



Missouri Heart Center[®]

Missouri Cardiovascular Specialists

CARDIOLOGY

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CHIEF EXECUTIVE OFFICER

Allen L. Goree, MHA CMPE

U.S. Nuclear Regulatory Commission
Materials Licensing Branch
Region III
2443 Warrensville Rd., Suite 210
Lisle, Illinois 60532-4352

NRC License # 24-32061-01

Dear Materials Licensing Section:

We are requesting an amendment action to address the following:

Please delete authorization noted in 6.C. and 9.C. of our license. We no longer have a gamma camera (compatible devices registered pursuant to 10 CFR 30.32(g) that uses Gd-153 transmission (line) sources, Models MED 3601 or NES 8412. Attached is confirmation from North American Scientific acknowledging receipt of our last set of Gd-153 line sources. In late 2009 we retired the gamma camera that used the above referenced model Gd-153 transmission sources. Therefore, we have no future use for these type sources and request removal of this authorization from our license. We did not possess any Gd-153 sources after the return of these sources in 2000. The sources were leak tested as required by NRC regulations and all leak test results were less than 0.005 uCi.

If you have any questions, please contact me at (573) 256-7700.

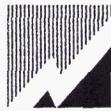
Sincerely,

John B. Baird, MD, RSO

10-13-10.

Date

Attachment: Gd-153 disposal confirmation



**NORTH AMERICAN
SCIENTIFIC**

10200 Sunburst Street

Chatsworth

California 91311

TEL: 818.734.8600

FAX: 818.734.8606

www.nasi.net

To Nuclear Medicine/Radiation Personnel:

Enclosed is a copy of the paper work which accompanied the return of radioactive material sent by your organization to North American Scientific. This letter and enclosure is a confirmation of the receipt of this shipment by us for your records. Please note the 'received' stamp for the actual date this material arrived at North American.

No other response or reply is needed from you.

Thank you for using North American Scientific products, and we hope to be able to continue to serve your needs in the future.

Traffic Department
North American Scientific, Inc.

✓ SAVE in call folder

PACKING LIST
RETURN SHIPMENT OF SPENT SEALED SOURCE TO NASI
Complete all items and make a copy for your records. Call NASI Traffic Department at (818) 255-0780 x17 if you require assistance.

PLEASE NOTE: This packing list authorizes the return of one equivalent radioactive source in exchange for the new one purchased. Disposal of other radiation products is not authorized without prior approval. Failure to comply is a violation of Regulatory Guidelines and applicable agencies will be notified.

In order for your return to be accepted and processed at NASI is important that:

- 1. The Return Auth # (as shown under your address) is written on the OUTSIDE OF THE PACKAGE.
- 2. This packing list is sealed in the packing list envelope and is on the OUTSIDE OF THE PACKAGE.

Failure to comply with the above will result in your shipment being refused by NASI Traffic Dept.

From: MISSOURI CARDIOVASCULAR SPECIA (MCS-ODS, LLC)
NUC MED DEPT
401 KEENE ST
COLUMBIA, MO 65201
Return Auth# RA12061
To: North American Scientific, Inc.
7435 Greenbush Ave
North Hollywood, Ca. 91605
Attn: Traffic Department

RECEIVED
APR 17 2000
NORTH AMER. SCI

This packing list authorizes the shipment of 2 Gd-153 Line Sources. In order for your return to be processed, it is very important that all the information in the box below is complete and accurate.

Activity of source at shipment 86 mCi
Manufacturer of source: NASI
Model number: MED3601
Serial number: H974, H991
Label activity shown on source: 250 mCi
Date shown on source: 8-1-98
Date last leak tested: 10-5-99

Method of leak test: wipe test, Other: (check one, if other is checked please explain on other side of this page.)

Result less than 5 nCi? yes

Certified by:
X See attached leak test (Signature) Tom Dickinson (print name) Assoc. in MED PHYSIC

Daytime phone #: 636-225-1474 Date: 4-10-00

TECHNICAL DATA SHEET

MODEL NO.: MED3601 Line Source

QUANTITY: 2

| <u>NUCLIDE</u> | <u>S/N OR LOT NO.</u> | <u>ACTIVITY</u> | <u>UNCERTAINTY</u> | <u>REFERENCE DATE</u> | <u>HALF-LIFE</u> |
|----------------|---------------------------|--------------------|--------------------|-----------------------|------------------|
| Gd-153 | H991, H974 | 9.25 GBq (250 mCi) | ± 15% | August 1, 1998 | 241.6 days |

NATURE OF ACTIVE DEPOSIT: gadolinium chloride in resin matrix

BACKING: n/a

COVER: n/a

ACTIVE DIAMETER/AREA: 1.5 mm diameter x 508 mm length

OVERALL DIAMETER/DIMENSIONS: 3.05 mm diameter x 522 mm length

DECAY CHART

| Months Since Reference Date | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|--------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|
| Activity (mCi) | 229 | 210 | 192 | 176 | 162 | 148 | 136 | 124 | 114 | 104 | 96 | 88 |

• LEAK TEST CERTIFICATION ON REVERSE •

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

FACILITY: MCS-ODS, LLC

DEPARTMENT: Nuclear Cardiology

LOCATION: Columbia, MO

ATTENTION: Dr. Baird

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 μ Ci, unless otherwise noted, when compared against NIST traceable standards.

Source: Gd-153, (x2) Line sources, 250 mCi each, 8/1/98, North Ame. Scientific, Mod# MED3601, S/N H974, H991.

| | | | | |
|----------------------------|---------|--------|---------|--------------|
| Date: | 1/11/99 | 7/6/99 | 10/5/99 | 4/27/2000 |
| Wipe No.: | 6083 | 7353 | 8015 | Returned |
| MDA (μ Ci): | 5 E-06 | 5 E-06 | 5 E-06 | to the |
| Net CPM: | 0 | 0 | 1 | Manufacturer |
| Net μ Ci: | < MDA | < MDA | < MDA | |
| CPM for 0.005 μ Ci: | 7,493 | 7,493 | 7,493 | |
| Analyst: | MS | MS | MS | |

Performed by: Associates in Medical Physics (AMP)

Under License No.: 34-26645-02



MID-MISSOURI 652
TUE 19 OCT 2010 FW

 Missouri
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