

## MATERIALS LICENSE

Amendment No. 23  
*ORC*

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. Department of Veterans Affairs  
Medical Center
2. 16111 Plummer Street  
Sepulveda, California 91343

In accordance with letter dated  
August 23, 1996,

3. License Number 04-00916-04 is amended  
in its entirety to read as follows:

4. Expiration Date May 31, 2001

5. Docket or  
Reference No. 030-01217

6. Byproduct, Source, and/or  
Special Nuclear Material7. Chemical and/or Physical  
Form8. Maximum Amount that Licensee  
May Possess at Any One Time  
Under This License

- A. (1) Any byproduct material with atomic numbers 3 - 83 and a half-life of less than 120 days except as noted below:

- (2) Iodine-125
- (3) Iodine-131
- (4) Technetium-99m
- (5) Molybdenum-99
- (6) Sulfur-35
- (7) Xenon-133

- (8) Phosphorus-32

- B. (1) Any byproduct material with atomic numbers 3-83 and a half-life greater than or equal to 120 days except as noted below:

- (2) Carbon-14

- A. (1) Any

- (2) Any

- (3) Any

- (4) Any

- (5) Any

- (6) Any

- (7) Gas or gas in saline

- (8) Any

- B. (1) Any

- (2) Any

- A. (1) 100 millicuries of each radionuclide with atomic numbers 3 to 83 except as noted below:

- (2) 400 millicuries

- (3) 200 millicuries

- (4) 6 curies

- (5) 6 curies

- (6) 200 millicuries

- (7) 1.5 curies

- (8) 200 millicuries

- B. (1) 3 millicuries of each radionuclide with atomic numbers 3 to 83 except as noted below:

- (2) 500 millicuries

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License Number

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030-01217

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(Continued)

- |   |   |  |
|---|---|--|
| 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 |
| (3) Calcium-45  | (3) Any                                 | (3) 15 millicuries   |
| (4) Zinc-65   | (4) Any                                 | (4) 8 millicuries  |
| C. Hydrogen-3   | C. Any                                  | C. 2.0 curies  |
| D. Gadolinium-153                                     | D. North American Scientific Model 3601 | D. 800 millicuries (no single source to exceed 300 millicuries)                |

## 9. Authorized use

- A. through C. Medical diagnosis and therapy as described in 10 CFR 35.100, 35.200, 35.300 and 35.500, excluding Iodine 131 therapy. Research in humans as approved by the Food and Drug Administration or by an RDRC approved by the FDA. Laboratory research. Research in animals.

Preparation of radioactive drugs for medical use, as defined in 10 CFR 35.2 provided that the radioactive drug is prepared by either an authorized nuclear pharmacist, as defined in 10 CFR 35.2, or an individual under the supervision of an authorized nuclear pharmacist as specified in 10 CFR 35.25.

- D. For use in ADAC Laboratories Vantage Nonuniform Attenuation Correction System for instrument calibration and quality control.

## CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at 16111 Plummer Street, Sepulveda, California.
11. The Radiation Safety Officer for this license is Marvin Cohen, M.D.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

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12. A. The use of licensed material in or on humans shall be by a physician, dentist, or podiatrist as defined in 10 CFR 35.2.
- B. Physicians, dentists, or podiatrists designated to use licensed material in or on humans shall meet the training criteria established in 10 CFR Part 35 Subpart J and shall be designated by the licensee's Radiation Safety Committee.
- C. Licensed material for other than human use shall be used by or under the supervision of individuals designated by the Radiation Safety Committee.
- D. Authorized Nuclear Pharmacist: Leslie S. Yamada
13. A. Sealed sources cells 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. 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.
- C. 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.
- 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

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030-01217

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(Continued)

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 IV, ATTN: Director, Division of Nuclear Materials Safety, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011. 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 the licensee or by other persons specifically licensed by the Commission or an Agreement State to Perform such services.
14. Pursuant to Title 10, Chapter 1, Code of Federal Regulations, Part 40, "Domestic Licensing of Source Material", the licensee is authorized to possess, use, transfer, and import up to 999 kilograms of depleted uranium contained as shielding material in the molybdenum-99/technetium-99m generators authorized by this license.
15. The licensee shall conduct a physical inventory every 3 months to account for all sources and/or devices received and possessed pursuant to 10 CFR 35.57, and 10 CFR 35.500 and every 6 months for all other sources and/or devices.
16. A. Detector cells containing a titanium tritide foil or a scandium tritide foil shall only be used in conjunction with a properly operating temperature control mechanism which prevents the foil temperature from exceeding that specified by the manufacturer and approved by NRC.
- B. When in use, detector cells containing a titanium tritide foil or a scandium tritide foil shall be vented to the outside.
17. Sealed sources containing licensed material shall not be opened or sources removed from source holders by the licensee.
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. Individuals involved in operations which utilize, at any one time, more than 100 millicuries of hydrogen 3 in a non-contained form, other than metallic foil, shall have bioassays performed within one week following a single operation and at weekly intervals for continuing operations.
20. 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:



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(Continued)

- 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.
21. This license does not authorize commercial distribution of licensed material.
22. Experimental animals, or the products from experimental animals, that have been administered licensed materials shall not be used for human consumption.
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, 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. Letter dated April 20, 1995
- B. Letter dated September 5, 1995
- C. Application dated November 9, 1995
- D. Letter dated March 28, 1996
- E. Letter dated May 9, 1996
- F. Letter dated August 23, 1996
- G. Facsimile dated November 14, 1996

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date NOV 27 1996

By James J. Matzomey  
Materials Branch  
Region IV, WCFO  
Walnut Creek, California 94596

BETWEEN:

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: Program Code: 02110
: Status Code: 0
: Fee Category: EX 7B 2B
: Exp. Date: 20010531
: Fee Comments:
: Decom Fin Assur Req'd: Y

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## A. REGION

Applicant/Licensee: V. A. MEDICAL CTR.  
Received Date: 960826  
Docket No: 3001217  
Control No.: 572398  
License No.: 04-00916-04  
Action Type: Amendment

Amount: \_\_\_\_\_  
Check No.: \_\_\_\_\_

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

1. Fee Category and Amount: \_\_\_\_\_

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

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



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV

Walnut Creek Field Office  
1450 Maria Lane  
Walnut Creek, California 94596-5368

**NOV 27 1996**

Department of Veterans Affairs  
Medical Center  
ATTN: Marvin Cohen, M.D.  
Nuclear Medicine Service  
16111 Plummer Street  
Sepulveda, California 91343

**SUBJECT: LICENSE AMENDMENT**

Please find enclosed Amendment 23 for License No. 04-00916-04. You should review this license carefully and be sure that you understand all conditions. In accordance with this amendment, which references your August 23, 1996 letter, you are authorized to relocate your radioactive waste storage facility to Rooms A-19 and B-28 in Building 7. Please note that this amendment does not authorize the release of your radioactive waste storage trailer or the former Nuclear Medicine facilities in B-47 of Building 10 for unrestricted use. You will need to submit your close-out decommissioning survey of the trailer and facilities to this office as a future amendment request. Until this future amendment is issued, your "old" facilities must be maintained as restricted areas as defined in 10 CFR Part 20. The same holds true for the research laboratories undergoing decommissioning that I inspected on September 10, 1996.

This amendment also authorizes you to relocate your Nuclear Medicine Service to Building 200 as noted in your August 23, 1996 letter. The Cobalt-57 flood source does not need to be on your license since it is not byproduct material covered under NRC regulations. Your use of noble gases and aerosols for ventilation scans are to be conducted in accordance with the procedures you submitted with your license renewal application. Upon completion of the new facility, the 10 CFR Part 35 required ventilation measurements must be made and maintained for review during future NRC inspections. If you have any questions, you may contact me at 510-975-0249.

NRC expects licensees to conduct their programs with meticulous attention to detail and a high standard of compliance. Because of the serious consequences to employees and the public which can result from failure to comply with NRC requirements, you must conduct your program involving radioactive materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

1. Operate in accordance with NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers: Inspection and Investigations," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.

2. Possess radioactive material only in the quantity and form indicated in your license.
3. Use radioactive material only for the purpose(s) indicated in your license.
4. Notify NRC in writing of any change in mailing address (no fee required if the location of radioactive material remains the same).
5. Request and obtain written NRC consent before transferring your license or any right thereunder, either voluntarily or involuntarily, directly or indirectly, through transfer of control of your license to any person or entity. A transfer of control of your license includes not only a total change of ownership, but also a change in the controlling interest in your company whether it is a corporation, partnership, or other entity. In addition, appropriate license amendments must be requested and obtained for any other planned changes in your facility, or program that are contrary to your license or contrary to representations made in your license application, as well as supplemental correspondence thereto, which are incorporated into your license. A license fee may be charged for the amendments if you are not in a fee-exempt category.
6. Maintain in a single document decommissioning records that have been certified for completeness and accuracy listing all the following items applicable to the license:
  - Onsite areas designated or formerly designated as restricted areas as defined in 10 CFR 20.3(a)(14) or 20.1003.
  - Onsite areas, other than restricted areas, where radioactive materials in quantities greater than amounts listed in Appendix C to 10 CFR 20.1001-20.2401 have been used, possessed, or stored.
  - Onsite areas, other than restricted areas, where spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site have occurred that required reporting pursuant to 10 CFR 30.50(b)(1) or (b)(4), including areas where subsequent cleanup procedures have removed the contamination.
  - Specific locations and radionuclide contents of previous and current burial areas within the site, excluding radioactive material with half-lives of 10 days or less, depleted uranium used only for shielding or as penetrators in unused munitions, or sealed sources authorized for use at temporary job sites.
  - Location and description of all contaminated equipment involved in licensed operations that is to remain onsite after license termination.

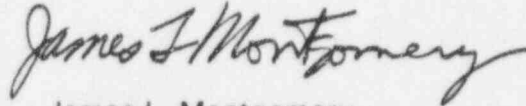


7. Submit a complete renewal application with proper fee, or termination request at least 30 days before the expiration date on your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of radioactive material after your license expires is a violation of NRC regulations.
8. Request termination of your license if you plan to permanently discontinue activities involving radioactive material.

You will be periodically inspected by NRC. Failure to conduct your program in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in enforcement action against you. This could include issuance of a notice of violation; imposition of a civil penalty; or an order suspending, modifying, or revoking your license as specified in the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), 60 FR 34381, June 30, 1995.

Thank you for your cooperation.

Sincerely,



James L. Montgomery  
Senior Health Physicist  
Materials Branch

Docket: 030-01217  
License: 04-00916-04  
Control: 572398

Enclosures: As stated

Department of Veterans Affairs  
Medical Center - Sepulveda

-4-

bcc:

F. Herbig, Director, V.A.

E. Liedholdt, Western Region Program Manager, V.A.

Docket File

WCFO Inspection File

LFDCB, T-9 E10

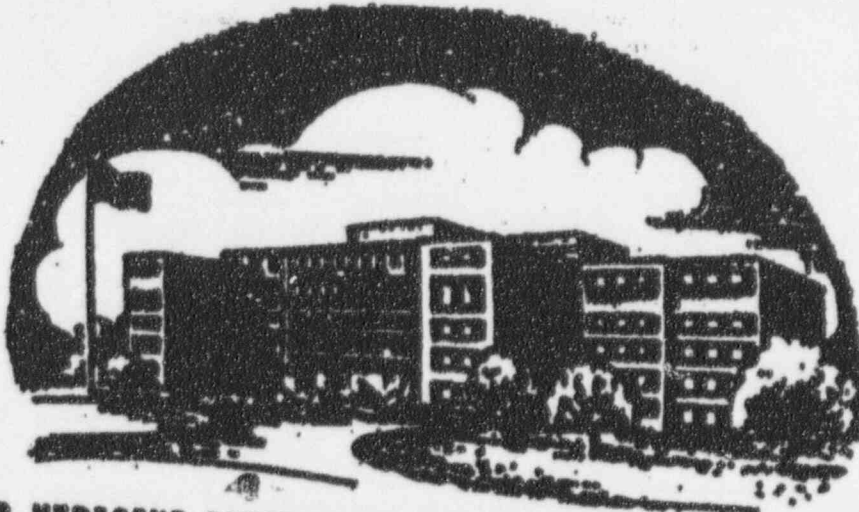
State of California (License Only)

DOCUMENT NAME: G:\572398

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

RIV:MB								
JLMontgomery <i>JL</i>								
11/27/96								

OFFICIAL RECORD COPY



NUCLEAR MEDICINE DEPARTMENT 818-895-9332  
VAMC SEPULVEDA, CALIFORNIA - FAX - 818-895-5829

**F A X**

TO: TIM MONTGOMERY DATE: 11/14/96  
FAX NUMBER: (510) 975-0381 TIME: 12<sup>25</sup> PM  
MAIL CODE (DEPT)                     

SUBJECT: GD-153 TRANSMISSION SOURCES - re license 04-00916 - 04

COMMENTS: Enclosed is the info I received from ADAX.  
I will call you on 11/18 to see if any additional  
info is needed.

FROM: MARVIN COHEN

MAIL CODE (DEPT) 115 PHONE:                     

This is page one of 5 pages.

11-14-1996 12:24PM FROM ADAC\_QUOTES 4083219554

P. 2

TO: Dr. Marvin Cohen

FROM: Ashlee Pryor

DATE: November 14, 1996

RE: Radioactive Materials License

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Enclosed is the "standard" info. regarding safety procedures for Vantage. Also, it may be of help to you to note that the Vantage product has been FDA approved (registration #K943596) and has already been installed and operating in all 50 states in the nation. The line source housing has been registered by the state of California (registration # CA102D101S). The line sources themselves are also registered by the state of California (registration # CA510S121S). This info. should be of some help to you. If you need any further assistance, please call me at 1-800-538-8531 ext. 1977.



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To: ADAC Vantage Customer  
Subject: Gadolinium-153 Licensing Requirements  
Date: August 25, 1995

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You must amend your radioactive materials license to accommodate a total of 800 millicuries of Gd-153 before you can receive the Vantage Nonuniform Attenuation Correction system into your department. (A limit of 800 millicuries is necessary when replacing the line sources.) In order to amend your radioactive materials license, please refer to your specific license information or contact your Radiation Safety Officer. All amendment procedures must follow NRC or agreement state agency policies.

North American Scientific supplies the Gd-153 for ADAC Laboratories (Model # MED 3601 - Registration # CA510S1215). Mike Cutrer, the North American Scientific representative, can be contacted at (818) 503-9201 if you have additional questions regarding the line sources or amendment procedures.

The Vantage system design is consistent with the ALARA (As Low As Reasonably Achievable) principles of radiation exposure. For a 40 minute acquisition (a typical acquisition time is less than 20 minutes), the patient exposure at the maximum source strength of 200 mCi with two sources is less than 5 mR (2 millirems - confirmed by TLD and survey meter measurements).

When the line source is in use, radiation emits from a 1 mm collimated aperture on the line source housing. When the line source is not in use, the lead housing completely shields the line source. This housing reduces patient and operator radiation exposure to a safe level (the exposure reading at the housing surface is less than 0.2 mR/hr). The line source housings can be left on the gantry at all times or removed and placed in a storage area, if desired.

The line sources are sealed sources that must be leak tested every six months. The leak test procedure is described in the operator's manual.

When it is time to replace the line sources, please contact your ADAC field service engineer who will arrange for the source disposal with North American Scientific.

#### Vantage Gd-153 line source specifications

- Quantity: 2 Line sources per system
- Activity: 200 mCi line source x 2 for a total of up to 300 mCi/system
- Active length: 508 ±3 mm
- Overall length: 521.7 ±3 mm
- Active diameter: 1.5 ±0.1 mm
- Overall diameter: 3.05 ±0.1 mm
- Uniformity: ±5% over entire surface area
- Contaminants: Eu-152, Eu-153, Eu-154 < 0.05% of total content

## Vantage Safety

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4. Press the RESUME button on the handcontroller to continue the acquisition. The line sources move to the line source starting position, and image acquisition resumes.

## Correcting Line Source Collisions

**IMPORTANT** If a collision occurs during a study acquisition, the line source assemblies stop moving and the shutters close. The software, checking for line source movement, displays a collision alert on the acquisition station monitor.

- ◆ Perform the following steps to correct the collision and resume the acquisition:
  1. Move the obstruction away from the line source.
  2. Press the RESUME button on the handcontroller to continue the acquisition. The line sources move to the line source starting position, and image acquisition resumes.

**Note:** Following a collision, only the current image frame is restarted. You do not need to restart the entire study.

## Emergency Procedures

The shutter to the Gd-153 line source automatically closes when:

- You press any Emergency Stop button on the Vertex gantry.
- You press the STOP button on the handcontroller.
- The power fails to the Vertex imaging system.
- You reboot the Vertex acquisition station.
- You are not acquiring transmission data.

**IMPORTANT** The shutter to the Gd-153 line source can stay open if the sensor monitoring the shutter status fails or the motor controlling the shutter fails. If the line source remains open, close the shutter by moving the shutter lever to the closed position, then remove the line source from the gantry. Call your ADAC field service engineer to evaluate the source.

## Hospital Power Failure Procedures

**IMPORTANT** All gantry and detector motions stop if the hospital power fails during an examination. If the power fails and the detector or gantry position prevents you from removing the patient, you can:

- Manually adjust the detector radius to move the detector away from the patient.
- Push the gantry away from the patient.

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*Emergency Procedures*

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◆ **Perform the following emergency steps to move the detector and gantry away from the patient:**

1. Ensure that the line source shutters are properly closed.
2. Locate the hand crank stored at the rear of the gantry.
3. Remove the hand crank by releasing or cutting the small plastic straps holding the crank to the gantry.
4. Turn the hand crank clockwise to move the detector away from the center of the gantry.

You may have to turn the hand crank more than 100 turns to move the detector out far enough to remove the patient.

5. Push the gantry away from the patient.

**IMPORTANT** With power removed from the gantry, you can push the gantry away from the patient. Push on the gantry ring or detector to move the gantry.

6. Remove the patient.

**IMPORTANT** After performing these emergency steps, please call your ADAC field service engineer to recalibrate the detector radius and gantry. This must be done before you can use the Vertex system for acquisitions requiring camera movements.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV

Walnut Creek Field Office  
1450 Maria Lane  
Walnut Creek, California 94596-5368

SEP 20 1996

Department of Veterans Affairs  
Medical Center  
ATTN: Dollie G. Brown  
Acting Director  
16111 Plummer Street  
Sepulveda, California 91343

SUBJECT: ACKNOWLEDGMENT OF REQUEST FOR LICENSING ACTION

REFERENCE: Letter dated August 23, 1996

We have completed the administrative review and initial processing of your application.

Please note that the technical review may identify additional omissions in the submitted information or technical issues that require additional information.

Amendment actions are normally processed within 90 days, unless the technical review identifies:

- Major technical deficiencies
- Policy issues are identified that require input and coordination with other NRC Regional offices, Agreement State offices, or NRC's Office of Nuclear Materials and Safeguards

Any correspondence about this application should reference the Control number listed below.

Sincerely,

James L. Montgomery  
Sr. Health Physicist  
Materials Branch

Enclosures:  
As stated

License No. 04-00916-04  
Docket No. 030-01217  
Control No. 572398



bcc:  
Docket File

To receive a copy of this document, indicate in the box "C" - Copy without attachment/enclosure "E" - Copy with attachment/enclosure "N" - No Copy

OFFICE	RIV:AO:NMLB	N		N				
NAME	J. Montgomery	<i>jm</i>						
DATE	9/20/96		/	/ 96				

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To: ADAC Vantage Customer  
Subject: Gadolinium-153 Licensing Requirements  
Date: August 25, 1995

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You must amend your radioactive materials license to accommodate a total of 800 millicuries of Gd-153 before you can receive the Vantage Nonuniform Attenuation Correction system into your department. (A limit of 800 millicuries is necessary when replacing the line sources.) In order to amend your radioactive materials license, please refer to your specific license information or contact your Radiation Safety Officer. All amendment procedures must follow NRC or agreement state agency policies.

North American Scientific supplies the Gd-153 for ADAC Laboratories (Model # MED 3601 - Registration # CA510S121S). Mike Cutrer, the North American Scientific representative, can be contacted at (818) 503-9201 if you have additional questions regarding the line sources or amendment procedures.

The Vantage system design is consistent with the ALARA (As Low As Reasonably Achievable) principles of radiation exposure. For a 40 minute acquisition (a typical acquisition time is less than 20 minutes), the patient exposure at the maximum source strength of 200 mCi with two sources is less than 5 mR (2 millirems - confirmed by TLD and survey meter measurements).

When the line source is in use, radiation emits from a 1 mm collimated aperture on the line source housing. When the line source is not in use, the lead housing completely shields the line source. This housing reduces patient and operator radiation exposure to a safe level (the exposure reading at the housing surface is less than 0.2 mR/hr). The line source housings can be left on the gantry at all times or removed and placed in a storage area, if desired.

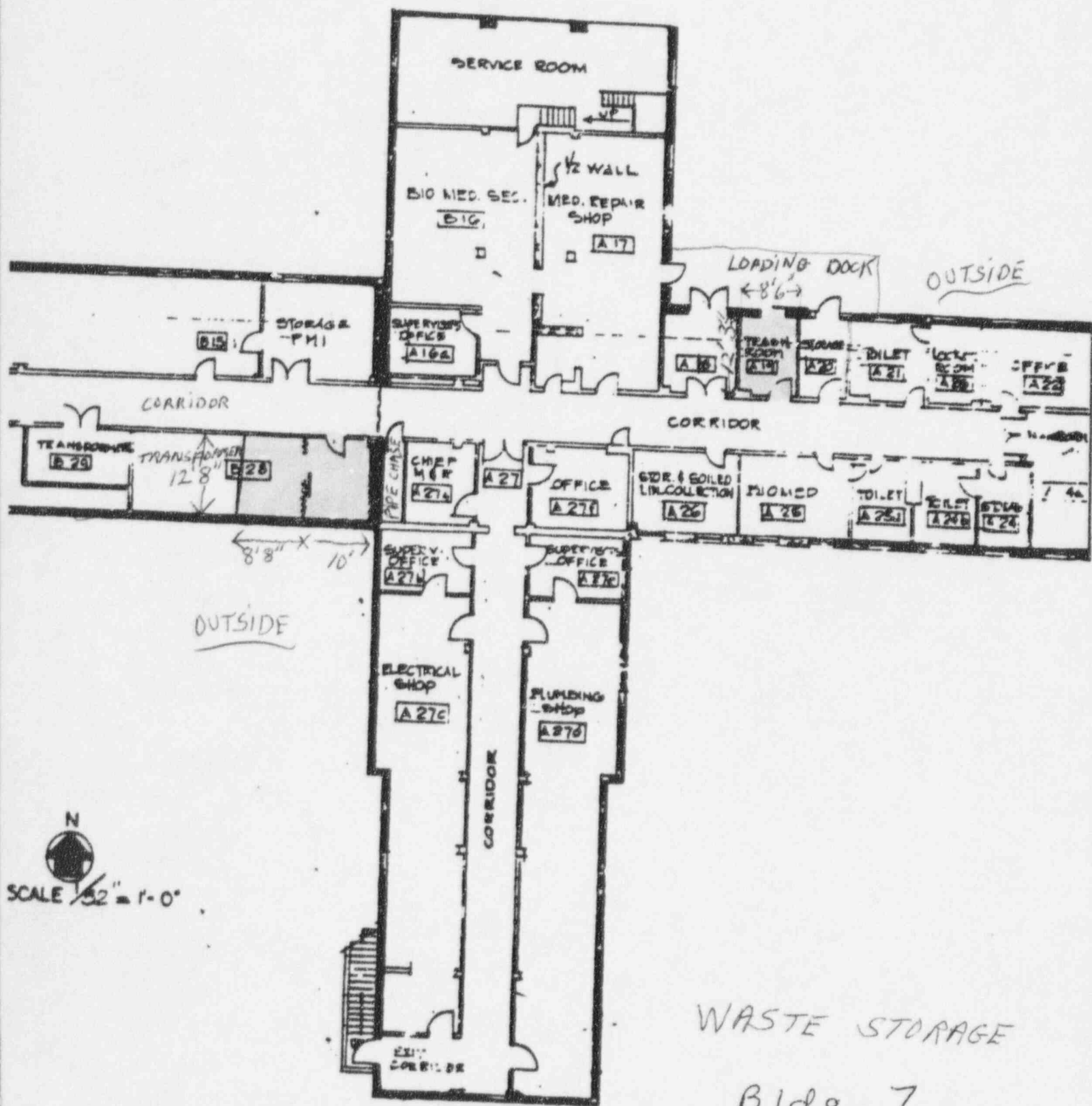
The line sources are sealed sources that must be leak tested every six months. The leak test procedure is described in the operator's manual.

When it is time to replace the line sources, please contact your ADAC field service engineer who will arrange for the source disposal with North American Scientific.

#### Vantage Gd-153 line source specifications

- Quantity: 2 Line sources per system
- Activity: 200-250 mCi line source x 2 for a total of up to 500 mCi/system
- Active length:  $508 \pm 3$  mm
- Overall length:  $521.7 \pm 3$  mm
- Active diameter:  $1.5 \pm 0.1$  mm
- Overall diameter:  $3.05 \pm 0.1$  mm
- Uniformity:  $\pm 5\%$  over entire surface area
- Contaminants: Eu-152, Eu-153, Eu-154 < 0.05% of total content

572398



WASTE STORAGE

Bldg 7

**BASEMENT FL.**

**BUILDING A**



DEPARTMENT OF VETERANS AFFAIRS  
Medical Center  
16111 Plummer Street  
Sepulveda CA 91343

*Amendment*  
030-01217  
RECEIVED  
36 AUG 26 1996 12:37

In Reply Refer To:

August 23, 1996

James L. Montgomery  
Nuclear Regulatory Commission  
1450 Maria Lane  
Walnut Creek, CA 94596-5368

Dear Mr. Montgomery,

We received amendment 22 to NRC Broad License # 04-00916-04, which allows us to relocate our radioactive waste storage facility to Bldg 2 and to dispose of the currently used trailer after decommissioning. It was our intention to relocate the radioactive waste storage from Bldg. 2 to Bldg. 7 at a later date. We have not yet effected the movement out of the trailer. Space has become available in Bldg. 7, which is the newly centralized Research Bldg and is the facility that generates most of our radioactive waste. We, therefore, request that amendment 22 be canceled and that a new amendment be issued to permit us to move the radioactive waste storage facility from the trailer to rooms A-19 and B-28 of Bldg 7. Diagrams of these basement rooms are enclosed. The walls of rooms B-28 and A-19 are brick and concrete and are much thicker than the wall of our current waste storage trailer. Room B-28 is secure with a single interior doorway to the hall. The windows, which are open to a subterranean airshaft, are blocked by heavy metal grates and there is minimal pedestrian traffic near the walls of this room. A-19 is a brick and concrete storage room with lockable doors to the outdoor loading dock and to the inner corridor. The adjacent A-20 is a storage room and A-18 is a transit way to the loading dock, which is seldom used. The radiation to areas adjacent to rooms B-28 and A-19 will be maintained at less than 2 mr per hour. After the transfer of all radioactive waste to Bldg. 7, we will perform a close-out survey on the trailer. The trailer will not be discarded until after we receive your approval of the close-out survey.

In addition, we wish to amend our license to permit the Nuclear Medicine Service to relocate its clinical activities from its present location in the various parts of B-47 in Bldg. 10 to the newly constructed outpatient facility, which has been designated as Bldg. 200. We plan to have the Nuclear Medicine Service cease operations in Bldg. 10 at the close of business on December 10, 1996 and to begin clinical operation in Bldg. 200 at 8 AM on December 11, 1996. It will be necessary for us to have authority to use radioactive byproduct materials in Bldg. 200 beginning on November 1, 1996. This will allow us to peak and calibrate various items of equipment and to receive training on the operation of the new dual-head ADAC Vertex camera, which has two 200 to 250 mCi Gd-153 transmission line sources from North American Scientific (details appended). This new imaging system will be installed in Imaging room 3 in October, but the transmission source will not be added until after October 31, 1996. We request an 800 mCi possession limit for these Gd-153 transmission sources. A new 15 mCi Co-57 flood field source will also be purchased. Our Siemens Orbiter and dual-head wholebody cameras will be moved to Bldg. 200 and will be

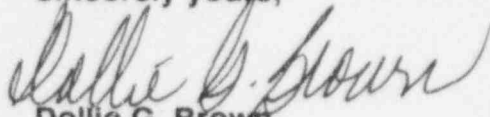
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located in Imaging rooms 1 & 2, as designated on the enclosed floor plan. Other new equipment ordered for Bldg 200 includes a Capintec Dose Calibrator, model CRC-15; Captus Thyroid Uptake System, model 600; an Atomaster Radiochromatogram scanner; Baker, Inc. Biological Safety Hood, model 6TX; and a Fisher-Hamilton Radioisotope Fume Hood, model H3-48B. Both hoods will be vented above the roof. We plan to resume I-131 use in Bldg. 200 using less than 30 mCi for therapy and 5 mCi or less for diagnostic testing. Other equipment including the aerosol ventilation unit plus well counters and liquid scintillation counters are those already in use in Bldg. 10. We also wish to perform Xe-133 ventilation scans in each of the 3 imaging rooms in Bldg 200 using our existing Medi-Nuclear ventilation unit: model XE-102. These rooms are engineered to have negative pressure, but we cannot provide measurements as the building is still under construction.

Beyond the concrete north end of the Nuclear Medicine Service (NMS) and the north end of the first floor of Bldg 200 is dirt, as this part of the building is below surface level. A long corridor is adjacent to the western boundary of the NMS. A corridor with vending machines, an elevator maintenance room and a men's toilet are adjacent to the southern wall. Adjacent to the 2 foot thick eastern wall of the NMS is a corridor, the Radiology-NMS waiting room and another empty corridor adjacent to the elevators. Please call our RSO, Marvin Cohen, M.D. at (818) 895-9332, if additional information is required.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Dollie G. Brown".

Dollie G. Brown  
Acting Director

# SEE APERTURE CARD FILES

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