

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

## Licensee

1. NIS Neptune

3. License number 29-30001-01

2. 230 Neptune Boulevard, Suite 2  
Neptune, New Jersey 07753

4. Expiration date December 31, 1997

5. Docket or  
Reference No 030-32997/37-28453-016. 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  
identified in 10 CFR 35.100A. Any radiopharmaceutical  
identified in 10 CFR  
35.100

A. As needed

B. Any byproduct material  
identified in 10 CFR 35.200B. Any radiopharmaceutical  
identified in 10 CFR  
35.200

B. As needed

9. Authorized use

A. Any uptake, dilution and excretion procedure approved in 10 CFR 35.100.  
B. Any imaging and localization procedure approved in 10 CFR 35.200.

## CONDITIONS

10. Licensed material may be used only at the licensee's facilities at 230 Neptune Boulevard, Suite 2 Neptune, New Jersey.

11. The Radiation Safety Officer for this license is Maliyil Koshy, Ph.D.

12. Authorized Users:Material and Use:

Margaret M. LaManna, M.D.

35.100; 35.200

13. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material so that at no time is a quantity of radioactive material possessed in excess of a quantity which requires decommissioning funding in accordance with 10 CFR 30.35(d), 10 CFR 40.36(b), or 10 CFR 70.25(d).

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PDR ADOCK 03032997  
C PDR

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MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License number

29-30001-01

Docket or Reference number

030-32997/37-28453-01

(Continued)

## CONDITIONS

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 October 30, 1992

For the U.S. Nuclear Regulatory Commission

Date

DEC 08 1992

By

Original Signed By:

Thomas K. Thompson

Nuclear Materials Safety Branch  
Region I

King of Prussia, Pennsylvania 19406

DEC 08 1992

License No. 29-30001-01  
Docket No. 030-32997  
Control No. 117393

NIS Neptune  
ATTN: Jeff Mandler  
President  
230 Neptune Boulevard, Suite 2  
Neptune, New Jersey 07753

Dear Mr. Mandler:

Please find enclosed your NRC material license.

Please review the enclosed document carefully and be sure that you understand all conditions. If there are any errors or questions, please notify the Region I Material Licensing Section, (215) 337-5093, so that we can provide appropriate corrections and answers.

Please be advised that you must conduct your program involving licensed radioactive materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, please note the items in the enclosed, "Requirements for Materials Licensees."

Since serious consequences to employees and the public can result from failure to comply with NRC requirements, the NRC expects licensees to pay meticulous attention to detail and to achieve the high standard of compliance which the NRC expects of its licensees.

You will be periodically inspected by NRC. A fee may be charged for inspections in accordance with 10 CFR Part 170. Failure to conduct your program safely and in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in prompt and vigorous enforcement action against you. This could include issuance of a notice of violation, or in case of serious violations, an imposition of a civil penalty or an order suspending, modifying or revoking your license as specified in the General Policy and Procedures for NRC Enforcement Actions, 10 CFR Part 2, Appendix C.

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NIS Neptune

-2-

We wish you success in operating a safe and effective licensed program.

Sincerely,

Original Signed By:  
Thomas K. Thompson

Thomas K. Thompson  
Nuclear Material Safety Branch  
Division of Radiation Safety  
and Safeguards

Enclosures:

1. License No. 29-30001-01
2. Requirements for Materials Licensees
3. 10 CFR Parts 2, 19, 20, and 170
4. 10 CFR Parts 2, 19, 20, 30, 35 and 170
5. NRC Form 473 - Diagnostic Misadministration Report
6. Notice for Medical Radiation Safety Officers

  
DRSS:RI  
Thompson/mlb

12/8/92



NUCLEAR  
IMAGING  
SYSTEMS,  
INCORPORATED

740 S. Chester Rd. • Suite C • Swarthmore, PA 19081

(215) 690-2620

November 2, 1992

L&L 30001  
030 - 32997  
02200

U.S.N.R.C.  
Licensing Assistance Section  
475 Allendale Rd  
King of Prussia, PA 19407  
Attn: Mike Perkins

**CERTIFIED MAIL**

Dear Mr. Perkins,

Please expedite the enclosed application for a materials license in the state of New Jersey at our base location of: 230 Neptune Boulevard, Suite 2, Neptune, NJ 07753. Also enclosed is a check in the amount of \$760.00 for the cost of the application fee.

Nuclear Imaging Systems, license number 37-28453-01 provides diagnostic cardiac mobile imaging services.

Thank you for your assistance.

Sincerely,

Jeffrey Mandler  
President

/ms

attachment: Application for Material License  
\$760.00 Application Fee (Check #1206)

25 NOV -3 11:01

License Fee Information  
on 11/3/92

**11-7393**

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NOV 03 1992

ESTIMATED BUDGET PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST 175 HRS. FORWARD COMMENTS REGARDING BUDGET ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (INRMB T14) U.S. NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20555 AND TO THE PAPERWORK REDUCTION PROJECT (1180 0120) OFFICE OF MANAGEMENT AND BUDGET WASHINGTON, DC 20503

# APPLICATION FOR MATERIAL LICENSE

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

## APPLICATIONS FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

U.S. NUCLEAR REGULATORY COMMISSION  
DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY, NMSS  
WASHINGTON, DC 20545

## ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS, IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION I  
NUCLEAR MATERIALS SAFETY SECTION  
415 ALLIANCE ROAD  
KING OF PRUSSIA, PA 19406

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PORTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION II  
NUCLEAR MATERIALS SAFETY SECTION  
101 MANHATTAN STREET, SUITE 200  
ATLANTA, GA 30322

## IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION III  
MATERIALS LICENSING SECTION  
799 ROOSEVELT ROAD  
GLEN ELLEN, IL 60137

ARKANSAS, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, SOUTH DAKOTA, TEXAS, UTAH, OR WYOMING, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION IV  
MATERIAL RADIATION PROTECTION SECTION  
811 RYAN PLAZA DRIVE, SUITE 1000  
ARLINGTON, TX 76011

ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, OREGON, WASHINGTON, AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION V  
NUCLEAR MATERIALS SAFETY SECTION  
1400 MARIA LAKE, SUITE 210  
WALNUT CREEK, CA 94606

L & L 30001  
030-32997  
02200

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTION.

1. THIS IS AN APPLICATION FOR (check appropriate item):

- ☒ A. NEW LICENSE  
☐ B. AMENDMENT TO LICENSE NUMBER \_\_\_\_\_  
☐ C. RENEWAL OF LICENSE NUMBER \_\_\_\_\_

2. NAME AND MAILING ADDRESS OF APPLICANT (include Zip Code):

NIS Neptune  
230 Neptune Boulevard  
Suite 2  
Neptune, NJ 07753

3. ADDRESS (S) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED:

NIS Neptune  
230 Neptune Boulevard  
Suite 2  
Neptune, NJ 07753

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION:

Jeff Mandler

TELEPHONE NUMBER  
215-690-2620

SUBMIT ITEMS 5 THROUGH 11 ON BN-111-PAP-1. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL  
a. Element and most nuclide; b. Chemical and/or physical form; and c. Maximum amount which will be possessed at any one time.

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY 7C AMOUNT ENCLOSED \$ 760.00

13. CERTIFICATION (Must be completed by applicant): THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT. THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, AND 40 AND THAT ALL INFORMATION CONTAINED HEREIN, IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF. WARNING: 18 U.S.C. SECTION 1001, ACT OF JUNE 25, 1948, 62 STAT. 749 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 JURISDICTION.

SIGNATURE (CERTIFYING OFFICER)

TYPED/PRINTED NAME

TITLE

DATE

Jeff Mandler

President

10-30-92

## FOR NRC USE ONLY

TYPE OF FEE FEE LOG FEE CATEGORY COMMENTS

ME 8003 7C

AMOUNT RECEIVED CHECK NUMBER

\$760 1306

Register: Nether Imaging Systems, Inc.

APPROVED BY

DATE

B. B. B.

11/10/92

117003

Item 5 and 6

Radioactive Material and Purpose

<u>Byproduct Material</u>	<u>Amount</u>	<u>Purpose</u>
5.a Material in 35.100	As needed	6.a Any uptake dilution and excretion procedure approved in 10CFR35.100
5.b Material in 35.200 (except Xe-133 and <sup>99m</sup> Tc Aerosols)	As needed	6.b Any imaging localization procedure in 10CFR35.200

Item 7

Individuals Responsible for Radiation Safety Programs

Authorized Users for Medical Use	Material
Maliyil Koshey, Ph.D., R.S.O.	None
Margaret LaManna, M.D.	5.a, 5.b.

Please refer to NRC License number 37-28453-01 for training and experience previously submitted, unless otherwise noted.

Item 8

Training for Individuals Working In or Frequenting Restricted Areas

NIS Neptune will establish and implement the model training program that was published in Appendix A to Regulatory Guide 10.8, Revision 2.

Nuclear Medicine technologists will be instructed (via inservice lecture) by the health physicist or RSO upon starting duties and during annual refresher training.

Ancillary support will be provided with an annual lecture on radiation safety for caring for diagnostic patients by the health physicist or RSO.

Item 9

Facilities and Equipment

See diagram and survey sheet attached.

The following radiation safety equipment is present:

1. Syringe shields
2. Lead syringe holders
3. Disposable rubber gloves
4. Absorbent pads
5. Vials are stored in their lead pigs.
6. Lead L-block shield is present.
7. Remote handling devices are present.
8. Lab coats are worn by technologists.
9. Leaded radioactive waste storage bin present.

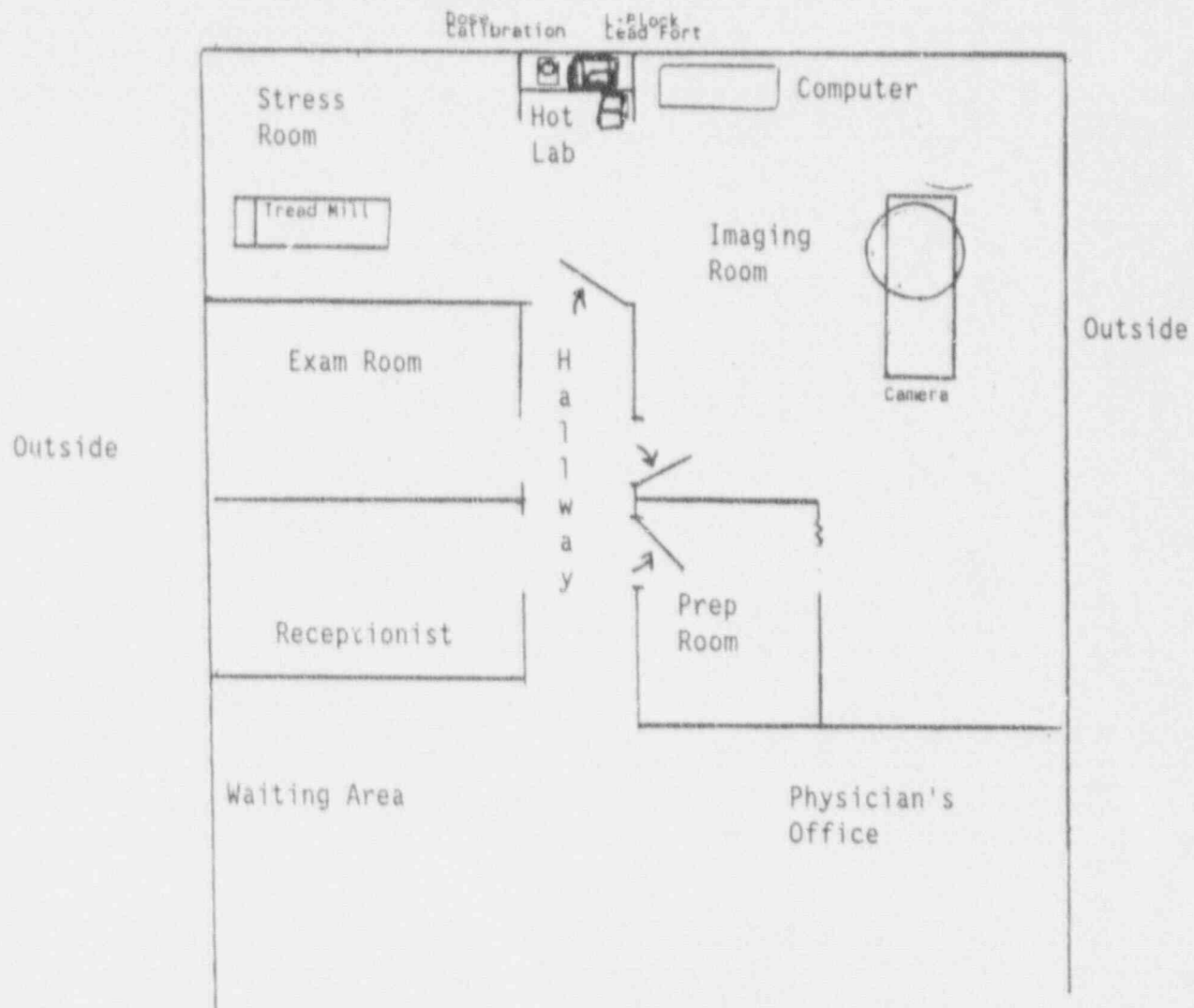
Available shielding:

1. Lead Fort: 2 inch lead walls, 8" high
2. Rad Waste Storage: 1/8 inch lead walls
3. L-Block: 2 inch thick lead

The scale on attached floor plan: 1/8" = 1'

<u>Instrument</u>	<u>Range</u>	<u>No. of Units</u>
Ludlum 14C Survey Meter with pancack probe	0 - 2000 mR/hr	2
Capintec CRC 7 Dose Calibrator	10 uCi - 2.0 Ci	1
Ludlum Mo. 2200 NaI (Tl) Well	0 - 9,999,999 dpm	1
Baird Scinti Cam Multi crystal gamma camera	cpm	1

ITEM 9  
Nuclear Imaging Systems, Neptune  
Outside



The Hot Lab will be secured in the Nuclear Medicine Scanning Room.

It will be equipped with a Lead L-Block and a Lead Fort constructed of lead bricks 2" thick by 8" high.

Radioactive waste will be stored in a 1/8" thick lead lined trash can.

## Item 10

### Radiation Safety Program

NIS Neptune will establish and implement the model program published in the following Appendixes of Regulatory Guide 10.8, Revision 2.

Appendix B

Appendix C

Appendix D

Appendix F - Radiation Safety Officer delegation of authority only,  
no Radiation Safety Committee required.

Appendix G

Appendix H

Appendix I

Appendix J

Appendix K

Appendix L

Appendix M.1, M.2.

Appendix N -	Survey Trigger Levels:	0.5mR/hr	Non-restricted
		5.0mR/hr	Restricted

Contamination Trigger Levels:	2,000 dpm	Non-restricted
	20,000 dpm	Restricted

All procedures and commitments described in model programs of the license guide pertain to Byproduct material only. Commitments do not apply to radioactive material and radiation exposure from other sources (accelerator produced, naturally occurring radioactive isotopes, machine sources, etc.).

Item 11

Waste Management

We will establish and implement the general guidance and model procedures for waste disposal that were published in Appendix R to Regulatory Guide 10.8, Revision 2.

