemption is based on the decommissioning funding plan and cost estimate contained in the licensee's application dated June 28, 1996.

A/2

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

34-26741-01

Docket or Reference Number

030-34189

Amendment No.

16. The licensee may not possess and use materials authorized in Items 6, 7, and 8 until:
- A. The licensee has constructed the facilities and obtained the equipment described in the application and supporting documentation; and
  - B. The U. S. Nuclear Regulatory Commission, Region III, ATTN: Chief, Materials Licensing Branch, 801 Warrenville Road, Lisle, IL 60532-4351 has been notified that activities authorized by the license will be initiated.
17. Within 30 days of the date of decision not to complete the facility, acquire equipment, or possess and use authorized material, the licensee must notify the Commission in writing, of the decision.
18. 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 U.S. 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 June 28, 1996;
  - B. Letters dated July 31, 1996 and August 14, 1996; and
  - C. Document received June 28, 1996.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date \_\_\_\_\_

By CCBY \_\_\_\_\_Nuclear Materials Licensing Branch  
Region III



Licwater

**MATERIALS LICENSE**

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	
1. Eye Lighting International of North America, Inc.	3. License number STB-1574
2. 9150 Hendricks Road	4. Expiration date June 30, 2005
Mentor, OH 44060	5. Docket No. 040-09041
	Reference No.

- |   |   |  |
|---|---|--|
| 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. Natural Thorium                                    | A. Thorium powder not to exceed 4% by weight mixed with non-radioactive powders | A. 1.0 kilogram  |
| B. Natural Thorium                                    | B. Thorium oxide not to exceed 4% by weight alloyed with tungsten oxide         | B. 5.0 kilograms   |

## 9. Authorized Use:

A. and B. To be used in the production and commercial distribution of arc tubes for metal halide lamps.

CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at 9150 Hendricks Road, Mentor, Ohio.
11. Licensed material shall be used by, or under the supervision of, Arthur L. Kaplan.
12. The Radiation Safety Officer for this license is Arthur L. Kaplan.
13. The licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

A/B



**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

Docket or Reference Number

040-09037

14. 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 U.S. 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 April 6, 1994; and

B. Letters dated July 15, 1994, October 12, 1994, April 23, 1995 and June 1, 1995.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date \_\_\_\_\_

By CCBY

Nuclear Materials Licensing Branch  
Region III

Licewater

**MATERIALS LICENSE**

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 application dated
1. Allied Corporation	January 9, 1992
2. 1749 Highland Road Twinsburg, OH 44087	3. License number 34-24816-01 is renewed in its entirety to read as follows:
	4. Expiration date February 28, 1997
	5. Docket No. 030-29602 Reference No.

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. Cesium-137	A. Sealed source (Troxler Dwg. No. A-102112)	A. 4 sources not to exceed 10 millicuries each
B. Americium-241	B. Sealed source (Troxler Dwg. No. A-102451)	B. 4 sources not to exceed 50 millicuries each
C. Americium-241	C. Sealed source (Troxler Dwg. No. A-100337 or A- 100608)	C. 8 sources not to exceed 300 millicuries each

## 9. Authorized Use:

A. and B. To be used in Troxler Model 3400 series surface moisture/density gauges.

A. To be used in Troxler Model 4640 or 4545 density gauges.

C. To be used in Troxler Model 3241 asphalt content gauges.

CONDITIONS

10. Licensed material may be stored at (1) 1749 Highland Road, Twinsburg, Ohio, (2) 8505 SR 14, Streetsboro, Ohio and (3) 3848 Erie SW, Massillon, Ohio and may be used 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 and in the physical presence of, individuals who have satisfactorily completed the device manufacturer's training program for gauge users and have been designated by the licensee's Radiation Protection Officer. The

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**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

34-24816-01

Docket or Reference Number

030-29602

Amendment No. 4

licensee shall maintain records of the individuals who have been designated as authorized users.

- B. The Radiation Protection Officer for the activities authorized by this license is Gary Cobb.
12. A. (1) The source(s) specified in Item(s) 7.A. through 7.C. shall be tested for leakage and/or contamination at intervals not to exceed 6 months. Any source received from another person which is not accompanied by a certificate indicating that a test was performed within 6 months before the transfer shall not be put into use until tested.
- (2) Notwithstanding the periodic leak test required by this condition, any licensed sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.
- B. Any source in storage and not being used need not be tested. When the source is removed from storage for use or transfer to another person, it shall be tested before use or transfer.
- C. 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, the source shall be removed from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. A report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region III, 799 Roosevelt Road, Glen Ellyn, Illinois 60137, ATTN: Chief, Nuclear Materials Safety Branch. The report shall specify the source involved, the test results, and corrective action taken. Records of leak test results shall be kept in units of microcuries and shall be maintained for inspection by the Commission. Records may be disposed of following Commission inspection.
- D. The licensee is authorized to collect leak test samples for analysis by Troxler or tests for leakage and/or contamination shall be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
13. Sealed sources containing licensed material shall not be opened or removed from their respective source holders by the licensee.
14. When performing tests at temporary job sites, the authorized user shall not leave the moisture/density gauge unattended. Upon completion of tests the device shall be locked in the licensee's vehicle or a secure building to prevent unauthorized use, loss or theft.
15. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 2 years from the date of each inventory.
16. The licensee may transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."



**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

34-24816-01

Docket or Reference Number

030-29602

Amendment No. 4

17. The licensee shall maintain records of information important to safe and effective decommissioning at the location listed in Item 2 of this license per the provisions of 10 CFR 30.35(g) until this license is terminated by the Commission.
18. 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 January 9, 1992.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

COPY

Date \_\_\_\_\_

By \_\_\_\_\_

Nuclear Materials Licensing Branch  
Region III

Licewater

**MATERIALS LICENSE**

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  1. Reuter-Stokes, Inc. Edison Park 2. 8499 Darrow Road Twinsburg, OH 44087	In accordance with letter dated October 31, 1997 3. License number SNM-1826 is amended in its entirety to read as follows: 4. Expiration date May 31, 2001 5. Docket No. 070-02872 Reference No.
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|---|--|--|
| 6. Byproduct, source, and/or special nuclear material<br><br>A. Plutonium (Principal Isotopes Pu-238 and Pu-239)<br><br>B. Plutonium (Principal Isotopes Pu-238 and Pu-239)<br><br>C. Uranium-235<br><br>D. Uranium-234/235<br><br>E. Uranium-235 | 7. Chemical and/or physical form<br><br>A. Sealed Pu-Be neutron sources<br><br>B. Any<br><br>C. Metallic or oxide<br><br>D. Metallic or oxide<br><br>E. Sealed sources | 8. Maximum amount that licensee may possess at any one time under this license<br><br>A. 240 grams (No single source to exceed 80 grams)<br><br>B. 300 micrograms<br><br>C. 300 grams<br><br>D. 9 grams<br><br>E. 1 gram |
|---|--|--|

## 9. Authorized Use:

A. Instrument testing and calibration.

B. Alpha calibration standards.

C. through E. For use and/or possession incident to:

(1) Development, manufacture and testing of fission counters and fission chambers.

(2) Distribution in fission counters and chambers listed in Condition 10. below to persons authorized to receive the licensed material pursuant to the terms and conditions of specific licenses issued by the Nuclear Regulatory Commission or any Agreement State.

A/11

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

SNM-1826

Docket or Reference Number

070-02872

Amendment No. 10

CONDITIONS

10. The following fission counters and chambers containing special nuclear material may be distributed.

<u>DEVICE MODEL NO.</u>	<u>ISOTOPE</u>	<u>MAXIMUM ACTIVITY PER DEVICE</u>
A. RS-P6 Series (Proportional Counters)	Uranium (Principal Isotope U-235)	7 grams
B. RS-C3 Series (Ion Chambers)	Uranium (Principal Isotopes U-235 and U-234/235 combined)	7 grams
C. RS-C6 Series (Ion Chambers)	Uranium (Principal Isotopes U-235 and U-234/235 combined)	4 grams
D. RS-P6-1596 Series (Position Sensitive Fission Chamber)	Uranium (Principal Isotope U-235)	25 grams

11. A. Licensed material shall be used at the licensee's facilities located at 8499 Darrow Road, Twinsburg, Ohio.
- B. Licensed material described in letter dated May 10, 1996, may be used at temporary job sites anywhere the NRC maintains jurisdiction when the material is physically accompanied by an authorized user named in Condition 12.A. of this license and is used in accordance with the procedures specified in letter dated May 10, 1996.
12. A. Licensed material shall be used by, or under the supervision of, Fred Glesius, Jan E. Orbin, Clark Gerber, Nathan H. Johnson, Patrick J. Coughlin, Gabriel Fortin, Lawrence W. Penman, B. M. Murray, David O'Connor or Patrick M. Cowher.
- B. The Radiation Safety Officer for this license is Patrick M. Cowher.
13. A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as specified by the certificate of registration referred to in 10 CFR 32.210.
- 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 3 months.



**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

SNM-1826

Docket or Reference Number

070-02872

Amendment No. 10

- C. In the absence of a certificate from a transferor indicating that a leak test has been made within 6 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 need not be leak tested if: (i) 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 (ii) 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 transferred 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 leak 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 in accordance with 10 CFR 30.50(b)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region III, ATTN: Chief, Nuclear Materials Safety Branch, 801 Warrenville Road, Lisle, Illinois 60532-4351. The report shall specify the source involved, the test results, and corrective action taken.
- G. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically licensed by the Commission or an Agreement State to Perform such services.
14. Except for plutonium contained in a medical device designed for individual human application, no plutonium, regardless of form, shall be delivered to a carrier for shipment by air transport or transported in an aircraft by the licensee except in packages the design of which the NRC has specifically approved for transport of plutonium by air.
15. Radiation survey instruments shall be calibrated by persons specifically authorized by the Commission or an Agreement State to perform such services.
16. The licensee may transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

SNM-1826

Docket or Reference Number

070-02872

Amendment No. 10

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 U.S. 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 16, 1990 (with attachments); and
- B. Letters dated February 20, 1991 (with attachments), April 19, 1991 (with attachments), May 3, 1991 (with attachments), May 11, 1994 (with attachments), August 8, 1994, and May 10, 1996.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

COPY

Date \_\_\_\_\_

By \_\_\_\_\_

Nuclear Materials Licensing Branch  
Region III

General Electric Company  
Lighting Business Group

In accordance with letter dated  
May 7, 1991  
SME-191 is amended in  
its entirety to read as follows:

Nela Park  
Cleveland, OH 44112

November 30, 1995

040-00534

- A. Natural Uranium
- B. Thorium

- A. Any
  - B. Any metal, oxide, nitrate, or alloy containing less than 4% by weight
- A. 50 kilograms
  - B. 750 kilograms

9. Authorized Use:

- A. For storage only.
- B. To be used for research and development of experimental and early-phase production lamps and the manufacture of thoriated tungsten products as described in letter dated July 30, 1990.

CONDITIONS

10. Licensed material shall be used only for those operations described in letter dated July 30, 1990 at the licensee's facilities located at:



## Amendment No. 13

Nela Park, Cleveland, Ohio  
Tungsten Products Plant, 21800 Tungsten Road, Cleveland, Ohio  
Chemical Products Plant, 1099 Ivanhoe Road, Cleveland, Ohio  
Dover Products Plant, 200 West Broadway, Dover, Ohio  
Ravenna Lamp Plant, 6800 N. Chestnut Street, Ravenna, Ohio  
Euclid Lamp Plant, 1814 E. 45th Street, Cleveland, Ohio  
Austintown Products Plant, 280 N. Meridian Road, Youngstown, Ohio

11. A. Licensed material shall be used by, or under the supervision of persons authorized in accordance with procedures and instruction requirements described in letter dated May 7, 1991 and the license application.
- B. The Radiation Safety Officer for the activities authorized by this license is A.M. Zielinski. Assistant Radiation Safety Officers for the Tungsten and Ravenna Plants are to be designated in accordance with procedures and instruction requirements described in letter dated May 7, 1991 and the license application.
12. This license does not authorize commercial distribution of licensed material.
13. The licensee shall maintain records of information important to safe and effective decommissioning at the location listed in Item 2. of the license per the provisions of 10 CFR 40.36(f) until this license is terminated by the Commission.
14. 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 November 30, 1989 with attached documents; and

B. Letters dated October 17, 1989 with attached Management Control and Audit Plan

February 10, 1989), May 11, 1990 (with attachments), July 30, 1990 (with attachment), and May 7, 1991.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date \_\_\_\_\_

By

[illegible]

040-00534

Amendment No. 13



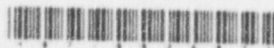
~~OFFICIAL RECORD COPY~~ MATERIALS LICENSE

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			
1. Secor International, Inc.		3. License Number	34-25385-01
2. 10703 Quebec Avenue Cleveland, Ohio 44106		4. Expiration Date	January 31, 2002
		5. Docket or Reference No.	030-34348
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. Cesium 137	A. Sealed sources registered either with NRC under 10 CFR 32.210 or with an Agreement State and incorporated in a compatible portable gauging device as specified in Item 9 of this license	A. No single source to exceed the maximum activity specified in the certificate of registration issued by the NRC or an Agreement State	
B. Americium 241	B. Sealed sources registered either with NRC under 10 CFR 32.210 or with an Agreement State and incorporated in a compatible portable gauging device as specified in Item 9 of this license	B. No single source to exceed the maximum activity specified in the certificate of registration issued by the NRC or an Agreement State	

## 9. Authorized Use:

- A. and B. To be used, for measuring physical properties of materials, in portable gauging devices that have been registered either with NRC under 10 CFR 32.210 or with an Agreement State and have been distributed in accordance with an NRC or Agreement State specific license authorizing distribution to persons specifically authorized by an NRC or Agreement State license to receive, possess, and use the devices.



ML 20

9703120199

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MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License Number 34-25385-01

Docket or Reference Number 90-34348

## CONDITIONS

10. Licensed material may be used or stored at the licensee's facilities located at 10703 Quebec Avenue, Cleveland, Ohio and may be used at temporary jobsites 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 only be used by, or under the supervision and in the physical presence of, individuals who have received the training described in the application dated January 23, 1997.
  - B. The Radiation Safety Officer (RSO) for this license is Ted E. Webster who must have successfully completed the training described in the application dated January 23, 1997 before assuming the duties of RSO.
12.
  - A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed the intervals specified in the certificate of registration issued by NRC under 10 CFR 32.210 or by an Agreement State.
  - B. In the absence of a certificate from a transferor indicating that a leak test has been made within the intervals specified in the certificate of registration issued by NRC under 10 CFR 32.210 or by an Agreement State prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
  - C. Sealed sources need not be tested if they are in storage and are not being used. However, when they are removed from storage for use or transferred 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 shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
  - D. The leak 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 in accordance with 10 CFR 30.50 (b)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within 5 days of the date the leak test result is known with the U. S. Nuclear Regulatory Commission, Region III, 801 Warrenville Road, Lisle, Illinois 60532-4351. The report shall specify the source involved, the test results, and corrective action taken.
  - E. Tests for leakage and/or contamination shall be performed by persons specifically licensed by the Commission or an Agreement State to perform such services. In addition, the licensee is authorized to collect leak test samples but not perform the analysis; analysis of leak test samples must be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
13. Sealed sources or source rods containing licensed material shall not be opened or sources removed or detached from source rods or gauges by the licensee, except as specifically authorized.
14. The licensee shall conduct a physical inventory every 6 months, or at other interval approved by NRC, to account for all sources and/or devices received and possessed under the license.



MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License Number 34-25385-01

Docket or Reference Number 30-34348

(continued)

## CONDITIONS

15. Each portable gauge shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The gauge or its container must be locked when in transport, storage, or when not under the direct surveillance of an authorized user.
16. Except for maintaining labeling as required by 10 CFR Part 20 or 71, the licensee shall obtain authorization from NRC before making any changes in the sealed source, device, or source-device combination that would alter the description or specifications as indicated in the respective Certificates of Registration issued either by the Commission pursuant to 10 CFR 32.210 or by an Agreement State.
17. Any cleaning, maintenance, or repair of the gauges that requires detaching the source or source rod from the gauge shall be performed only by the manufacturer or other persons specifically licensed by the Commission or an Agreement State to perform such services.
18. The licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
19. The licensee may not possess and use materials authorized in Items 6, 7, and 8, until:
  - A. The licensee has constructed the facilities and obtained the equipment described in the application and supporting documentation; and
  - B. The licensee has notified the U. S. Nuclear Regulatory Commission, Region III, 801 Warrenville Road, Lisle, Illinois 60532-4351, that the activities authorized by the license will be initiated.
20. In accordance with the requirements set forth in 10 CFR 30.36(d), the licensee shall notify the U. S. Nuclear Regulatory Commission, Region III, 801 Warrenville Road, Lisle, Illinois 60532-4351, in writing, of a decision not to complete the facility, acquire equipment, or possess and use authorized material.
21.
  - A. If the licensee uses sealed sources or probes containing sealed sources at depths greater than 3 feet, the licensee shall use surface casing that extends from the lowest depth to 12 inches above the surface and other appropriate procedures to reduce the probability of the source or probe becoming lodged below the surface.
  - B. If a sealed source or a probe containing sealed sources becomes lodged below the surface and it becomes apparent that efforts to recover the sealed source or probe may not be successful, the licensee shall notify the U. S. Nuclear Regulatory Commission and submit the report required by 10 CFR 30.50(b)(2) and (c). The licensee shall not abandon the sealed source or probe without obtaining the Commission's prior written consent.
22. 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) for establishing decommissioning financial assurance.



MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License Number 34-25385-01

Docket or Reference Number 34-34348

(continued)

CONDITIONS

23. 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.

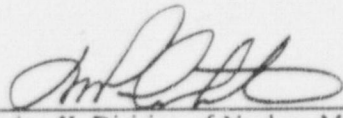
A. Application dated January 23, 1997

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

JOHN M. PELCHAT

Date JAN 28 1997

By

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

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**MATERIALS LICENSE**

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.

<p>Licensee</p> <p>1. The Mount Sinai Medical Center</p> <p>2. One Mount Sinai Drive Cleveland, OH 44106-4198</p>	<p>In accordance with letter dated December 20, 1996</p> <p>3. License number 34-00746-02 is amended in its entirety to read as follows:</p> <p>4. Expiration date November 30, 2004</p> <p>5. Docket No. 030-02651 Reference No.</p>	
<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Any byproduct material identified in 10 CFR 35.100</p> <p>B. Any byproduct material identified in 10 CFR 35.200</p> <p>C. Any byproduct material identified in 10 CFR 35.300</p> <p>D. Any byproduct material identified in 10 CFR 35.400</p> <p>E. Any byproduct material identified in 10 CFR 35.500</p> <p>F. Any byproduct material identified in 10 CFR 31.11</p> <p>G. Strontium-90</p> <p>H. Cesium-137</p> <p>I. Hydrogen-3</p> <p>J. Carbon-14</p>	<p>7. Chemical and/or physical form</p> <p>A. Any radiopharmaceutical identified in 10 CFR 35.100</p> <p>B. Any radiopharmaceutical identified in 10 CFR 35.200</p> <p>C. Any radiopharmaceutical identified in 10 CFR 35.300</p> <p>D. Any brachytherapy sources identified in 10 CFR 35.400</p> <p>E. Sealed sources identified in 10 CFR 35.500</p> <p>F. Prepackaged Kits</p> <p>G. Sealed source (Nuclear Assoc. Model No. 05-657)</p> <p>H. Sealed sources (New England Nuclear Model No. NER.401H)</p> <p>I. Any</p> <p>J. Any</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. As needed</p> <p>B. As needed</p> <p>C. As needed</p> <p>D. As needed</p> <p>E. As needed</p> <p>F. As needed</p> <p>G. 1 millicuries</p> <p>H. 10 millicuries</p> <p>I. 989 millicuries</p> <p>J. 10 millicuries</p>

9. Authorized Use:

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**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

34-00746-02

Docket or Reference Number

030-02651

Amendment No. 66

- A. Medical use described in 10 CFR 35.100.
- B. Medical use described in 10 CFR 35.200.
- C. Medical use described in 10 CFR 35.300.
- D. Medical use described in 10 CFR 35.400.
- E. Medical use described in 10 CFR 35.500 in devices which have been evaluated and approved for licensing purposes by the U.S. Nuclear Regulatory Commission or an Agreement State.
- F. In vitro studies.
- G. and H. To be used for instrument calibration.
- I. and J. To be used for in-vitro studies.

CONDITIONS

- 10. Location of Use: Mount Sinai Medical Center, One Mount Sinai Drive, Cleveland, Ohio.
- 11. Radiation Safety Officer: Mark S. Rzeszotarski, Ph.D.
- 12. Authorized Users:
  - A. Stephen N. Wiener, M.D. 10 CFR 35.100, 35.200, 35.300, 35.500 and 31.11.
  - B. Saul Genuth, M.D. 10 CFR 35.100, 35.200 and 31.11.
  - C. Ram K. Goyal, M.D. 10 CFR 35.400.
  - D. Henry E. Blair, M.D. 10 CFR 35.400.
  - E. Henri Brunengraber, M.D., Ph.D. Hydrogen-3 and Carbon-14 for in-vitro studies only.
  - F. Mark S. Rzeszotarski, Ph.D. 10 CFR 35.400, Strontium-90 and Cesium-137 for instrument calibration only.
  - G. Gregory W. Baran, M.D. 10 CFR 35.100, 35.200, 35.300 and 31.11.
  - H. Leonard A. Kahn, M.D. 10 CFR 35.100, 35.200, 35.300 and 31.11.
- 13. 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) for establishing



**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

34-00746-02

Docket or Reference Number

030-02651

Amendment No. 66

decommissioning financial assurance.

14. Notwithstanding the requirements of 10 CFR 35.400(d), the licensee may use iridium-192 as seeds encased in nylon ribbon as a sealed source in seeds for topical, interstitial, and intracavitary treatment of cancer. The licensee may deviate from the manufacturer's radiation safety and handling instructions to the extent that the instructions are not applicable to the type of use proposed by the licensee.
15. 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, except for minor changes in the medical use radiation safety procedures as provided in 10 CFR 35.31. 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 June 28, 1994; and
- B. Letters dated November 17, 1994 and December 20, 1996.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date \_\_\_\_\_

By \_\_\_\_\_

Nuclear Materials Licensing Branch  
Region III

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**MATERIALS LICENSE**

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
1. The Mt. Sinai Medical Center	January 19, 1995
2. Department of Radiology Radiation Therapy Division One Mt. Sinai Drive Cleveland, OH 44106-4198	3. License number 34-00746-03 is amended in its entirety to read as follows:
	4. Expiration date July 31, 1998
	5. Docket No. 030-15270 Reference No.

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. Cobalt-60	A. Sealed sources model designation AECL C-146 or C-151	A. 5000 curies per source
B. Uranium depleted in uranium-235	B. Solid metal	B. 550 kilograms total possession limit
C. Cobalt-60	C. Sealed sources	C. 5000 curies per model designation source AECL C-146 or C-151; or Neutron Products Inc. Model NPTT series

## 9. Authorized Use:

- A. Medical use described in 10 CFR 35.600, in an AECL Theratron 780 teletherapy unit.
- B. Shielding in two teletherapy units.
- C. Medical use described in 10 CFR 35.600 in a Theratronics International Ltd. (AECL) Model T780C teletherapy unit.

CONDITIONS

10. Location of Use: Licensed material listed in Subitems 6.A. and 6.B. may be used at One Mt. Sinai Drive, Tower Wing, Basement Floor, Room TB100, Cleveland, Ohio. Licensed material listed in Subitems 6.B. and 6.C. may be used at Mt. Sinai Integrated Medical Campus; 26900 Cedar Road, Suite 129, Beachwood, Ohio.

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**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
34-00746-03Docket or Reference Number  
030-15270

Amendment No. 16

11. Radiation Safety Officer: Mark S. Rzeszutarski, Ph.D.
12. Authorized Users: Ram K. Goyal, M.D. and Henry F. Blair, M.D.
13. The teletherapy physicist for this license is Louis A. Fadell, M.S.
14. The licensee is exempted from decommissioning financial assurance requirements for possession of licensed material in sealed sources in quantities greater than the limits in 10 CFR 30.35(d) for the purpose of source changes only. This exemption is granted for no more than 30 days for any one source change.
15. The licensee shall maintain records of information important to safe and effective decommissioning at the location specified in Condition 10. per the provisions of 10 CFR 30.35(g) until this license is terminated by the Commission.
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, except for minor changes in the medical use radiation safety procedures as provided in 10 CFR 35.31. 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. Applications dated August 16, 1984 (with attachments) and August 30, 1994 (with attachment);
  - B. Letters dated February 22, 1988, August 24, 1990 (with enclosures), April 7, 1993, June 8, 1993;
  - C. ALARA Program dated February 3, 1988; and
  - D. Facsimile dated April 29, 1994.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date \_\_\_\_\_

By \_\_\_\_\_

Nuclear Materials Licensing Branch  
Region III



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**MATERIALS LICENSE**

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 application dated September 2, 1994
1. Deaconess Hospital of Cleveland	3. License number 34-17967-01 is amended in its entirety as follows:
2. 4229 Pearl Road Cleveland, OH 44109	4. Expiration date September 30, 1998
	5. Docket No. 030-13733 Reference No.

- |   |   |  |
|---|---|--|
| 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. Any byproduct material identified in 10 CFR 35.100 | A. Any radiopharmaceutical identified in 10 CFR 35.100  | A. As needed   |
| B. Any byproduct material identified in 10 CFR 35.200 | B. Any radiopharmaceutical identified in 10 CFR 35.200 (excluding xenon-133 and generators that require depleted uranium shielding) | B. As needed   |
| C. Any byproduct material identified in 10 CFR 35.300 | C. Any radiopharmaceutical identified in 10 CFR 35.300  | C. As needed (not to exceed 1 curie of I-131)                                  |

## 9. Authorized Use:

- A. Medical use described in 10 CFR 35.100.
- B. Medical use described in 10 CFR 35.200 (excluding xenon-133 and generators that require depleted uranium shielding).
- C. Medical use described in 10 CFR 35.300.

CONDITIONS

- 10. Licensed material shall be used only at the licensee's facilities located at 4229 Pearl Road, Cleveland, Ohio.
- 11. Radiation Safety Officer: Mary Ann King, M.D.

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**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
34-17967-01Docket or Reference Number  
030-13733

Amendment No. 16

12. Licensed material listed in Item 6 above is only authorized for use by, or under the supervision of, the following individuals for the materials and uses indicated:

Authorized UsersMaterial and Use

S. Bruce DeVille, M.D.	10 CFR 35.100, 35.200 (excluding xenon-133 and generators that require depleted uranium shielding) and 35.300
Charles Doyle, M.D.	10 CFR 35.100, 35.200 (excluding xenon-133 and generators that require depleted uranium shielding) and 35.300
Victor A. Ceicys, M.D.	10 CFR 35.100, 35.200 (excluding xenon-133 and generators that require depleted uranium shielding) and 35.300
Shardul Vibhaker, M.D.	10 CFR 35.100, 35.200 (excluding xenon-133 and generators that require depleted uranium shielding) and 35.300
Glen F. Sykora, M.D.	10 CFR 35.100, 35.200 (excluding xenon-133 and generators that require depleted uranium shielding) and 35.300 (excluding iodine-131 for thyroid carcinoma)
Bela Frank Ballo, M.D.	10 CFR 35.100, 35.200 (excluding xenon-133 and generators that require depleted uranium shielding) and 35.300 (excluding iodine-131 for thyroid carcinoma)
Robert J. Lazarony, M.D.	10 CFR 35.100, 35.200 (excluding xenon-133 and generators that require depleted uranium shielding) and iodine-131 for hyperthyroidism and cardiac dysfunction.
Amin Seyed Bagheri, M.D.	10 CFR 35.100, 35.200 (excluding xenon-133 and generators) and 35.300
Mary Ann King, M.D.	10 CFR 35.100, 35.200 (excluding xenon-133 and generators that require depleted uranium shielding) and 35.300 (excluding iodine-131 for thyroid carcinoma)
Hasson Lee, M.D.	10 CFR 35.100, 35.200 (excluding xenon-133 and generators that require depleted uranium shielding) and phosphorus-32 as soluble phosphate for treatment of polycythemia vera, leukemia and bone metastases
Christine Zirafi, M.D.	10 CFR 35.200 (excluding xenon-133 and generators that require depleted uranium shielding) limited to cardiovascular clinical procedures
Sean V. Lyons, M.D.	10 CFR 35.100 and 35.200 (excluding xenon-133 and generators that require depleted uranium shielding) limited to cardiovascular clinical



**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
34-17967-01Docket or Reference Number  
030-13733

Amendment No. 16

## procedures

Laurence B. Grossman, M.D. 10 CFR 35.100, 35.200 (excluding xenon-133 and generators) and 35.300

Victor J. DeMarco, M.D. 10 CFR 35.100, 35.200 (excluding xenon-133 and generators that require depleted uranium shielding) and 35.300

Ronald A. Siwik, M.D. 10 CFR 35.100, 35.200 (excluding xenon-133 and generators that require depleted uranium shielding) and 35.300

Robert P. Jacobson, M.D. 10 CFR 35.100, 35.200 (excluding xenon-133 and generators that require depleted uranium shielding) and 35.300 (excluding iodine-131 for thyroid carcinoma)

Eugene A. White, M.D. 10 CFR 35.100 and 35.200 (excluding xenon-133 and generators that require depleted uranium shielding)

David H. Berns, M.D. 10 CFR 35.100 and 35.200 (excluding xenon-133 and generators that require depleted uranium shielding)

13. The licensee shall maintain records of information related to decommissioning at the location listed in Condition 10. of this license as specified in 10 CFR 30.35(j) until this license is terminated by the Commission.
14. 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, except for minor changes in the medical use radiation safety procedures as provided in 10 CFR 35.31. The U.S. 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 April 23, 1993 and September 2, 1994; and
- B. Letter dated August 25, 1993 (excluding Item 12).

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date \_\_\_\_\_

By \_\_\_\_\_



**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

34-17967-01

Docket or Reference Number

030-13733

Amendment No. 16

Nuclear Materials Licensing Branch  
Region III

## MATERIALS LICENSE

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 3.1 November 18, 1997 34-03749-10 is amended in its entirety to read as follows:	
1. MetroHealth Medical Center Radiation Safety Office		4. Expiration Date	
2. 2500 MetroHealth Drive Cleveland, OH 44109		5. Docket or Reference No. September 30, 2003	
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. Any byproduct material identified in 10 CFR 35.100	A. Any radiopharmaceutical identified in 10 CFR 35.100	A. As needed	
B. Any byproduct material identified in 10 CFR 35.200	B. Any radiopharmaceutical identified in 10 CFR 35.200	B. As needed	
C. Any byproduct material identified in 10 CFR 35.300	C. Any radiopharmaceutical identified in 10 CFR 35.300	C. As needed	
D. Any byproduct material identified in 10 CFR 35.400	D. Any brachytherapy source identified in 10 CFR 35.400	D. 3.0 curies	
E. Any byproduct material identified in 10 CFR 31.11	E. Prepackaged Kits	E. As needed	
F. Any byproduct material, Atomic Nos. 3 through 83, inclusive, with a half-life less than 120 days	F. Any	F. Not to exceed 20 millicuries per radionuclide. Total possession not to exceed 2 curies, except as noted below:  Phosphorus-32 150 millicuries Iodine-125 75 millicuries Sulfur-35 200 millicuries	
G. Carbon-14	G. Any	G. 200 millicuries	
H. Calcium-45	H. Any	H. 5 millicuries	

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MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License Number

34-03749-10

Docket or Reference Number

030-13873

Amendment No. 23

I. Cobalt-57	I. Any	I. 10 millicuries
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
J. Hydrogen-3	J. Any	J. 500 millicuries
K. Chromium-51	K. Any	K. 30 millicuries
L. Nickel-63	L. Foil sources contained in electron capture detector cells (which have been evaluated by and registered with the NRC or an Agreement State)	L. No single source to exceed 15 millicuries, maximum of 150 millicuries
M. Iridium-192	M. Sealed sources (Byk Mallinckrodt Model C1 LBV)	M. Two sources not to exceed 12 curies each
N. Any byproduct material, Atomic Nos. 3-83	N. Solid/liquid Waste	N. See Item 9.O.
O. Gadolinium-153	O. Sealed rod source (Isotope Products Labs. Model No. 3409)	O. Two sources not to exceed 86 millicuries each
P. Uranium depleted in Uranium-235	P. Cadmium plated metal	P. 137 kilograms

## 9. Authorized Use:

- A. Medical use described in 10 CFR 35.100.
- B. Medical use described in 10 CFR 35.200.
- C. Medical use described in 10 CFR 35.300.
- D. Medical use described in 10 CFR 35.400.



**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

34-03749-10

Docket or Reference Number

030-13873

Amendment No. 23

- E. To be used for in vitro studies.
- F. through K. To be used for research and development as defined in 10 CFR Part 30, Section 30.4, animal studies, and instrument calibration.
- L. For storage only.
- M. One source to be used in a Nucletron Corporation MicroSelectron-HDR remote afterloading brachytherapy unit for interstitial and intracavitary radiotherapy. One source in its shipping container to be in possession of the licensee, as necessary for replacement of the source in the irradiation device.
- N. For possession incident to interim storage of waste in accordance with statements, representations and procedures contained in letter dated June 1, 1994.
- O. To be used in a Picker International STEP device for medical radiography of patients.
- P. For storage only in a Theratronics 780 teletherapy unit in Bel Greve building, room WB-27G.

**CONDITIONS**

10. Licensed material shall be used only at the licensee's facilities located at MetroHealth Medical Center, 2500 MetroHealth Drive, Cleveland, Ohio.
11. A. Licensed material shall only be used by, or under the supervision of, individuals designated by the Radiation Safety Committee, Douglas Frye, Ph.D., Chairperson. The licensee shall maintain records of individuals designated as users for 3 years after the individual's last use of licensed material.
- B. The licensee's Radiation Safety Committee shall approve all potential users prior to the use of byproduct material.
- C. The Radiation Safety Officer for this license is Ridgely Conant.
- D. Physicians designated to use licensed material in or on humans shall meet the appropriate training and experience criteria in 10 CFR Part 35, Subpart J.
12. A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as specified by the certificate of registration referred to in 10 CFR 32.210.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

34-03749-10

Docket or Reference Number

030-13873

Amendment No. 23

- B. Notwithstanding the periodic leak test required by this condition, any licensed sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting materials or 10 microcuries or less of alpha emitting material.
- C. Except for alpha sources, the periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage before any use or transfer to another person unless they have been leak tested within 6 months before the date of use or transfer.
- D. Sealed sources 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 transferred 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.
- E. The leak test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. Records of leak test results shall be kept in units of microcuries and shall be maintained for inspection by the Commission. 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 shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region III, 801 Warrenton Road, Lisle, Illinois 60532-4351, ATTN: Chief, Nuclear Materials Safety Branch. The report shall specify the source involved, the test results, and corrective action taken. Records may be disposed of following Commission inspection.



**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

34-03749-10

Docket or Reference Number

030-13873

Amendment No. 23

F. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically licensed by the Commission or an Agreement State to Perform such services.

13. Detector cells containing licensed material shall not be opened or the sources removed from the detector cell by the licensee.
14. In lieu of using the conventional radiation caution colors (magenta or purple on yellow background) as provided in 10 CFR 20.203(a)(1), the licensee is hereby authorized to label detector cells, containing licensed material and used in gas chromatography devices, with conspicuously etched or stamped radiation caution symbols.
15. Except as otherwise specified in this license, the licensee shall have available and follow the instructions contained in the manufacturer's instruction manual for the chromatography device.
16. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 5 years from the date of each inventory, and shall include the quantities and kinds of byproduct material, manufacturer's name and model numbers, location of the sources and/or devices, and the date of the inventory.
17.
  - A. Access to the rooms housing the MicroSelectron High Dose Rate afterloading brachytherapy unit shall be controlled by a door at each entrance.
  - B. The entrance to the irradiation room shall be equipped with an electrical interlock system that will cause the source to return to the shielded position immediately upon opening of the entrance door. The interlock system shall be connected in such a manner that the source cannot be placed in the irradiation position until the entrance door is closed and the source "on-off" control is reset at the control panel.
  - C. Electrical interlocks on the entrance door to the irradiator room shall be tested for proper operation at least once a month. Records of test results shall be maintained for inspection by the Commission.
  - D. In the event of malfunction of the door interlock, the irradiation device shall be locked in the "off" position and not used, except as may be necessary for repair or replacement of the interlock system, until the interlock system is shown to be functioning properly.



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18. Prior to initiation of a treatment program, and subsequent to each source exchange for the MicroSelectron High Dose Rate afterloading brachytherapy unit, radiation surveys and tests shall be performed in accordance with the following:
- A. A radiation survey shall be made of:
- (1) The irradiator source housing, with the source in the shielded position. The maximum radiation levels at 100 centimeters from the surface of the main source safe shall not exceed 0.25 milliroentgen per hour.
  - (2) All areas adjacent to the treatment room with the source in the "irradiation" position. The survey shall clearly establish:
    - (a) That radiation levels in restricted areas are not likely to cause personnel exposure in excess of the limits specified in 10 CFR 20.101.
    - (b) That quantities of radiation in unrestricted areas do not exceed the limits specified in 10 CFR 20.105(b).
- B. Records of the survey results shall be maintained for inspection by the Commission for the duration of the license.
19. The following shall be performed only by persons specifically authorized by the Commission or an Agreement State to perform such services:
- A. Installation and replacement of the sealed sources contained in the MicroSelectron High Dose Rate afterloading brachytherapy unit(s).
  - B. Any maintenance or repair operations on the MicroSelectron High Dose Rate afterloading brachytherapy unit(s) listed in Item 9., Subitem(s) N involving work on the source safe, the source driving unit, or other mechanism that could expose the source, reduce the shielding around the source, or compromise the safety of the unit and result in increased radiation levels.
20. Experimental animals, or the products from experimental animals, that have been administered licensed materials shall not be used for human consumption.
21. The licensee shall submit all changes to the membership of the Radiation Safety Committee for review and approval by the Commission.

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22. The licensee shall not use licensed material in field applications where activity is released except as provided otherwise by specific condition of this license.
23. The licensee is authorized to hold radioactive material with a physical half-life of less than 90 days for decay-in-storage before disposal in ordinary trash provided:
- A. Radioactive waste to be disposed of in this manner shall be held for decay a minimum of 10 half-lives.
  - B. Before disposal as ordinary trash, byproduct material shall be surveyed at the container surface with the appropriate survey meter set on its most sensitive scale and with no interposed shielding to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.
  - C. A record of each disposal permitted under this License Condition shall be retained for three years. The record must include the date of disposal, the date on which the byproduct material was placed in storage, the radionuclides disposed, the survey instrument used, the background dose rate, the dose rate measured at the surface of each waste container, and the name of the individual who performed the disposal.
24. "The licensee may possess 24 Ci iridium-192 (not to exceed 12 Ci per source) for use in the Nucletron Corp. MicroSelectron-HDR remote afterloading brachytherapy unit, provided the individual source activity does not exceed 10 Ci at the time of installation, and the source is installed by an authorized individual."
25. 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 U.S. 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 20, 1992;
  - B. Letters dated February 10, 1993 (excluding reference to exemption from radiation surveys indicated in item 1), May 7, 1993, August 2, 1993, October 29, 1993, June 1, 1994, August 3,

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1994, September 14, 1994, March 14, 1995 (excluding Item 2), June 8, 1995 (with attachments), September 19, 1995, January 12, 1996 and November 18, 1997 (excluding the Enclosure No. 1 reference to the Quality Management Program); and

C. Letter received May 13, 1993.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date \_\_\_\_\_

By \_\_\_\_\_



**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

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Amendment No. 23

Nuclear Materials Licensing Branch, Region III

Licwater

**MATERIALS LICENSE**

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 application dated March 4, 1994
1. Meridia Huron Hospital	3. License number 34-01505-01 is renewed in its entirety to read as follows:
2. 13951 Terrace Road Cleveland, OH 44112	4. Expiration date June 30, 1999
	5. Docket No. 030-02680 Reference No.

- |   |  |  |
|---|--|--|
| 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. Any byproduct material identified in 10 CFR 35.100 | A. Any radiopharmaceutical identified in 10 CFR 35.100 | A. As needed   |
| B. Any byproduct material identified in 10 CFR 35.200 | B. Any radiopharmaceutical identified in 10 CFR 35.200 | B. As needed   |
| C. Any byproduct material identified in 10 CFR 35.300 | C. Any radiopharmaceutical identified in 10 CFR 35.300 | C. As needed   |
| D. Any byproduct material identified in 10 CFR 31.11  | D. Prepackaged Kits                                    | D. As needed   |
| E. Carbon-14  | E. Any   | E. 2 millicuries   |
| F. Hydrogen-3   | F. Any   | F. 10 millicuries  |
| G. Phosphorus-32                                      | G. Any   | G. 500 microcuries   |

## 9. Authorized Use:

- A. Medical use described in 10 CFR 35.100.
- B. Medical use described in 10 CFR 35.200.
- C. Medical use described in 10 CFR 35.300.
- D. through G. To be used for in-vitro studies.

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**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

34-01505-01

Docket or Reference Number

030-02680

Amendment No. 33

CONDITIONS

10. Location of Use: Meridia Huron Hospital, 13951 Terrace Road, Cleveland, Ohio.

11. Radiation Safety Officer: A. Mervyn Thynne, M.D.

12. Authorized Users:

B. T. Archer, M.D. 10 CFR 35.100, 35.200, 31.11 and iodine-131 for treatment of hyperthyroidism and cardiac dysfunction.

C. C. York, M.D. 10 CFR 35.100, 35.200, 31.11 and iodine-131 for treatment of hyperthyroidism and cardiac dysfunction.

Shardul Vibhaker, M.D. 10 CFR 35.100, 35.200, 35.300 and 31.11.

Howard Potash, M.D. 10 CFR 35.100, 35.200, 35.300 and 31.11.

A. Mervyn Thynne, M.D. 10 CFR 35.100, 35.200, 31.11, and iodine-131 for treatment of hyperthyroidism and cardiac dysfunction, and strontium-89.

Burton Carey West, M.D. Subitems 6.E., 6.F. and 6.G.

13. 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, except for minor changes in the medical use radiation safety procedures as provided in 10 CFR 35.31. 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.



**MATERIALS LICENSE  
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34-01505-01

Docket or Reference Number

030-02680

Amendment No. 33

- A. Application dated March 4, 1994; and
- B. Letters dated May 13, 1993 (Item 4), and May 31, 1994.

COMMISSION

FOR THE U.S. NUCLEAR REGULATORY

Date \_\_\_\_\_

By \_\_\_\_\_

Nuclear Materials Licensing Branch  
Region III

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

34-01505-01

Docket or Reference Number

030-02680

Amendment No. 33

Licewater

## MATERIALS LICENSE

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 application dated April 24, 1995
1. General Electric Lighting	3. License number 34-00054-05 is renewed in its entirety to read as follows:
2. Nela Park Cleveland, OH 44112	4. Expiration date August 31, 2001
	5. Docket No. 030-05605 Reference No.

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. Promethium-147	A. As contained in sealed glow switches	A. 100 millicuries total No single glow lamp to contain more than 0.5 microcuries
B. Krypton-85	B. As contained in sealed glow switches or sealed arc tubes	B. No single glow switch or arc tube to exceed 48 microcuries, 25 millicuries total
C. Hydrogen-3	C. Gas	C. 9 curies
D. Krypton-85	D. Gas	D. 10 curies
E. Hydrogen-3	E. As contained in sealed glow switches	E. 12 millicuries

## 9. Authorized Use:

- A. To be used for storage incident to distribution.
- B. To be used for possession incident to the assembly and distribution of fluorescent lamps.
- C. and D. To be used for storage only, incident to waste disposal as described in letter dated July 22, 1996.
- E. To be used for possession incident to assembly and distribution.

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**MATERIALS LICENSE  
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License Number

34-00054-05

Docket or Reference Number

030-05605

Amendment No. 38

CONDITIONS

10. A. Licensed material shall be used at the licensee's facilities located at: Nela Park, Cleveland, Ohio, Tungsten Products Plant, 21800 Tungsten Road, Euclid, Ohio, Ravenna Lamp Plant, 6800 N. Chestnut Street, Ravenna, Ohio, Circleville Lamp Plant, East Ohio Street, Circleville, Ohio, and Ohio Lamp Plant, 1210 North Park Avenue, Warren, Ohio.
- B. Licensed material shall be stored, incident to distribution at the licensee's facilities located at:
- Ravenna Master Distribution Center, Ravenna, Ohio; Kansas City Master Distribution Center, Kansas City, Missouri; and Batesville Master Distribution Center, 1736 Lammers Pike, Batesville, Indiana.
11. Licensed material shall be used by, or under the supervision of, A. M. Zielinski.
12. Licensed material shall not be used in or on human beings or in field applications where activity is released except as provided otherwise by specific condition of this license.
13. The licensee shall conduct a physical inventory every six (6) months to account for all glow switches and arc tubes received and possessed under the license. The records of the inventories shall be maintained for two (2) years from the date of the inventory for inspection by the Commission, and shall include the quantities and kinds of byproduct material, manufacturer's name and model numbers, location of the glow switches and arc tubes and the date of the inventory.
14. Individuals who work in or whose duties may require them to work in restricted areas or in the vicinity of licensed materials, shall be instructed in the items specified in 10 CFR 19.12 at the time of initial employment and at least annually thereafter.
15. The licensee may transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
16. This license does not authorize commercial distribution of licensed material.
17. The licensee shall maintain records of information important to safe and effective decommissioning at General Electric Co., Cleveland, Ohio per the provisions of 10 CFR 30.35(g) until this license is terminated by the Commission.
18. 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 April 24, 1995 (with attachments).
- B. Letters dated October 23, 1995, March 7, 1996, and July 22, 1996.

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License Number

34-00054-05

Docket or Reference Number

030-05605

Amendment No. 38

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date \_\_\_\_\_

By \_\_\_\_\_

Nuclear Materials Licensing Branch  
Region III

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