

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

24-26664-01

Docket or Reference Number

030-33899

Amendment No. 01

301823

Mallinckrodt Medical, Inc.
P.O. Box 5840
675 McDonnell Boulevard
St. Louis, MO 63134

In accordance with NRC Form 314, "Certificate of Disposition of Materials," dated September 9, 1996, License No. 24-26664-01 is hereby terminated.

TERMINATED

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date Jan 28 1997

By *Richard R. Matson*
Nuclear Materials Licensing Branch, Region III

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FDR ADOCK 03033899
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(FOR LFMS USE)
INFORMATION FROM LTS

BETWEEN:

License Fee Management Branch, ARM
and
Regional Licensing Sections

Program Code: 03225
Status Code: 0
Fee Category: 3P
Exp. Date: 20050531
Fee Comments:
Decom Fin Assur Req: N

R8

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: MALLINCKRODT MEDICAL INCORPORATED
Received Date: 960913
Docket No: 3033899
Control No.: 301823
License No.: 24-26664-01
Action Type: Termination

2. FEE ATTACHED

Amount: 0
Check No.: 2

3. COMMENTS

Signed A. Hersey
Date 9-16-96

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

1. Fee Category and Amount: 3P Termination

2. Correct Fee Paid. Application may be processed for
Amendment ✓
Renewal
License

3. OTHER

Signed SC
Date 9/24/96

1296 SEP 20 AM 11:56

SEP 30 1996

| | |
|-------------------|-----------------------|
| RECEIVED BY LFDCB | |
| Date | <u>Sept. 20, 1996</u> |
| Log | <u>Sep 7 III</u> |
| By | <u>SC</u> |
| Date Completed | <u>9/24/96</u> |

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 30 MINUTES. THIS MANDATORY SUBMITTAL IS USED BY NRC AS PART OF THE BASIS FOR ITS DETERMINATION THAT THE FACILITY HAS BEEN CLEARED OF RADIOACTIVE MATERIAL BEFORE THE FACILITY IS RELEASED FOR UNRESTRICTED USE. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNRB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0028), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

CERTIFICATE OF DISPOSITION OF MATERIALS

INSTRUCTIONS: ALL ITEMS MUST BE COMPLETED -- PRINT OR TYPE
SEND THE COMPLETED CERTIFICATE TO THE NRC OFFICE SPECIFIED ON THE REVERSE

LICENSEE NAME AND ADDRESS

Mallinckrodt Medical, Inc.
NMA Medical Physics Consultation
P.O. Box 5840, 675 McDonnell Boulevard
St. Louis, Missouri 63134

LICENSE NUMBER

24-26664-01

LICENSE EXPIRATION DATE

May 31, 2005

A. MATERIALS DATA (Check one and complete as necessary)

THE LICENSEE OR ANY INDIVIDUAL EXECUTING THIS CERTIFICATE ON BEHALF OF THE LICENSEE CERTIFIES THAT:
(Check and/or complete the appropriate item(s) below.)

- ☐ 1. NO MATERIALS HAVE EVER BEEN PROCURED OR POSSESSED BY THE LICENSEE UNDER THIS LICENSE.
OR
☒ 2. ALL ACTIVITIES AUTHORIZED BY THE LICENSE HAVE CEASED AND ALL MATERIALS PROCURED AND/OR POSSESSED BY THE LICENSEE UNDER THE LICENSE NUMBER CITED ABOVE HAVE BEEN DISPOSED OF IN THE FOLLOWING MANNER. (If additional space is needed, use the reverse side or provide attachments.)

Describe specific material transfer actions and, if there were radioactive wastes generated in terminating this license, the disposal actions including the disposition of low-level radioactive waste, mixed waste, Greater-than-Class-C waste, and sealed sources, if applicable.

All sealed sources removed and transferred to another licensee (attached).

Unsealed sources were not received, possessed nor used for 18 months.

For transfers, specify the date of the transfer, the name of the licensed recipient, and the recipient's NRC license number or Agreement State name and license number.

All sealed sources were transferred to Radiated Uniform Frequency (Material License #34-26693-01) on September 5, 1996

If materials were disposed of directly by the licensee rather than transferred to another licensee, licensed disposal site or waste contractor, describe the specific disposal procedures (e.g., decay in storage).

Not Applicable

Termination
FEE EXEMPT

B. OTHER DATA

- ☒ 1. OUR LICENSE HAS NOT YET EXPIRED; PLEASE TERMINATE IT.
2. A RADIATION SURVEY WAS CONDUCTED BY THE LICENSEE TO CONFIRM THE ABSENCE OF LICENSED RADIOACTIVE MATERIALS AND TO DETERMINE WHETHER ANY CONTAMINATION REMAINS ON THE PREMISES COVERED BY THE LICENSE. (Check one)

☐ NO (Attach explanation)

☒ YES, THE RESULTS (Check one)

☒ ARE ATTACHED, or

☐ WERE FORWARDED TO NRC ON (Date)

RECEIVED**SEP 13 1996****REGION III****pm: 9-10-96**

3. THE PERSON TO BE CONTACTED
REGARDING THE INFORMATION
PROVIDED ON THIS FORM

NAME

Scott Surovi

TELEPHONE NUMBER
(Include Area Code)

(314) 770-7444

4. MAIL ALL FUTURE CORRESPONDENCE REGARDING THIS LICENSE TO

Mallinckrodt Medical, Inc. 2703 Wagner Place, Maryland Heights, MO 63043

301823**CERTIFYING OFFICIAL**

I CERTIFY UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT

PRINTED NAME AND TITLE

Les Sabo, Director
U.S. Nuclear Medicine Operations

SIGNATURE



DATE

09/09/96

WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECTS. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTIONS.



September 9, 1996

Loren Hueter
U.S. Nuclear Regulatory Commission
Region III
Nuclear Materials Licensing Section
801 Warrenville Road
Lisle, IL 60532-4351

Mallinckrodt Medical, Inc.
2703 Wagner Place
Maryland Heights, MO 63043
Telephone (314) 770-7800

RE: Material License 24-26664-01

PLEASE EXPEDITE LICENSING ACTION

Dear Mr. Hueter:

Attached please find a Certificate of Disposition of Materials (NRC Form 314) and results of a "close-out" survey conducted at our facility located at 9457 Midwest Avenue, Garfield Heights, OH. It is our intent to terminate the above referenced material license no later than September 30, 1996.

For the past 18 months, the consulting service, NMA Medical Physics Consultation, as described in the application for material license (dated August 25, 1994), has been limited to survey meter calibrations and analysis of sealed source leak test samples. Only sealed calibration sources have been used at our facility during this time. Thus, receipt and use of unsealed sources has not occurred for at least 18 months.

All sealed sources (see attached list) have been transferred to Radiated Uniform Frequency (RUF), material license number 34-266693-01, on September 5, 1996. A thorough survey (dose rate and contamination) was conducted once all sources were removed from the facility. As indicated in the attached survey report, dose rate and contamination levels were negligible and considered equal to ambient background levels.

I trust the enclosed information will satisfy the Commission's requirements regarding our request to terminate the above referenced material license. Please contact Scott Surovi (314-770-7444) for additional information regarding this matter. I thank you for your assistance and prompt action regarding this request.

Sincerely,

Les Sabo
Director, U.S. Nuclear Medicine Operations

enclosures: Form 314
Sealed source transfer list
"Close-out" survey
Material License 34-26693-01

RECEIVED
SEP 13 1996
REGION III

SEP 13 1996

NMA MEDICAL PHYSICS CONSULTATION
(Mallinckrodt Medical, Inc.)

The following sealed radioactive sources were transferred to Radiated Uniform Frequency (R.U.F.), under the authority of material license 34-26693-01 (U.S. Nuclear Regulatory Commission) and registration 70-F-00019-01 (Ohio Department of Health), on September 5, 1996:

| Radionuclide | Calibration Activity | Source Configuration | Identification Number |
|-------------------------|--|---|-----------------------|
| Cesium-137 ¹ | 151.3 mCi on 05/08/89 | Survey calibration source (Tech Ops Model 773) | S/N 362 |
| Cobalt-57 ¹ | 5.5 mCi on 09/24/94 | E-Viai (Model NES-206) | S/N S206081-037 |
| Radium-226 | 0.5 μ grams 1967 | Sealed vial | ID# 109 |
| Germanium-68/Gallium-68 | 0.5 μ Ci on 11/21/89 | Sealed vial | |
| Carbon-14 | 0.189 μ Ci on 10/26/81 | Calibration disk | |
| Uranium-238 | 1.01 x 10 ⁴ α /min 2 π on 09/17/70 | Calibration disk | S/N 2255-6 |
| Strontium-90 | 0.0237 μ Ci on 10/22/70 | Calibration disk | S/N 2223-2 |
| Iodine-129 | 0.989 μ Ci on 08/01/88 | Calibration disk | S/N 221-61-1 |
| Cesium-137 | 0.8-1.0 μ Ci | Calibration rod (Model 658-194) | ID# 658-194 |
| Americium-241 | 0.107 μ Ci on 11/01/81 | Calibration rod | S/N 9163 |
| Iodine-125 (simulated) | 0.098 μ Ci on 07/74 | Calibration rod | |
| Cobalt-57 | 0.923 μ Ci on 03/01/94 | Calibration rod | S/N 449-71-1 |
| Barium-133 | 0.092 μ Ci on 07/24/78 | Calibration rod | S/N MA02118 |
| Cobalt-60 | < 1.0 μ Ci | Calibration rod (Model GS.30) | S/N 2304-2 |
| Gadolinium-153 | 0.1195 μ Ci on 02/25/86 | Calibration rod | S/N 158-22-1 |

**MEDICAL PHYSICS SURVEY
SEALED SOURCE LEAK TEST ANALYSIS REPORT**

FACILITY: Mallinckrodt Medical Inc.

DEPARTMENT: NMA Medical Physics Consultation

LOCATION: Garfield Heights, Ohio

ATTENTION: Andrew Williams

Analysis of the WIPE used to conduct a leak test on the sealed sources identified below was performed by gas or scintillation detection and reveals removable contamination was less than 0.005 μCi , unless otherwise noted, when compared against NIST traceable standards.

Source: Cs-137, Tech-Ops Unit, 144.3 mCi on 8/20/87, Model 77032, s/n 8-600

| | | |
|-----------------------------------|-----------|-----------------------|
| Date: | 9/7/95 | 3/29/96 |
| Wipe No.: | PH 2746 | Seri to |
| MDA (μCi): | 3.6E-5 | Associates in |
| Net CPM: | 0 | Medical |
| Net μCi : | <MDA | Physics |
| CPM for 0.005 μCi : | 302 | Garfield Hts. Ohio |
| Analyst: | S. Surovi | |

Source: Cs-137, Tech-Ops Unit, 151.3 mCi on 5/8/89, Model 77032, s/n 8-682

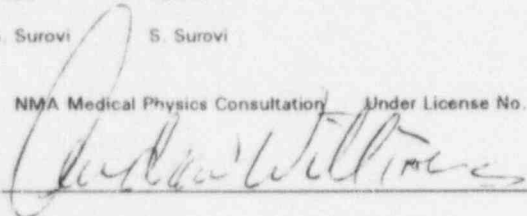
| | | |
|-----------------------------------|-----------|-----------|
| Date: | 9/7/95 | 3/29/96 |
| Wipe No.: | PH 2747 | CL 9990 |
| MDA (μCi): | 3.6E-5 | 9E-5 |
| Net CPM: | 0 | 0 |
| Net μCi : | <MDA | <MDA |
| CPM for 0.005 μCi : | 302 | 945 |
| Analyst: | S. Surovi | S. Surovi |

Source: Co-57, Vial, 5.5 mCi on 9/26/94, NEN, s/n S206081-037

| | | |
|-----------------------------------|-----------|-----------|
| Date: | 9/7/95 | 3/29/96 |
| Wipe No.: | PH 2750 | CL 9991 |
| MDA (μCi): | 1.0E-5 | 2E-5 |
| Net CPM: | 0 | 0 |
| Net μCi : | <MDA | <MDA |
| CPM for 0.005 μCi : | 1328 | 10.587 |
| Analyst: | S. Surovi | S. Surovi |

Performed by: NMA Medical Physics Consultation Under License No. : NRC #24-26664-01

RSO Signature

 5/20/96

NMA MEDICAL PHYSICS CONSULTATION
(Mallinckrodt Medical, Inc.)

CLOSE-OUT SURVEY

DATE: September 5, 1996

INSTRUMENTATION: Bicron "Surveyor" G-M survey meter (Model 2000, S/N A056P)
Canberra Multi-Channel Analyzer (Model Series 35, S/N 384754)

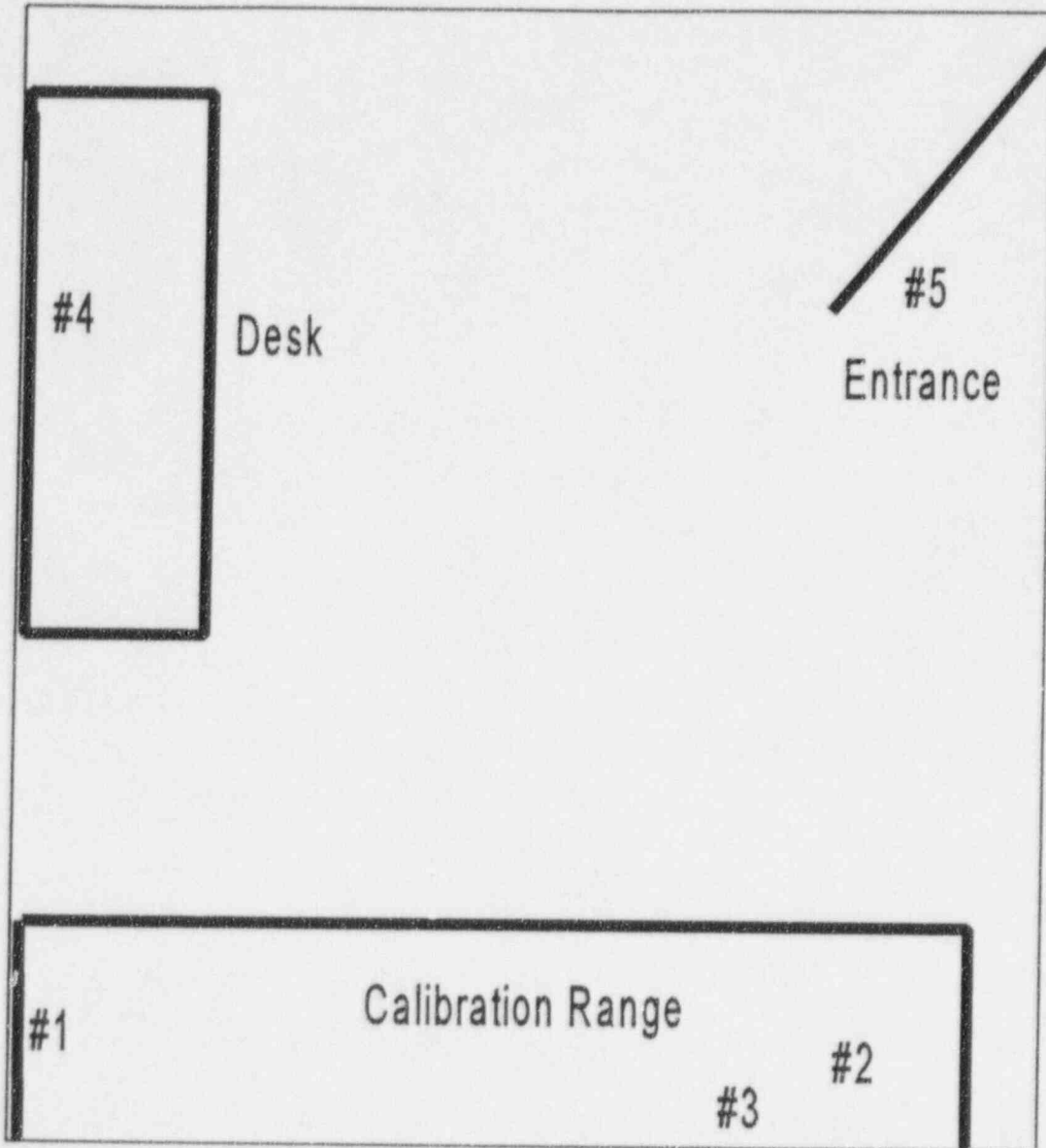
SURVEYOR: Scott Surovi, Assistant Radiation Safety Officer

The following table summarizes the results of a "close-out" survey, for the NMA Medical Physics Consultation office (9457 Midwest Avenue, Garfield Heights, OH), performed as part of the material license termination process:

| Survey Location | Gross Dose Rate Survey | Contamination Survey | |
|--|------------------------|----------------------|-----------|
| | | Gross Count | Net Count |
| Cs-137 source/calibration range (location #1) | 0.02 mR/hr | 299 cpm | 9 cpm |
| calibration range (location #2) | 0.01 mR/hr | 319 cpm | 29 cpm |
| shelf above calibration range (location #3) | 0.01 mR/hr | 273 cpm | 0 cpm |
| calibration rod source storage area/desk (location #4) | 0.02 mR/hr | 280 cpm | 0 cpm |
| calibration room entrance (location #5) | 0.01 mR/hr | 277 cpm | 0 cpm |
| ambient background level | 0.02 mR/hr | 290 cpm | |

Refer to attached diagram for survey locations within the restricted area.

Sensitivity of the Bicron survey meter is at least 0.01 mR/hr. The counting efficiency and minimum detectable activity (for a region of interest equivalent to 20 -700 keV) calculated for the Canberra multi-channel analyzer is as follows: **Efficiency** = 0.747 (74.7%), **MDA** = $2.73 \times 10^{-5} \mu\text{Ci}$ (61 dpm). The minimum detectable count rate was calculated as 46 cpm. Thus, net contamination levels less than 46 cpm are considered below the minimum detectable activity.



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.

399611

Licensee

1. R. U. F.

3. License Number 34-26693-01

2. 514 North Harmony Street
Medina, OH 44256

4. Expiration Date April 30, 2001

5. Docket or
Reference No. 030-340276. Byproduct, Source, and/or
Special Nuclear Material7. Chemical and/or Physical
Form8. Maximum Amount that Licensee
May Possess at Any One Time
Under This LicenseA. Any byproduct
material with Atomic
Nos. 3-83, inclusive
and Atomic No. 95

A. Leak test samples

A. See Item 9.A. below

B. Any byproduct
material with Atomic
Nos. 3-83, inclusive
and Atomic No. 95B. Sealed sources which
have been evaluated
and approved by the
Commission in
accordance with
Section 32.210 of
10 CFR Part 32 or
equivalent Agreement
State requirements.B. No single source
to exceed 0.1
millicurie. Total
possession limit
not to exceed 1.0
millicurie.

C. Cesium-137

C. Sealed sources
(Tech/Ops (Amersham
Corp.) Mo. 77302)C. 2 sources not
to exceed 165
millicuries.

9. Authorized Uses:

A. Possession incident to evaluation of leak/wipe test samples.

B. To be used for instrument calibration and testing.

C. One source to be used in a Tech/Ops (Amersham Corp.) Model 773 device for
calibration of clients survey instruments and one source in its shipping container
for source replacement.

COPY

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number

34-26693-01

Docket or Reference number

030-34027

CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at 514 North Harmony Street, Medina, Ohio.
11. Licensed material shall be used only by Greg Rogers, David Close or Sharon L. Long.
12. The Radiation Safety Officer for this license is Greg Rogers.
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.
- 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. 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.

COPY

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number

34-26693-01

Docket or Reference number

030-34027

- E. 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.
- 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.
14. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license.
15. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
16. The licensee is authorized to hold radioactive material with a physical half-life of less than 65 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.

COPY

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number
34-26693-01
Docket or Reference number
030-34027

17. 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.
18. 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.
19. Within 30 days of the date of a 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.
20. Before initiation of a survey instrument calibration program, radiation surveys shall be performed in accordance with the following:
 - A. A radiation survey shall be made of all restricted and unrestricted areas adjacent to the calibration room with the source in the "on" position. The survey shall be performed with a scattering medium in the primary beam of radiation that is similar to the chamber of a survey instrument and shall clearly establish:
 - (1) That radiation levels in restricted areas are not likely to cause personnel exposure in excess of the limits specified in Section 20.1201 of 10 CFR Part 20.
 - (2) That radiation levels in unrestricted areas are not likely to cause members of the general public exposure in excess of the limits specified in Section 20.1301 of 10 CFR Part 20.
 - B. The licensee shall provide the results of the above surveys to the U.S. Nuclear Regulatory Commission, Region III, 801 Warrenville Road, Lisle, Illinois 60532 as an amendment to this license not more than 30 days after installation of the survey instrument calibrator.

COPY

MATERIALS LICENSE
SUPPLEMENTARY SHEET

| |
|----------------------------|
| License number |
| 34-26693-01 |
| Docket or Reference number |
| 030-34027 |

21. 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 December 4, 1995 and
B. Letters dated March 25, 1996, and April 10, 1996



FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date 4/26/96By James Mulbrey
Materials Licensing Branch, Region III

COPY

JAN 30 1997

Scott Surovi
Mallinckrodt Medical, Inc.
2703 Wagner Place
Maryland Heights, MO 63043

Dear Mr. Surovi:

Enclosed is Amendment No. 01 which terminates your NRC License Number 24-26664-01 in accordance with your request.

If you have any questions or require clarification on any of the information stated above, you may contact us at (630) 829-9887.

Sincerely,

Original Signed By
Evelyn R. Matson
Nuclear Materials Licensing Branch

License No.: 24-26664-01
Docket No.: 030-33899

Enclosure: Amendment No. 01

DOCUMENT NAME: M:\03033899.T6

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|--------|---------------------|-------------------------------------|--|--|--|--|--|--|--|
| OFFICE | DNMS/RIII <i>EM</i> | <input checked="" type="checkbox"/> | | | | | | | |
| NAME | EMATSON:jaw | | | | | | | | |
| DATE | 18 Jan 1997 | | | | | | | | |

OFFICIAL RECORD COPY

301823



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION III
801 WARRENVILLE ROAD
LISLE, ILLINOIS 60532-4351

January 17, 1997

96-76

MEMORANDUM TO: B. J. Holt, Chief, Nuclear Materials Licensing Branch
FROM: B. L. Jorgensen, Chief, Decommissioning Branch
SUBJECT: RESPONSE TO REQUEST FOR TECHNICAL ASSISTANCE REGARDING
MALLINCKRODT MEDICAL INC. (CONTROL NO. 301823)

In a Request For Technical Assistance dated December 2, 1996, you requested our review of data and information submitted by Mallinckrodt Medical, Inc., regarding the license termination of Mallinckrodt's facility at 9457 Midwest Avenue, Garfield Heights, Ohio (No. 24-26664-01). We have completed our review as requested and determined that this facility can be evaluated under the Type I Decommissioning criteria. As such, you may proceed with the termination of this license. No closeout inspection or confirmatory survey will be required in conjunction with the termination of this license. The technical basis for our position is that only sealed sources or wipe tests of sealed sources were used at this site, and there were no records of spills or unusual occurrences, and no reports of leakage from the sealed source leak tests.

you have any questions regarding this review, please contact William Snell (x9871).

RECEIVED
JAN 23 1997
REGION III



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
801 WARRENVILLE ROAD
LISLE, ILLINOIS 60532-4351

DEC 02 1996

96-76

REQUEST FOR TECHNICAL ASSISTANCE

DATE: November 20, 1996
TO: Bruce L. Jorgensen, Chief, Decommissioning Branch
FROM: B. J. Holt, Chief, Nuclear Materials Licensing Branch
LICENSEE: Mallinckrodt Medical, Inc.

LICENSE NO.: 24-26564-01

CONTROL NO.: 301823

Problem/Issue:

The subject licensee is requesting termination of their byproduct materials license and the release of their facility for unrestricted use. The licensee possessed radionuclides atomic numbers 3-83 incident to the collection and analysis of leak test samples and an assortment of sealed sources. The attached NRC Form 314 dated September 9, 1996, and the attached letter dated October 30, 1996, contain close-out survey results and additional information about their licensed activities.

In accordance with NMSS Handbook for Decommissioning Fuel Cycle and Materials Licensees, Rev. 0, October, 1996, this is a Type III facility which requires further review by the Decommissioning Branch.

Action Requested:

Please review the data submitted by the licensee and advise the Licensing Branch on a future course of action for decommissioning and release of these buildings.

Further Information Contact: Evelyn R. Matson (ext. 9822)

Decommissioning Reviewer:

Response needed by: November 27, 1996

Attachments:

1. NRC Form 314 dated September 9, 1996, with attached survey results.
2. Deficiency telephone conversation dated October 16, 1996
3. Response letter dated October 30, 1996, with attached survey results.

UNITED STATES NUCLEAR REGULATORY COMMISSION
REGION III
CONVERSATION RECORD

(X) TELEPHONE (X) OUTGOING () INCOMING () CONVERSATION

TIME: 4pm

DATE: 10/16/96

NAME OF PERSON(S) CONTACTED:

ORGANIZATION:

TELEPHONE NO.:

Scott Surovi

314-770-7444

Mallinckrodt Medical

License No. 24-26664-01

SUBJECT:

Termination request for License No. 24-26664-01 in NRC Form 314 dated 9/9/96

SUMMARY:

The NRC needs the following additional information:

1. 10 CFR 30.36(k) (4) states that specific licenses will be terminated when the Commission determines that records required by 10 CFR 30.51(d) and (f) have been received by the Commission. 10 CFR 30.51(d) does not pertain to your license. However, 10 CFR 30.51(f) states that prior to license termination, each licensee shall forward the records required by 30.35(g) to the appropriate NRC Regional Office. Therefore, transfer the required records to this office or provide a statement explaining why each of the records required is not applicable to your licensed program.
2. Review the history of sealed source leak test records and indicate if any sealed sources have ever leaked or indicate that no sealed sources have leaked at the facility.

Please call me if you have any questions. I am available to discuss the issues.

ACTION REQUIRED:

Please respond in writing within 15 days, provide two copies of your response and refer to Control No. 301823.

ACTION TAKEN:

NAME OF PERSON DOCUMENTING CONVERSATION

SIGNATURE

DATE

Evelyn R. Matson

630-829-9822



10/16/96



October 30, 1996

Mallinckrodt Medical, Inc.
2703 Wagner Place
Maryland Heights, MO 63043
Telephone (314) 770-7800

Evelyn R. Matson
U.S. Nuclear Regulatory Commission
Region III
Nuclear Materials Licensing Section
801 Warrenville Road
Lisle, IL 60532-4351

**RE: Material License 24-26664-01
Control Number 301823**

Dear Ms. Matson:

Pursuant to your October 16, 1996 telephone conversation with Scott Surovi, the following information is provided as part of the request for termination of the above referenced material license:

1. Retention of records, important to the safe and effective decommissioning of the facility (9457 Midwest Avenue, Garfield Heights, OH), as stipulated in 10 CFR 30.35(g), are not applicable because:
 - (1) There were no records of spills or unusual occurrences since only sealed sources were used at our calibration/leak test analysis facility.
 - (2) There were no modifications of structures and/or equipment since our May 25, 1994 license renewal application. A diagram of the survey meter calibration room was included with our September 9, 1996 license termination request.
 - (3) A list of licensed materials was not maintained since only sealed sources were used at the facility.
 - (4) Records of cost estimate performed for a decommissioning funding plan were not maintained since development of a plan was not required per 10 CFR 30.35.

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2. There were no reports of leakage upon review of sealed source leak test records.

Additionally, ambient dose rate surveys were performed in the adjacent unrestricted areas. The following table details the dose rates noted at the time of evaluation:

| Location (with regard to calibration room) | Observed Ambient Dose Rate |
|---|-----------------------------------|
| Warehouse area (south side of calibration room) | 0.04 mR/hr |
| Adjacent office area (east side of calibration room) | 0.04 mR/hr |
| Adjacent office area (north side of calibration room) | 0.04 mR/hr |
| Neighboring office (west side of calibration room) | 0.04 mR/hr |
| Ambient background dose rate | 0.04 mR/hr |

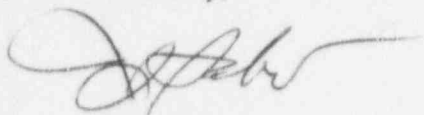
Instrument used for ambient dose rate surveys:

Eberline model E-120 with pancake
probe (S/N 10395), calibrated
4/10/96

I trust that the above information satisfies your requirements for the termination of material license 24-26664-01.

Please contact Scott Surovi (314-770-7444) for additional information, if necessary. Thank you for your prompt attention regarding this matter.

Sincerely,



Les J. Sabo
Director, U.S. Nuclear Medicine Operations



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION III
801 WARRENVILLE ROAD
LISLE, ILLINOIS 60532-4351

September 16, 1996

Scott Surovi
Radiation Safety Officer
Mallinckrodt Medical Incorporated
2703 Wagner Place
Maryland Heights, MO 63043

SUBJECT: ACKNOWLEDGEMENT OF CORRESPONDENCE
(Letter & NRC Form 314 Dated 09/09/96)

Dear Licensee:

In response to your request, we have completed the initial processing, which is an administrative review of your application for a(n):

☐ New License ☐ Amendment ☐ Renewal
☒ Termination ☐ Auth User (Amendment not required)
☐ Other _____

No administrative deficiencies were identified during this initial review. However, it should be noted that a technical review may identify omissions in the submitted information.

It appears that your request is nonroutine and has been assigned to Loren Hueter for an expedited review. If you should have questions please contact Mr. Hueter at (630) 829-9887.

1. New and amendment actions are normally processed within 90 days, unless we find major deficiencies, or policy issues requiring central program office assistance.
2. Renewal actions are normally processed within 180 days, however, under timely filing (before expiration), you may continue to operate under your existing license.
3. Termination actions are normally processed within 90 days, unless confirmatory surveys following decontamination/decommissioning activities are involved.

A copy of your correspondence has been forwarded to our Licensing Fee and Debt Collection Branch (301/415-6097) for approval of the fee category and amount, if required.

If you have a compelling safety or business-related reason for requesting expedited review, please contact the Materials Licensing Branch at (630) 829-9887. We will try to complete your request as soon as practicable. Any correspondence about this request should reference the control number.

Nuclear Materials Support Branch

Mail Control No. 301823
License No. 24-26664-01