UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

July 26, 1996

Department of the Army
U.S. Army Garrison, Fitzsimons
ATTN: Captain Annette Boatwright
HSHG-RP
Aurora, Colorado 80045-5000

SUBJECT: LICENSE AMENDMENT

Please find enclosed License No. 05-00046-13. You should review this license carefully and be sure that you understand all conditions. If you have any questions, you may contact the reviewer who signed your license at 817-860-8100.

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,

M. C. Hernandez

Christi Hernandez, Radiation Specialist
Nuclear Materials Licensing Branch

Docket: 030 01?33
License: 05-00046-13
Control: 466151

Enclosures: As stated

NRC FORM xxx (9-91) U.S. NUCLEAR REGULATORY COMMISSION

IFS Data Entry Form

Reviewed By: R Howell

Date: 7/24/96

SPECIFY CATEGORY (Check One) Page 1 of 1

___ Reactor/Vendor Inspection (IFS Option 1) ___ Docket Release/P21 Items (IFS Option 4)

Status Opened (Y/N): ___ Enter Log Number: ___

Y Materials Inspection (IFS Option 2) ___ LER Items (IFS Option 3)

SRI (Y/N): Y Enter LER Number: ___

Loaner (Y/N): N

Closer (Y/N): Y ___ Non-Docket Released Items (IFS Option 4)

Site/Name: FITZSIMONS ARMY MED CTR

Report Transmittal Date: 7/17/96

Lead Inspector: AJ19 Responsible Org. Code: 4B2W10 Report End Date: 7/17/96 Region: 4

	Report NBR	Docket NBR	Materials Only License NBR	*Docket Name
A	96-001	030-01233	05-00046-13	
B				
C				

Update? (Y/N): Y Opened IR/LER/P21 LOG/IFS Number: ___

***Sequence NBR: ___ Item Type: ___ **Severity: ___ **Supplement: ___ , ___

	Status	*UPD I/R	*Proj. Closeout	*Actual Closeout	Materials Only 10 CFR	License Cond.	Tie Down
A	SEE ATTACHED REPORT 6.						
B							
C							

Title: ___ (55 character width)

*Closeout Org: ___ *Closeout EMP: ___ *Contact EMP: ___ *Procedure: ___ *Funct Area: ___ . ___

*Cause CD: ___ . ___ **EA Number: ___ **NOV/NNC Issue Date: ___ ___ ___

Text: ___

Update? (Y/N): ___ Opened IR/LER/P21 LOG/IFS Number: ___

***Sequence NBR: ___ Item Type: ___ **Severity: ___ **Supplement: ___ , ___

	Status	*UPD I/R	*Proj. Closeout	*Actual Closeout	Materials Only 10 CFR	License Cond.	Tie Down
A							
B							
C							

Title: ___ (55 character width)

*Closeout Org: ___ *Closeout EMP: ___ *Contact EMP: ___ *Procedure: ___ *Funct Area: ___ . ___

*Cause CD: ___ . ___ **EA Number: ___ **NOV/NNC Issue Date: ___ / ___ / ___

Text: ___

* Optional Fields.

** Severity, Supplement, and NOV/NCC only applicable for Violations; EA Number only applicable for Apparent Violations.

*** Sequence NBR is not applicable for docket related/P21, LER, or non-docket released items.

LICENSEE ARMY DEPARTMENT OF THE 030-01233 TRANSMITTAL DATE: 07/28/1995
LICENSE # 05-00046-13 LEAD INSPECTOR: R3L
REPORT #: 95-001

SEQUENCE	ITEM TYPE	SEV / SPL	10CFR / LC / TD	EA NUMBER	STS	CLOSEOUT	TITLE
01	VIO	4 /6	10 CFR 1020 1302		0		FAILURE TO EVALUATE GASEOUS EFFLUENT

ITEM COMMENT TEXT

10 CFR 20.1302(A) REQUIRES THAT THE LICENSEE, IN PART, MAKE OR C
AUSE TO BE MADE, AS APPROPRIATE, SURVEYS OF RADIOACTIVE MATERIAL
S IN EFFLUENTS RELEASED TO UNRESTRICTED AND CONTROLLED AREAS TO

3 close

NRC FORM 591 (9-91) U.S. NUCLEAR REGULATORY COMMISSION

SPECIFY EGORY (Check One) Page 1 of 1

IFS Data Entry Form

Reviewed By: R Howell

Date: 7/24/96

___ Routine/Review Inspection (IP's Option 1) ___ Docket Related/P21 Items (IP's Option 4)

Issue Closeout (Y/N): ___ Enter Log Number: ___

Y Material Inspection (IP's Option 2) ___ LER Items (IP's Option 3)

SRI (Y/N): Y Enter LER Number: ___

Lacer (Y/N): N

Close (Y/N): Y ___ Non-Docket Related Items (IP's Option 5)

Site/Name: FITZSIMONS ARMY MED CTR

Report Transmittal Date: 7/17/96

Lead Inspector: AJ19 Person/Office Org. Code: 4 B V 10 Report End Date: 7/17/96 Region: 4

	Report NBR	Docket NBR	Materials Only License NBR	*Docket Name
A	96-001	030-01233	05-00046-13	
B				
C				

Update? (Y/N): Y Cosned IR/LER/P21 LOG/IFS Number: ___

***Sequence NBR: ___ Item Type: ___ **Severity: ___ **Supplement: ___ / ___

	Status	*UPD I/R	*Proj. Closeout	*Actual Closeout
A	SEE ATTACHED REPORT 6.			
B				
C				

Materials Only

10 CFR	License Cond.	Tie Down

Title: ___ (55 character limit)

*Closeout Org: ___ *Closeout EMP: ___ *Contact EMP: ___ *Procedure: ___ *Funct Area: ___ . ___

*Cause CD: ___ . ___ **EA Number: ___ **NOV/NNC Issue Date: ___ ___ ___

Text: ___

Update? (Y/N): ___ Cosned IR/LER/P21 LOG/IFS Number: ___

***Sequence NBR: ___ Item Type: ___ **Severity: ___ **Supplement: ___ / ___

	Status	*UPD I/R	*Proj. Closeout	*Actual Closeout
A				
B				
C				

Materials Only

10 CFR	License Cond.	Tie Down

Title: ___ (55 character limit)

*Closeout Org: ___ *Closeout EMP: ___ *Contact EMP: ___ *Procedure: ___ *Funct Area: ___ . ___

*Cause CD: ___ . ___ **EA Number: ___ **NOV/NNC Issue Date: ___ / ___ / ___

Text: ___

* Optional Fields.

** Severity, Supplement, and NOV/NCC only applicable for Violations; EA Number only applicable for Apparent Violations.

*** Sequence NBR is not applicable for docket related P21, LER or non-docket related items.

LICENSEE ARMY, DEPARTMENT OF THE 030-01233 TRANSMITTAL DATE 07/28/1995
LICENSE # 05 00046-13 LEAD INSPECTOR RSL
REPORT # 95-001

SEQUENCE	ITEM TYPE	SEV / SPL	10CFR / LC / TD	EA NUMBER	STS	CLOSEOUT	TITLE
01	VIO	4 /6	10 CFR 1020 1302		O		FAILURE TO EVALUATE GASEOUS EFFLUENT

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S IN EFFLUENTS RELEASED TO UNRESTRICTED AND CONTROLLED AREAS TO

3 more

In accordance with the guidance provided in NRC Inspection Procedure 2800, the need for a change in inspection frequency has been evaluated based upon the NRC inspection report or other information for the licensee listed below.

Based on this review, the inspection frequency is (check):

Extended X; Reduced ___; Deferred ___; No Change Necessary ___.

The next inspection date is 7/98; Inspection Priority: 1

License No: 05-00046-13 Docket No: 030-01233 Inspection Report No: 96-01

Licensee: Dept of ARMY - FITZSIMONS ARMY MED CTR. (Name)

AURORA COLORADO (City, State)

Last Inspection Date: 7/26-28/95 By: R. LEONARDI

This Inspection Date: 7/17/96 By: J CRUZ

Check the appropriate boxes related to this inspection:

Reciprocity ☐ Assist ☐ Radiography ☐ Field Site ☐ Reactive ☐
Priority: ___

Well Logger ☐ Other Priority 1, 2, or 3 ☒ Uninspectable ☐
Reason: _____

Accompanied by State ☐ EPA ☐ Consultant ☐ Other: _____

Basis for Change in Inspection Frequency:

One SLTI violation last 2 inspections
Activities restricted to decommissioning
only - Inspection schedule to be adjusted based on Div
decommissioning activities as appropria

Signed: _____ Date: 7/22/96
Inspector

Approved By: Linda Howell Date: 7/24/96
Chief, Nuclear Materials
Inspection Branch

Inspection Codes: "P" = Uninspectable; "R" = Reduced; "Q" = Both Uninspectable and Reduced; "D" = Deferred Inspection; "E" = Extended Inspection; "N" = No Change

Next Inspection Date and Inspection Code Entered in LTS _____

Distribution:
Docket File
LLHowell
RABrown → LLHowell

License restricted to decommissioning activities only and has centrally located all material in the waste storage area. Awaiting characterization of burial site to submit final decommissioning plan.

RSO appears to have very strong oversight of program and has made many contacts with KE personnel regarding the closure of the facility.

Recommend extension of inspection frequency and re-evaluation of program code/priority of licensee.

NOTE: All areas indicated in field notes are not required to be addressed during each inspection

NOTE: Any reference to patient is intended to include human research subject

MEDICAL BROAD-SCOPE INSPECTION FIELD NOTES
Region IV

Inspection Report No. 96-01 License No. 05-00046-13

Licensee (Name & Address): Docket No. 030-01233
Dept of the ARMY
Fitzsimons Army Medical Center
ATTN: HSHG-RP
AURORA CO 80045-5001

Licensee Contact Cpt Annette Doolittle Telephone No. 303 361 4289
361 8225

Last Amendment No. 57 Date of Amendment 3/26/96

Priority: 1
Program Code 2110

Date of Last Inspection 7/26-28/96
Date of This Inspection 7/29/96

Type of Inspection:
( ) Announced (X) Unannounced
(X) Routine ( ) Special
( ) Initial ( ) Reinspection

Summary of Findings and Action:

(X) No violations, Clear 591 issued
( ) Violation(s), 591 issued
( ) Violation(s), Regional letter issued
( ) Followup on Previous violations

Were non-cited violations identified during this inspection? ( ) Y (X) N

Was proprietary information reviewed by or received by the inspector? ( ) Y (X) N

Inspector [signature] (Signature) Date 7/22/96

Approved Lynda Howell (Signature) Date 7/24/96

1. INSPECTION HISTORY ( ) N/A - Initial inspection

A. Violations were identified during the last two inspections or two years, whichever is longer (X) Y ( ) N

B. ~~Response letter(s)~~ or 591(s) dated 7/28/96

C. Open violations from previous inspections:

Requirement	Violation	Corrective Action Taken (Y/N)	Status Open/Closed
10CFR20.1302	Failure to evaluate gaseous effluent	Y	C

D. Explain any previous violations not corrected or repeated (X) N/A

2. ORGANIZATION AND SCOPE OF PROGRAM

A. Organizational Structure ~~Colo~~ *+ Colonel Bull - Installation Commander
↓
+ Chairman of RSC
@ Col Carol Randle
↓
+* RSO - Captain Annette Boatwright
↓
+ Radiation office NCO SGT Wofford

+ Individuals contacted during inspection
* Individuals present at exit meeting

1. Meets license requirements [L/C] (X) Y ( ) N
2. Multiple authorized locations of use ( ) Y (X) N
   If yes, may use **ATTACHMENT A** as a guide for location(s) or lab(s) inspected and note lab numbers where violations are found. ( ) N/A
3. Briefly describe scope of activities, including types and quantities of use involving byproduct material, frequency of use, staff size, etc.

License currently Restricted to decommissioning activities only (since 7/1/96) and has had limited activity since last inspection. All medical activities + labs closed 6/21/96. All therapeutic radiopharmaceuticals discontinued 2/96. All material located in waste storage area awaiting either D.L.S. or transfer for disposal. Licensee contracting to have former burial site characterized and will then submit full decommissioning plan. Licensee plans to excavate entire burial site. Dept of Army plans to release entire facility by 8/97. No brachytherapy or use of SR90 ~~Sec~~ Sec radiator since last inspection.

B. Licensee does limited distribution of pharmaceuticals[1] under Part 35 license ( ) Y (X) N

1. Indicate type of operation:

___a. Registered or licensed with FDA as a drug manufacturer

___b. Registered or licensed with State Agency as a drug manufacturer

___c. Licensed as a pharmacy by State Board of Pharmacy

___d. Operating as a nuclear pharmacy within a Federal medical institution

none

2. Licensee distributes

* sealed sources ( ) Y ( ) N
* alpha and beta emitters ( ) Y ( ) N
* generators ( ) Y ( ) N
* photon emitters ( ) Y ( ) N

Remarks: radiopharmacy discontinued prior to 7/95 inspection

C. Research involving human subjects ( ) N/A

1. Research is conducted, funded, supported, or regulated by another Federal Agency which has implemented Federal Policy for Protection of Human Subjects[2]? [35.6] (X) Y ( ) N

If no, does licensee have license amendment authorizing human research? [35.6] N/A ( ) Y ( ) N

2. Licensee obtains informed consent from human subjects? [35.6] (X) Y ( ) N

3. Licensee obtains approval of research activities from an Institutional Review Board? [35.6] (X) Y ( ) N

Remarks: Licensee discontinued 2 programs 9/95 one program used C-14 the other H-3 - all waste ~~from~~ produced by these program transferred 12/95

[1]If licensee distributes radiopharmaceuticals to several facilities, the inspector should consider the need to complete the radiopharmacy fieldnotes.

[2]Agencies: USDA, DOE, NASA, HUD, DOJ, DOD, VA, EPA, HHS, DOT, Dept. of Commerce, Consumer Product Safety Commission, International Developme Cooperation Agency, Agency for International Development, Dept. of Educati National Science Foundation

D. Radiation Safety Committee [33.13, 14, 15] ( ) N/A

1. Membership as specified [35.22(a)(1)] (X) Y ( ) N
2. Meetings held quarterly [35.22(a)(2)] (X) Y ( ) N
3. Quorums established [35.22(a)(3)] (X) Y ( ) N
4. Has sufficient authority [35.23] (X) Y ( ) N
5. Record of Committee meetings [35.22(a)(4)] (X) Y ( ) N
6. Approve/disapprove credentials of individuals prior to allowing them to work as an authorized user or authorized nuclear pharmacist [35.22(b)(2)(ii)] (X) Y ( ) N
7. Approve/disapprove applications for use [L/C] (X) Y ( ) N

Remarks: Licensee plan to hold last meeting of RSC 7/96 since all activities discontinued

E. Radiation Safety Officer

1. Appointed & on license [33.13, 35.21(a), L/C] (X) Y ( ) N
2. Fulfills duties per [35.21(b)] (X) Y ( ) N
3. Has sufficient authority per [35.23] (X) Y ( ) N

Capt Annette Boatwright

F. Radiation Safety Program

1. Minor changes pursuant to [35.31] ( ) N/A (X) Y ( ) N
2. Records of changes maintained [35.31(b)] (X) Y ( ) N
3. Content and implementation reviewed annually by the licensee [20.1101(c), 35.22(b)(6)] (X) Y ( ) N
4. Records of reviews maintained [20.2102] (X) Y ( ) N

G. Use by authorized individuals [L/C] (X) Y ( ) N
If no, list name/position of individual
as approved by RSC - RSO only active user

H. Mobile Nuclear Medicine Service (X) N/A

1. Licensee operates services per [35.29, 80] ( ) Y ( ) N
2. Compliance with 20.1301 evaluated and met ( ) Y ( ) N

I. Any Amendments or Notifications since last inspection [35.13, 14] changed license to decommissioning activities only (X) Y ( ) N

Licensee has notified NRC within 30 days after RSO stops work or changes name, or mailing address changes [35.14(b)] (X) N/A ( ) Y ( ) N

Remarks:

3. TRAINING, RETRAINING, AND INSTRUCTIONS TO WORKERS

A. Instructions to workers/students per [10 CFR 19.12] (X) Y ( ) N
B. Individual's understanding of current procedures and regulations is adequate (X) Y ( ) N
C. Training program required [L/C] (X) Y ( ) N

1. If so, briefly describe training program:
Annual training provided to all personnel who work with or in proximity to licensed materials.

2. Training program implemented (X) Y ( ) N
3. Periodic training program required (X) Y ( ) N
4. Periodic training program implemented (X) Y ( ) N
5. Records maintained (X) Y ( ) N

Remarks: Annual training given each month to personnel based on Birthday (example: if born in January receive annual training every January).

D. Supervision of individuals

1. Supervised individuals[3] are instructed in preparation of material, principles and procedures for radiation safety and QM Program as appropriate [35.25(a)(1), 35.25(b)(1)] (X) Y ( ) N

2. Licensee periodically reviews supervised individuals use of material and records kept to reflect use [35.25(a)(3)] (X) Y ( ) N

3. Authorized ~~nuclear pharmacist~~ or user periodically review work and records of work of supervised individuals as it pertains to preparing byproduct material [35.25(b)(3)] ( ) N/A (X) Y ( ) N

Remarks:

E. Therapy training

1. Safety instruction [35.310, 410, L/C]

a. Control of patient and visitors (X) Y ( ) N
b. Contamination and waste (X) Y ( ) N
c. Size/appearance of sources (X) N/A (X) Y ( ) N
d. Handling/shielding of sources (X) N/A (X) Y ( ) N
e. RSO notification in emergency or death (X) Y ( ) N
f. Records maintained [35.310(b), 410(b)] (X) Y ( ) N

Refresher training given to personnel for each procedure

2. Manufacturer's instructions available and followed [35.59(a), 400] N/A ( ) Y ( ) N

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[3]Applies to individuals that receive, possess, use, transfer, or prepare byproduct material for medical use under supervision of authorized nuclear pharmacist or user.

3. Training for operating and emergency procedures for HDR Remote Afterloaders (X) N/A ( ) Y ( ) N

F. Revised Part 20

interview of SCT Wofford Rad Safety N.C.

Workers cognizant of requirements for:

1. Radiation Safety Program [20.1101] (X) Y ( ) N
2. Annual dose limits [20.1301, 1302] (X) Y ( ) N
3. New forms 4 and 5 ( ) N/A (X) Y ( ) N
4. 10% monitoring threshold [20.1502] (X) Y ( ) N
5. Dose limits to embryo/fetus and declared pregnant worker [20.1208] ( ) N/A (X) Y ( ) N
6. Grave Danger Posting [20.1902] (X) N/A ( ) Y ( ) N
7. Procedures for opening packages [20.1906] ( ) N/A (X) Y ( ) N
8. Sewer disposal limits [20.2003] (X) N/A ( ) Y ( ) N

NOTE: Deficiencies in Section 3.F, while not always a violation, should be brought to the attention of licensee management at the exit meeting and in the cover letter transmitting the inspection report or NOV.

Remarks:

4. FACILITIES

A. Facilities as described in license application (X) Y ( ) N

B. Storage areas

1. Materials secured from unauthorized removal or access [20.1801] (X) Y ( ) N
2. Licensee controls and maintains constant surveillance of licensed material not in storage [20.1802] (X) Y ( ) N
3. Licensee uses process or other engineering controls for airborne concentrations, internal exposures in restricted areas, and volatiles/gases in storage [20.1701, 1702, 35.90] (X) Y ( ) N
4. Maintenance program implemented for engineering controls (negative pressure, ventilation rates, filter changes, etc.) [35.205(e), L/C] (X) Y ( ) N

C. Describe any Self-contained dry-source-storage irradiators [Part 36] and/or survey instrument calibrators (model, radionuclide, activity, use, etc) (X) N/A

1. Maintenance of safety-related components performed by authorized persons [L/C] ( ) Y ( ) N
2. Access to keys and/or material controlled [20.1801, 1802, L/C] ( ) Y ( ) N
3. Access to high/very high radiation areas controlled [20.1601, 1602, L/C] ( ) Y ( ) N
4. Adequate protection of shield integrity, fire protection [L/C] ( ) Y ( ) N

Remarks:

5. EQUIPMENT

unable to review records of RSC checks for Dose Calibrator. Determined through interview of RSO and documentation of RSC meeting minutes. Dose Calibrators and associated records had already been transferred to Ft. Carson Colorado.

A. Dose calibrator - Photon-emitting radionuclides

1. Possessed and used [35.50(a)] (X) Y ( ) N
2. Constancy [35.50(b)(1)]
   a. Performed daily prior to use (X) Y ( ) N
   b. Dedicated check source used (X) Y ( ) N
3. Accuracy [35.50(b)(2)]
   a. Performed at installation and annually (X) Y ( ) N
   b. At least 2 sealed sources used (X) Y ( ) N
4. Linearity [35.50(b)(3)]
   a. Performed at installation and quarterly thereafter (X) Y ( ) N
   b. Includes range between 30 uCi and the highest dosage administered (X) Y ( ) N
5. Geometric Dependence [35.50(b)(4)]
   a. Performed at installation or relocation (X) Y ( ) N
   b. Includes range of volumes and volume configurations used (X) Y ( ) N
6. Dosage readings over 10 uCi mathematically corrected for geometry or linearity errors greater than + or - 10% (X) N/A ( ) Y ( ) N
7. Repaired or replaced when constancy or accuracy errors exceeded + or - 10% (X) N/A ( ) Y ( ) N
8. Approved procedures followed [35.22, 25, L/C] (X) Y ( ) N
9. Records maintained and include identity of the individual performing the test. [35.50(e)(2)] (X) Y ( ) N

Remarks:

B. Instrumentation - Alpha- or beta-emitting radionuclides (X) N/A

1. List type of equipment used to assay alpha and beta particles:

Licensee relied on radiopharmacy assay for metastron (SR89) doses ~ 4 mCi

N/A

2. Licensee has procedures for use of instrumentation [35.52(b)] ( ) Y ( ) N

3. Accuracy, linearity and geometric dependence tests are performed prior to initial use, periodically, and following repair, if applicable[4] [35.52(b)(1), L/C] ( ) Y ( ) N

4. Instruments are checked for constancy and proper operation at the beginning of each day of use [35.52(b)(2), L/C] ( ) Y ( ) N

5. Appropriate action taken when calibration errors in excess of limits are identified [L/C] ( ) Y ( ) N

6. Records maintained [L/C] ( ) Y ( ) N

Remarks:

licensee went to all unit doses in 7/95 from Syncor.

C. Licensee uses generators ( ) Y (X) N

1. Each eluate/extract used for radiopharmaceuticals tested for Mo-99 breakthrough ( ) Y ( ) N

2. No radiopharmaceuticals <u>administered</u> with Mo-99 concentrations over 0.15 uCi per mCi of Tc-99m ( ) Y ( ) N

3. Records maintained [35.204(c)] ( ) Y ( ) N

D. Syringes properly labeled and shielded [35.60] (X) Y ( ) N Per RSO

E. Vials kept in a shield [35.61(a)] (X) Y ( ) N

F. Vial shields labeled [35.61(b)] (X) Y ( ) N

Remarks:

6. <u>MATERIALS</u>

A. Licensee measures activity of each dosage of photon-emitting radionuclide prior to use [35.53(a)] (X) Y ( ) N

B. Licensee administers alpha- or beta-emitting radionuclides 6R 89 (X) Y ( ) N

If yes,

1. Licensee receives unit doses and relies on assay data supplied by manufacturer or properly licensed organization [35.53(b)] (X) Y ( ) N

---

[4]Linearity and geometric dependence tests are not applicable if liquid scintillation is used. Linearity is not applicable if sodium iodide is used.

2. Licensee measures by direct measurements or combination of measurement and calculation each dosage of alpha or beta-emitting radionuclide prior to medical use [35.53(b)] ( ) Y (X) N

C. Unsealed material used under 35.100,200,or 300 are [35.100(b), 35.200(b), 35.300(b):
(1) Obtained from manufacturer or properly licensed organization AND/OR (X) Y ( ) N
(2) Prepared by authorized nuclear pharmacist or physician user or individual under the supervision of a authorized nuclear pharmacist or physician user (X) Y ( ) N

D. Isotope, chemical form, quantity and use as authorized [31.11, 35.400,500, L/C] (X) Y ( ) N

Remarks:

For RSO Annette Boatwright

No Research since 12/95

E. Use of RAM [L/C]

1. Protective clothing worn (X) Y ( ) N
2. Personnel routinely monitor their hands (X) Y ( ) N
3. No eating/drinking in use/storage areas (X) Y ( ) N
4. No food, drink, or personal effects kept in use/storage areas (X) Y ( ) N
5. Proper dosimetry worn (X) Y ( ) N
6. Radwaste disposed in proper receptacles (X) Y ( ) N
7. No pipetting by mouth (X) Y ( ) N

F. Radioisotopes are used in research in accordance with current procedures [L/C] (X) Y ( ) N

G. Leak tests and Inventories

1. Leak test performed on sealed sources and brachytherapy sources [35.59(b)] (X) Y ( ) N
2. Leak test records in microcuries (X) Y ( ) N
3. Inventory of sealed sources ~~and brachytherapy sources~~ performed quarterly [35.59(g)] (X) Y ( ) N
4. Inventory performed promptly at the storage area after removing sources from a patient to ensure all sources taken from the storage area are returned [35.406(a)] N/A ( ) Y ( ) N
5. Records maintained and signed by RSO [35.59, 406] (X) Y ( ) N

Remarks:

7. RADIATION SURVEYS ( ) N/A

A. Survey instruments

licensee maintained ≥10 survey instruments to ensure calibrated instruments available

1. Appropriate operable survey instrumentation possessed [35.120, 220, 320, 420, L/C] or available [35.520, L/C] ( ) N/A (X) Y ( ) N
2. Calibrations [35.51(a), (b)]
   a. Before first use, annually & after repairs (X) Y ( ) N
   b. Approved calibration procedure followed to include check source reading determination [35.51(a)(3), L/C] (X) Y ( ) N
   c. Within 20% in each scale or decade of interest [L/C] (X) Y ( ) N
3. Records maintained [35.51(d)] (X) Y ( ) N
4. Source-checked each day of use [35.51(c)] (X) Y ( ) N

B. Radiation surveys performed

1. Daily in all areas where radiopharmaceuticals are prepared or administered [35.70(a)] (X) Y ( ) N
2. Weekly in all areas where radiopharmaceuticals or waste is stored [35.70(b)] (X) Y ( ) N
3. Weekly wipes in all areas where radiopharmaceuticals are prepared for use, administered or stored [35.70(e)] (X) Y ( ) N
4. Quarterly in brachytherapy source storage area (N/A) Y ( ) N

C. Trigger levels [35.70(d), (g)]

1. Established (X) Y ( ) N
2. Exceeded (X) Y ( ) N
3. Corrective action taken and documented (X) Y ( ) N

D. Techniques can detect 0.1 mR/hr, 2000dpm [35.70] (X) Y ( ) N
E. Records maintained [35.70(h), L/C] (X) Y ( ) N
F. Protection of members of the public

Note: See IN 94-09 for updated guidance on conflicts between Parts 20 and 35.

1. Licensee made adequate surveys to demonstrate either (1) that the TEDE to the individual likely to receive the highest dose does not exceed 100 mrem in a year, or (2) that if an individual were continuously present in an unrestricted area, the external dose would not exceed 2 mrem in any hour and 50 mrem in a year [20.1301(a)(1), 1302(b)] (X) Y ( ) N
2. Unrestricted area radiation levels do not exceed 2 mrem in any one hour [20.1301(a)(2)] (X) Y ( ) N
3. Records maintained [20.2103, 2107] (X) Y ( ) N

G. Describe licensee's survey requirements for research areas( ) N/A

Permittee to perform area surveys of research areas following each day of use

H. Research areas surveyed as required [20.1501(a), L/C] (X) Y ( ) N
I. Research area survey records maintained [20.2103, L/C] (X) Y ( ) N

Remarks:

8. RADIOPHARMACEUTICAL THERAPY ( ) N/A

A. Safety precautions implemented to include patient facilities, posting, stay times, patient safety guidance, release and contamination controls [35.315(a), L/C] (X) Y ( ) N
B. Area dose rate surveys and room contamination surveys [35.315(a)(4), (7)] (X) Y ( ) N
C. Release of patients containing radiopharmaceuticals meets <5 mR/hr @ 1m or <30 mCi [35.75] (X) Y ( ) N
D RSO promptly notified if patient died or had a medical emergency [35.315(b)] (X) N/A ( ) Y ( ) N

Remarks: ≈ 30 procedures since last inspection
6 procedured in 1996
last procedure 2/96

9. BRACHYTHERAPY (X) N/A

A. Safety precautions implemented to include patient facilities, room posting, stay times, and area radiation level surveys [35.415, L/C] ( ) Y ( ) N
B. Patients surveyed immediately after implant [35.406] ( ) Y ( ) N
C. Release of patients with permanent implants meets <5 mR/hr @ 1m [35.75] ( ) N/A ( ) Y ( ) N

D. Patients surveyed immediately after removing the last temporary implant source (required for all manual, LDR, MDR, and HDR therapies) [35.404(a)] ( ) N/A ( ) Y ( ) N
E. Records maintained [35.404(b), 406(d), 415(a)(4)] ( ) Y ( ) N

Remarks: no brachytherapy since last inspection

10. RADIOACTIVE WASTE ( ) N/A

A. Disposal

1. Decay-in-storage ( ) N/A

a. Approved [20.2001, 35.92, L/C] (X) Y ( ) N
b. Procedures followed [35.92, L/C] (X) Y ( ) N
c. Labels removed or defaced [20.1904, 35.92] (X) Y ( ) N

2. Special procedures performed as required [L/C] ( ) Y ( ) N (X) N/A
3. Liquid scintillation (LS) media and animal carcasses per [20.2005] ( ) N/A (X) Y ( ) N
4. Improper/unauthorized disposals [20.2001] ( ) Y (X) N
5. Records maintained [20.2103(a), 2108, L/C] (X) Y ( ) N

B. Effluents ( ) N/A

liquid waste not released to public sanitary sewer, but into onsite septic & treatment site located on facility grounds.

1. Release into sanitary sewer [20.2003] ( ) N/A ( ) Y ( ) N

a. Material is readily soluble or readily dispersible [20.2003(a)(1)] (X) Y ( ) N
b. Monthly average release concentrations do not exceed App B, Table 2 values (X) Y ( ) N
c. No more than 5 Ci of H-3, 1 Ci of C-14 and 1 Ci of all other radionuclides combined released in a year [20.2003(a)] (X) Y ( ) N
d. Procedures to ensure representative sampling and analysis implemented [20.1501, L/C] (X) Y ( ) N

2. Release into septic tank [20.2003] (X) N/A ( ) Y ( ) N

a. Within unrestricted limits [App B,Table 2] ( ) Y ( ) N

3. Waste incinerated (X) N/A

a. License authorizes [20.2004(a)(3)] ( ) Y ( ) N
b. Licensee directly monitors exhaust ( ) Y ( ) N
c. Airborne releases evaluated and controlled [20.1501, 1701] ( ) Y ( ) N

Remarks:

4. Control of air effluents and ashes [20.1201, 1301, 1501, 2001, L/C] (See also IP 87102, RG 8.37) (X) Y ( ) N

a. Compliance with air emissions requirements in Part 20:

Licensee has demonstrated compliance with air emission requirements in 10 CFR Part 20 (X) Y ( ) N

Basis for compliance determination (check one or more; provide basis below)

___(1) Measured concentrations of radionuclides in air effluents are below Appendix B, Table 2 concentrations (and external dose < 50 mrem/yr)

___(2) Bounding calculations show that air effluents could not exceed Appendix B, Table 2 concentrations (and external dose < 50 mrem/yr)

___(3) Dose modeling shows that dose equivalent to the individual likely to receive the highest dose does not exceed 10 mrem/yr

X (4) Licensee does not possess sufficient radioactive material to exceed Part 20 requirements

Basis for Determination: Licensee can comply code to verify compliance

A Vio violation from last inspection. Licensee evaluated effluents and is very aware of requirement and has established mechanism RSC to review at 1st qtr of each calendar year) to prevent recurrence.

b. Description of effluent program

1.	Monitoring system hardware adequate	( ) Y ( ) N
2.	Equipment calibrated as appropriate	( ) Y ( ) N
3.	Air samples/sampling technique (i.e. charcoal, HEPA, etc.) analyzed with appropriate instrumentation	( ) Y ( ) N

Remarks:

C. Waste Management ( ) N/A

1.	Waste compacted	( ) Y (X) N
2.	Storage area(s)	( ) N/A
	a. Protection from elements and fire [L/C]	(X) Y ( ) N
	b. Control of waste maintained [20.1801]	(X) Y ( ) N
	c. Containers properly labeled and area properly posted [20.1902, 1904]	(X) Y ( ) N
	d. Package integrity maintained [L/C]	(X) Y ( ) N

3. Packaging, Control and Tracking [App. F.III] [20.2006(d)]

Note: The licensee's waste is likely to be Class A. N/A

a.	Not packaged for disposal in cardboard or fiberboard boxes [61.56(a)]	( ) Y ( ) N
b.	Liquid wastes solidified, i.e., less than 1% freestanding liquid, and void spaces minimized [61.56(a), (b)]	( ) Y ( ) N

N/A

c. Does not generate harmful vapors [61.56] ( ) Y ( ) N

d. Structurally stable (will maintain its physical dimensions and form under expected disposal conditions) [61.56(b)] ( ) Y ( ) N

e. Packages properly labeled [App. F.III.A.2] ( ) Y ( ) N

f. Licensee conducts a QC program to ensure compliance with [61.55, 56] and includes management evaluation of audits [App. F.III.A.3] ( ) Y ( ) N

g. Shipments not acknowledged within 20 days after transfer are investigated and reported [App. F.III.A.8] ( ) N/A ( ) Y ( ) N

Transfers to Hanford completed in 10/95 & 12/95

4. Transfers to land disposal facilities ( ) N/A

a. Transferred to person specifically licensed to receive waste [30.41, 20.2001(b)] (X) Y ( ) N

b. Each shipment accompanied by a manifest prepared as specified in Section I of Appendix F [20.2006(b) and App. F.III.A.4] (X) Y ( ) N

c. Manifests certified as specified in Section II of Appendix F [20.2006(c)] (X) Y ( ) N

D. Records of surveys and material accountability are maintained [20.2103, 2108] (X) Y ( ) N

Remarks:

11. RECEIPT AND TRANSFER OF RADIOACTIVE MATERIAL

A. Describe how packages are received and by whom [33.13, L/C] Packages delivered to RSO's office. ( ) N/A
for monitoring and then picked up by permittee or delegate

B. Written package opening procedures established and followed [20.1906(e)] (X) Y ( ) N

C. All incoming packages with a DOT label wiped, unless exempted (gases and special form) [20.1906(b)(1)] (X) Y ( ) N

D. Incoming packages surveyed [20.1906(b)(2), L/C] (X) Y ( ) N

E. Monitoring in (C) and (D) above performed within time specified [20.1906(c)] (X) Y ( ) N

F. Transfer(s) between licensees performed per [30.41] (X) Y ( ) N

G. All sources surveyed before shipment and transfer [20.1501(a), 49 CFR 173.475(i), L/C] (X) Y ( ) N

H. Records of surveys and receipt/transfer maintained [20.2103(a), 30.51] (X) Y ( ) N

I. Transfers within licensee's authorized users or locations performed as required [L/C] ( ) N/A (X) Y ( ) N

J. Arrangements made for packages containing quantities of radioactive material in excess of Type A quantity [20.1906(a)] (X) Y ( ) N

K. Package receipt/distribution activities evaluated for compliance with 20.1301 [20.1302] (X) Y ( ) N

Remarks:

12. TRANSPORTATION (10 CFR 71.5(a) and 49 CFR 171-189) ( ) N/A

A. Licensee shipments are:

(X) delivered to common carriers
( ) transported in licensee's own private vehicle
( ) both
( ) no shipments since last inspection

none since last inspection

B. Licensee returns radiopharmacy doses ( ) N/A ( ) Y (X) N

1. Licensee assumes shipping responsibility N/A ( ) Y ( ) N
2. If NO, describe arrangements made between licensee and radiopharmacy for shipping responsibilities:

C. Packages

1. Authorized packages used [173.415, 416] ( ) N/A (X) Y ( ) N
2. Performance test records on file ( ) N/A

a. DOT-7A packages [173.415(a)] (X) Y ( ) N
b. Special form sources [173.476(a)] N/A ( ) Y ( ) N

Per RSO Annette Boatwright

3. Two labels (White-I, Yellow-II, Yellow-III) with TI, Nuclide, Activity, and Hazard Class [172.403, 173.441] (X) Y ( ) N
4. Properly marked (Shipping Name, UN Number, Package Type, RQ, "This End Up" (liquids), Name and Address of consignee) [172.301,306,310,312,324] (X) Y ( ) N
5. Closed and sealed during transport [173.475(f)] (X) Y ( ) N

D. Shipping Papers ( ) N/A

1. Prepared and used [172.200(a)] (X) Y ( ) N
2. Proper {Shipping Name, Hazard Class, UN Number, Quantity, Package Type, Nuclide, RQ, Radioactive Material, Physical and Chemical Form, Activity, Category of label, TI, Shipper's Name, Certification and Signature, Emergency Response Phone Number, "Limited Quantity" (if applicable), "Cargo Aircraft Only" (if applicable)} [172.200-204] (X) Y ( ) N
3. Readily accessible during transport [177.817(e)] (X) Y ( ) N

Remarks:

13. PERSONNEL RADIATION PROTECTION

A. Licensee performed exposure evaluation [20.1501] (X) Y ( ) N
B. Licensee incorporated ALARA considerations in the Radiation Protection Program [35.20, 20.1101(b)] (X) Y ( ) N

C. External Dosimetry ( ) N/A

1. Licensee monitors workers [20.1502(a), L/C] (X) Y ( ) N
2. External exposures account for contributions from airborne activity [20.1203] (X) N/A ( ) Y ( ) N
3. Supplier US ARMY Frequency Monthly
4. Supplier is NVLAP-approved [20.1501(c)] (X) Y ( ) N
5. Dosimeters exchanged at required frequency [L/C] (X) Y ( ) N

D. Internal Dosimetry (X) N/A

1. Licensee monitors workers [20.1502, L/C] (X) Y ( ) N
2. Briefly describe licensee's program for monitoring and controlling internal exposures [20.1701, 1702, L/C]:
3. Aerosols and gases sampled [20.1204, 35.205] ( ) Y (X) N
4. Monitoring/controlling program implemented (includes bioassays) [35.205(d), 315(a)(8), L/C] (X) Y ( ) N
5. Respiratory protection equipment [20.1703] ( ) Y (X) N

Licensee does bioassay all personnel involved in I 131 therapies + all nuc med techs yearly

E. Reports

1. Reviewed by RSO Frequency monthly
2. Inspector reviewed personnel monitoring records for period 7/95 to 5/96
3. Prior dose determined for individuals likely to receive doses [20.2104] (X) Y ( ) N
4. Maximum exposures TEDE ___ Other from 7/95 - 5/96 w/o 75 mrem
5. Maximum CDEs ___ Organ(s) ___
6. Maximum CEDE ___
7. Licensee sums internal and external [20.1202] ( ) Y (X) N
8. TEDEs and TODEs within 20.1201 limits (X) Y ( ) N
9. NRC forms or equivalent [20.2104(d), 2106(c)]

   a. NRC-4 (X) Y ( ) N Complete: (X) Y ( ) N
   b. NRC-5 (X) Y ( ) N Complete: (X) Y ( ) N

10. Worker declared her pregnancy in writing during inspection period (review records) (X) N/A ( ) Y ( ) N
    If yes, licensee in compliance with [20.1208] ( ) Y ( ) N
    and records maintained ( ) Y ( ) N

F. Who performed any PSEs at this facility (number of people involved and doses received) [20.1206, 2104(b), 2105, 2204] (X) N/A

G. Records of exposures, surveys, monitoring, and evaluations maintained [20.2102, 2103, 2106, 35.205(d), 315(a)(8), L/C] (X) Y ( ) N

Remarks:

14. MISADMINISTRATIONS AND RECORDABLE EVENTS no 2l

A. If misadministrations or recordable events (defined in 35.2) have occurred since last inspection, evaluate the incident(s) and the licensee's quality management program (QMP) using the existing guidance. [Reference TI 2800/025 and IP 87103]

1. Event date _____ Information Source _____
2. Notifications

NRC Ops Center	( ) Y ( ) N	Region	( ) Y ( ) N
Referring Physician	( ) Y ( ) N	Patient	( ) Y ( ) N
In writing	( ) Y ( ) N		

If notification did not occur, why not:

3. Written Reports [35.33]

a.	Submitted to Region within 15 days	( ) Y ( ) N
b.	Copy to patient within 15 days	( ) Y ( ) N

B. Records maintained [35.33(b)] ( ) Y ( ) N

Remarks:

15. NRC INDEPENDENT MEASUREMENTS BG = 0.1 mrem/hr

A.

Survey instrument	Serial No.	Last calibration
XETEK 11221	11221	11/95

B. Inspector's measurements were compared to licensee's ( ) Y (X) N

C. Describe the type, location, and results of measurements:
~~Survey~~ Surveyed unrestricted areas surrounding waste storage area (Only place that material is located) all readings at background

16. NOTIFICATION AND REPORTS

A. Licensee in compliance with [19.13] (reports to individuals, public and occupational, monitored to show compliance with Part 20) ( ) None (X) Y ( ) N

B. Licensee in compliance with [20.2201] (theft or loss) (X) None ( ) Y ( ) N

C. Licensee ... compliance with [20.2202] (incidents) (X) None ( ) Y ( ) N

D. Licensee in compliance with [20.2203] (overexposures and high radiation levels) (X) None ( ) Y ( ) N

E. Licensee aware of NRC Ops Center phone number (X) Y ( ) N

17. POSTING AND LABELING

A. NRC-3 "Notice to Workers" is posted [19.11] (X) Y ( ) N

B. Parts 19, 20, 21, Section 206 of Energy Reorganization Act, procedures adopted pursuant to Part 21, and license documents are posted or a notice indicating where documents can be examined is posted [19.11, 21.6] (X) Y ( ) N

C. Other posting and labeling per [20.1902, 1904] and the licensee is not exempted by [20.1903, 1905] (X) Y ( ) N

Remarks:

18. RECORDKEEPING FOR DECOMMISSIONING

A. Records of information important to the safe and effective decommissioning of the facility maintained in an independent and identifiable location until license termination [30.35(g)] (X) Y ( ) N

B. Records include all information outlined in [30.35(g)] (X) Y ( ) N

Remarks: Installation will be closed as of 8/98 (estimated) Discussed Burial site decommissioning plan with RSO

19. BULLETINS AND INFORMATION NOTICES

A. Bulletins, Information Notices, NMSS Newsletters, etc., received by the licensee (X) Y ( ) N

B. Licensee took appropriate action in response to Bulletins, Generic Letters, etc. (X) Y ( ) N

Remarks: none required

20. SPECIAL LICENSE CONDITIONS OR ISSUES (X) N/A

A. Special license conditions or issues to be reviewed:

B. Evaluation:

21. DEBRIEF WITH LICENSING STAFF

Inspection findings discussed with licensing staff ( ) N/A (X) Y ( ) N

Items discussed: Burial site decommissioning plan

22. CONTINUATION OF REPORT ITEMS none

23. VIOLATIONS, NCVs, AND OTHER ISSUES none

Note: Briefly state (1) the requirement and (2) how and when the licensee violated the requirement. For non-cited violations, indicate why the violation was not cited.

24. EPA REFERRAL FORM

EPA referral form for air effluents sent to appropriate EPA regional office per IP 87102 (X) Y ( ) N

If no, explain:

25. PERFORMANCE EVALUATION FACTORS

Licensee (name & location) Dept of Army Fitzsimmons Army Medical Center Aurora Colorado

Inspector J. Cruz

Inspection Date 7/17/96

A.	Lack of senior management involvement with the radiation safety program and/or Radiation Safety Officer (RSO) oversight	( ) Y (X) N
B.	RSO too busy with other assignments	( ) Y (X) N
C.	Insufficient staffing	( ) Y (X) N
D.	Radiation Safety Committee fails to meet or functions inadequately	( ) Y (X) N
E.	Inadequate consulting services or inadequate audits	( ) Y (X) N
F.	Financial Instability	( ) Y (X) N

Remarks (consider above assessment and/or other pertinent PEFs):

see attached

Regional follow-up on above PEFs citations:

Extend inspection interval to 24 months to allow majority of decommissioning activities to be completed

END

ATTACHMENT A
QUALITY MANAGEMENT PROGRAM (QMP)
QM FIELD NOTES

1. GENERAL

A. Facility name(s): Dept of Army Eisenhower Army Med Ctr
B. License number(s): 05-00096-13
C. Docket number(s): 030-01237
D. Last inspection date(s): 7/26/28/96
E. Current inspection date(s): 7/17/96
F. Most recent QMP and certification received by NRC [35.32(e), (f)(2)] Date: 2/3/95

2. PREPARATION

A. Be familiar with the submitted QMP and any modifications in preparation for inspection of the licensee's implemented QMP. Familiarization should focus upon awareness of the submitted program in order to compare the written program with the program as implemented.

3. MODALITIES

A. Identify licensee procedures and attach appropriate inspection module(s):

Module:		
1.	NaI I-125 or I-131 > 30 μCi and/or Therapeutic radiopharmaceutical other than NaI	(X) Y ( ) N
2.	High-Dose-Rate Remote Afterloading Brachytherapy	(X) Y ( ) N
3.	All Other Brachytherapy	( ) Y (X) N
4.	Strontium-90 eye applicator No use since last insp	(X) Y ( ) N
5.	Teletherapy	(X) Y (X) N
6.	Gamma Stereotactic Radiosurgery	( ) Y (X) N
7.	Event (misadministration or other)	( ) Y (X) N

4. SAMPLING (Inspector random sample of each modality)

unable to review target sample since license had archived most records relating to QMP

Total Written Directives	Minimum Target Sample
1 to 5	All
5 to 100	5
> 100	5%

		95 Total W.D.* Prev.Yr	96 Total W.D.* Curr.Yr	Target Sample	Number Reviewed
1.	NaI I-125 or I-131 > 30 μCi	24	6	5	3
2.	Therapeutic Radiopharmaceutical other than NaI	0	0	0	0
3.	HDR remote afterloading brachytherapy	0	0		0
4.	Other brachytherapy	0	0		0
5.	Sr-90 eye applicator	0	0		0
6.	Teletherapy	0	0		0
7.	Gamma Stereotactic Radiosurgery	0	0		0

* Full calendar year

MODULE 1

GREATER THAN 30 MICROCURIES NaI I-125 or I-131
AND
RADIOPHARMACEUTICAL THERAPY

1. **SUPERVISION**

A. Supervised individual(s) instructed in QMP applicable to the modality of use [35.25(a)(1)] (X) Y ( ) N
List individual(s) found to be inadequately trained:

2. **NaI I-125 or I-131 > 30 μCi** ( ) N/A

OBJECTIVE 1

		Number Missed
A.	A written directive (order for a specific patient, dated & signed by authorized user (a.u.) or physician under supervision of an a.u.) is prepared for each patient [35.32(a)(1)] (X) Y ( ) N	0
B.	Written directives, as applicable, contain required dosage information [35.2] (X) Y ( ) N	0
C.	Exceptions to written directives are documented [footnote to 35.32(a)(1)] (X) N/A	
1.	Written revisions ( ) Y ( ) N	
2.	Oral revisions ( ) Y ( ) N	
3.	Oral directives ( ) Y ( ) N	

none in sample

OBJECTIVE 2

A. Licensee uses more than one method to verify the patient's identity [35.32(a)(2)] (X) Y ( ) N 0

Remarks:

OBJECTIVE 3 (Does not apply)

OBJECTIVE 4

A. Procedures implemented to verify, prior to administration, that the specific details are in accordance with written directive [35.32(a)(4)] (X) Y ( ) N 0

B. Procedures **may** include: **(not requirements)**

1. Dosage measured prior to administration (X) Y ( ) N
2. Dosage confirmed just prior to administration (X) Y ( ) N

C. Record of administration maintained in auditable form [35.32(d)(2)] (X) Y ( ) N (O)

Remarks:

OBJECTIVE 5

A. Procedures implemented to ensure that unintended deviations are identified, evaluated, and corrective action taken [35.32(a)(5)] (X) Y ( ) N

1. Recordable event(s) self-identified since the last inspection [35.32(c), 35.2] ( ) Y (X) N
   Dates of events:

2. Recordable events identified by inspector [35.32(c), 35.2] ( ) Y (X) N
3. Misadministration resulted from the unintended deviation (If yes, also complete module 7) ( ) Y (X) N

B. Procedures implemented to evaluate & respond within 30 days to each recordable event discovered [35.32(c)] (X) Y ( ) N

C. Procedures <u>may</u> include: <u>(not requirements)</u>

1. Assemble relevant facts including cause (X) Y ( ) N
2. Identify corrective action to prevent recurrence (X) Y ( ) N
3. Retain a record of items 1 and 2 (X) Y ( ) N

D. Licensee reported misadministration(s) since the last inspection (If yes, also complete module 7) [35.33(a)] ( ) Y (X) N

E. Licensee identified misadministrations that were <u>not</u> subsequently reported (If yes, also complete module 7) [35.33(a)] ( ) Y (X) N

Remarks: UNABLE Too Review target sample since licensee had boxed and prepared for shipment most of the records regarding the QMP procedures.

Standard Review Plan Checklist
For Review of Submitted Quality Management Programs (QMP)

1. A. Facility name: FITZSIMONS ARMY MEDICAL CENTER

   B. License number: 05-00046-13

   C. Docket number: 030-01233

2. Applicant requests following modalities:

			Module:
NaI I-125 or I-131 > 30 μCi and/or	(Y)	N	1a
Therapeutic radiopharmaceutical other than NaI	(Y)	N	1b
High-Dose-Rate Remote Afterloading Brachytherapy	Y	(N)	2
All Other Brachytherapy	(Y)	N	3
Strontium-90 eye applicator not used since last inspection	(N)	N	4
Teletherapy Removed in 93	(N)	N	5
Gamma Stereotactic Radiosurgery	Y	(N)	6

3. A QMP was received with the application (Y) N [QM001]

4. QMP Submitted for each modality of use (Y) N [QM002]

5. A negative declaration was received for one or more modalities __ Y X N

   Negative declaration received for _____ (Modality)

6. Written certification received that QMP was (will be) implemented (Y) N [QM003]

Reviewer: J Cruz

Date of Review 7/11/96

Note:

MODULE 1A

GREATER THAN 30 MICROCURIES OF NAI I-125 OR I-131

1. A. Facility name: _____

   B. License number: _____

   C. Docket number: _____

2. Objective 1

   An authorized user will prepare, date and sign a written directive for each specific patient prior to administration. [OM005(a)] Y N

   The written directive contains the following: [OM006]
   - Dosage [35.2] Y N

3. Objective 2

   The licensee will verify the patient's identity by more than one method prior to administration. [35.32(a)(2)] [OM013] Y N

4. Objective 3 N/A

5. Objective 4

   The licensee has procedures to ensure, prior to administration, that each administration is in accordance with the written directive. [OM019] Y N

   Examples of acceptable procedures (one or more procedures may apply):

   a. Dosage measured in dose calibrator, and the results compared to the written directive. Y N (a)

   b. Details of administration confirmed just prior to administration (dosage, patient, etc.) Y N (b)

6. Objective 5

   The licensee has procedures that describe the method(s) used to identify and evaluate any unintended deviations from a written directive. [OM025] Y N

   The licensee has procedures that describe the corrective action(s) that will be taken after the [OM026]

deviation has been identified. [35.32(a)(5)] (Y) N

Additional regulatory requirements of which the applicant should be reminded:

1. Record of Administration

   Record of each administration will be maintained in an auditable form for 3 years [35.32(d)(2)] (Y) N

2. Training and Supervision

   All workers instructed to seek guidance if they do not understand how to carry out the written directive. [OM027] (Y) N

Reviewer: _____

Date of Review 7/11/96

MODULE 1B

Therapeutic Radiopharmaceutical other than NaI

1. A. Facility name: _____

   B. License number: _____

   C. Docket number _____

2. Objective 1

   An authorized user will prepare, date and sign a written directive for each specific patient prior to administration. [QM005(b)] Y N

   The written directive contains the following [35.2]: [QM007]

   a. Radiopharmaceutical Y N
   b. Dosage Y N
   c. Route of Administration Y N

3. Objective 2

   The licensee will verify the patient's identity by more than one method prior to administration. [35.32(a)(2)] [QM013] Y N

4. Objective 3 N/A

5. Objective 4

   The licensee has procedures to ensure, prior to administration, that each administration is in accordance with the written directive. [QM019] Y N

   Examples of acceptable procedures (one or more procedures may apply):

   a. Dosage measured or verified by another method and the results compared to the written directive. Y N (a)

   c. Patient, radiopharmaceutical, dosage, and route of administration confirmed immediately prior to administration. Y N (b)

6. Objective 5

The licensee has procedures that describe the method(s) used to identify and evaluate any unintended deviations from a written directive.	[QMD25]	(Y) N
The licensee has procedures that describe the corrective action(s) that will be taken after the deviation has been identified. [35.32(a)(5)]	[QMD26]	(Y) N

Additional regulatory requirements of which the applicant should be reminded:

1. Record of Administration

Record of each administration will be maintained in an auditable form for 3 years [35.32(d)(2)]		(Y) N

2. Training and Supervision

All workers instructed to seek guidance if they do not understand how to carry out the written directive.	[QMD27]	(Y) N

Reviewer: _____

Date of Review 7/11/96

MODULE 3

BRACHYTHERAPY
(OTHER THAN HDR REMOTE AFTERLOADING)

1. A. Facility name: _____

   B. License number: _____

   C. Docket number: _____

2. Objective 1

   An authorized user will prepare, date and sign a written directive for each specific patient prior to administration [35.32(a)(1)]. [OM005(c)] (Y) N

   The written directive contains the following [35.2]: [OM008]

   1. Prior to implantation:
      - radioisotope, (Y) N (i)
      - number of sources, (Y) N (ii)
      - source strengths (Y) N (iii)

   2. After implantation & prior to completion of procedure:
      - radioisotope, (Y) N (iv)
      - treatment site, (Y) N (v)
      - total source strength & exposure time (or total dose) (Y) N (vi)

3. Objective 2

   The licensee will verify the patient's identity by more than one method prior to administration. [35.32(a)(2)] [OM013] (Y) N

4. Objective 3

   Procedures are implemented to verify that final plans of treatment and related calculations are in accordance with written directives. [35.32(a)(3)] [OM014] (Y) N

   Examples of acceptable procedures (one or more procedures may apply):

   a. Performing acceptance testing (based on licensee's specific needs & applications) on each treatment planning or dose calculating computer program that could be used for dose calculations. (Y) N (a)

   b. A plan of treatment is prepared for each patient. (Y) N (b)

c. Check of dose calculations by an authorized user or a qualified person under supervision of an authorized user who whenever possible did not make the original calculations — Y N (c)

d. Verification of dummy sources or fixed geometry applicators prior to inserting sealed sources. — Y N (d)

e. Method used for verifying source strength prior to administration. — Y N (e)

5. Objective 4

The licensee has procedures to ensure, prior to administration, that each administration is in accordance with the written directive. [QM022] — Y N

Examples of acceptable procedures (one or more procedures may apply):

a. Person administering therapy treatment confirms the prescribed radioisotope, treatment site, number of sources, source strength and exposure time, or total dose. — Y N (a)

b. Prompt record by the authorized user, of the number of sources, source strength, the actual loading sequence of sources implanted (location of each sealed source in a tube, tandem, or cylinder) and signing or initialing the patient's chart or appropriate record. — Y N (b)

c. Ensure that source(s) will not move or dislodge while implanted. — Y N (c)

6. Objective 5

The licensee has procedures that describe the method(s) used to identify and evaluate any unintended deviations from a written directive. [QM025] — Y N

The licensee has procedures that describe the corrective action(s) that will be taken after the deviation has been identified. [35.32(a)(5)] [QM026] — Y N

Additional regulatory requirements of which the applicant should be reminded:

1. Record of Administration

   Record of each administration will be maintained in an auditable form for 3 years [35.32(d)(2)] Y N

2. Training and Supervision

   All workers instructed to seek guidance if they do not understand how to carry out the written directive. [GM027] Y N

Reviewer: _____

Date of Review _____

MODULE 4
STRONTIUM-90 EYE APPLICATORS

1. A. Facility name: _____

   B. License number: _____

   C. Docket number: _____

2. Objective 1

   An authorized user will prepare, date and sign a written directive for each specific patient prior to administration [35.32(a)(1)]. [OM005(e)] Y N

   The written directive contains the following: [OM011]

   a. source strength, Y N (a)
   b. treatment site, Y N (b)
   c. exposure time or total dose Y N (c)

3. Objective 2

   The licensee will verify the patient's identity by more than one method prior to administration. [35.32(a)(2)] [OM013] Y N

4. Objective 3

   Procedures are implemented to verify that final plans of treatment and related calculations are in accordance with written directives. [35.32(a)(3)] [OM017] Y N

   Examples of acceptable procedures (one or more procedures may apply):

   a. Assess quantity of material remaining after decay (decay chart or other method). Y N (a)

   b. Plan of treatment prepared in accordance with the written directive. Y N (b)

5. Objective 4

   The licensee has procedures to ensure, prior to administration, that each administration is in accordance with the written directive. [OM024] Y N

   Examples of acceptable procedures (one or more procedures may apply):

   a. Method used to time the administration Y N (a)

b. Person administering treatment confirms the prescribed site and the total dose, or source strength and exposure time. Y N (b)

6. Objective 5

The licensee has procedures that describe the method(s) used to identify and evaluate any unintended deviations from a written directive. [OM025] Y N

The licensee has procedures that describe the corrective action(s) that will be taken after the deviation has been identified. [35.32(a)(5)] [OM026] Y N

Additional regulatory requirements of which the applicant should be reminded:

1. Record of Administration

Record of each administration will be maintained in an auditable form for 3 years. [35.32(d)(2)] Y N

2. Training and Supervision

All workers instructed to seek guidance if they do not understand how to carry out the written directive. [OM027] Y N

Reviewer: _____

Date of Review _____

NRC FORM 374
(10-89)

U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 58

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, 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 the Army	In accordance with letter dated June 14, 1996 3. License number 05-00046-13 is amended in its entirety to read as follows:
2. U.S. Army Garrison, Fitzsimons ATTN: HSHG-RP Aurora, Colorado 80045-5001	4. Expiration date December 31, 1999
	5. Docket or Reference No 030-01233

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 with atomic numbers 1 through 83	A. Any except sealed sources	A. Not to exceed 500 millicuries per radionuclide except: H-3 - 5 curies Mo-99 - 10 curies Tc-99m - 10 curies I-125 - 1 curie I-131 - 2 curies Xe-133 - 2 curies
B. Any byproduct material with atomic numbers 1 through 96	B. Sealed sources	B. Not to exceed 2 curies per source
C. Uranium, Natural or Depleted	C. Shielding material	C. Not to exceed 999 kilograms

9. Authorized use:

A. and B. Medical research, diagnosis, and therapy. In vitro studies. Studies in laboratory animals.

C. Shielding in Molybdenum-99/Technetium-99m generators.

ML40

OFFICIAL RECORD COPY

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 IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, ATTN: Director, Division of Radiation Safety and Safeguards. 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.

13. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.

14. Maintenance, repair, cleaning, replacement, and disposal of foils contained in detector cells shall be performed only by the device manufacturer or other persons specifically authorized by the Commission or an Agreement State to perform such services.

15. 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 U.S. Nuclear Regulatory Commission.

B. When in use, detector cells containing a titanium tritide foil or a scandium tritide foil shall be vented to the outside.

16. 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 35.59, 10 CFR 35.400 and 10 CFR 35.500 and every 6 months for all other sources and/or devices.

17. Notwithstanding the requirements of 10 CFR 35.49(a) and (b), 10 CFR 35.100, 10 CFR 35.200, 10 CFR 35.300, 10 CFR 35.400, and 10 CFR 35.500, the licensee may use for any medical use any byproduct material or reagent kit. The licensee shall possess and use byproduct material for medical use in accordance with the prescriptive and performance criteria in the other sections of 10 CFR 35. This does not relieve the licensee from complying with applicable United States Food and Drug Administration (FDA) and other Federal and State requirements.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number
05-00046-13

Docket or Reference Number
030-01233

Amendment No. 58

18. Patients containing cobalt-60, cesium-137, or iridium-192 implants shall remain hospitalized until a source count and surveys made with an appropriate radiation detection instrument indicate that all implants have been removed. The results of these surveys shall be recorded and maintained for inspection by the Commission for 5 years from the time the implants are removed.

19. Patients containing iodine-131 for the treatment of thyroid carcinoma (or patients containing therapeutic quantities of gold-198) shall remain hospitalized until the residual activity is 30 millicuries or less.

20. 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 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 3 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. 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."

22. Experimental animals, or the products from experimental animals, that have been administered licensed materials shall not be used for human consumption.

23. As of July 1, 1996, the licensee's authorized activities are limited to those decommissioning activities necessary to decontaminate facilities and equipment, package materials for radioactive material transfer or waste disposal, and other activities as may be necessary to release the equipment and facilities for unrestricted use.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number
05-00046-13

Docket or Reference Number
030-01233

Amendment No. 58

24. 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 February 6, 1984
B. Letter dated October 29, 1985
C. Letter dated December 4, 1985
D. Letter dated February 27, 1986
E. Letter dated May 21, 1986
F. Letter dated August 18, 1986
G. Letter dated July 8, 1987
H. Letter dated November 4, 1987
I. Letter dated October 11, 1988
J. Letter dated May 10, 1989
K. Letter dated April 5, 1990
L. Letter dated February 28, 1992
M. Letter dated October 9, 1992
N. Letter dated May 10, 1995
O. Letter dated April 25, 1995
P. Letter dated July 5, 1995
Q. Letter dated August 8, 1995
R. Letter dated June 14, 1996

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date JUL 26 1996

By Jacqueline D. Burks MCH.
Jacqueline D. Burks
Nuclear Materials Licensing Branch
Region IV
Arlington, Texas 76011

R1201021 LICENSING TRAC SYSTEM DATE: 960724
PAGE: 1

LTS WORKSHEET

T2
7/26/96

DOCKET NO : 03001233 LICENSE NO : 05-00046-13 STATUS: 0
MAIL CONTROL: 466151 RECEIPT DATE : 960723 ACTION TYPE: 4
DUE DATE : 961021
FED. GOVT. G INST. CODE : 00046 LICENSE REGION: 4
ISSUE DATE: 960326 ORIGINAL DATE: 871222 EXPIRATION DATE: 19991231
NAME : ARMY, DEPARTMENT OF THE DECOM FIN ASSUR REQD: Y
SUBM: Y
U.S. ARMY Garrison, Fitzsimons
DEPT/BUREAU: ~~FITZSIMONS ARMY MED. CTR.~~ CONT PLAN REQD: N APPRV: N
BUILDING :
STREET : ATTN: HS HG-RP
CITY : AURORA STATE: CO ZIP: 800455001
CONTACT PERSON: CPT ANNETTE BOATWRIGHT PHONE: 303-361-8411

PRIMARY PGM CODE : 02110 SECONDARY PGM CODES: 11210
INSPECTION REGION: 4 PRIORITY CODE: 1 INSPECTION CATEGORY: G1
RADIATION SAFETY OFFICER: CPT ANNETTE BOATWRIGHT
STATES WHERE USE IS AUTHORIZED: 1
0 : ALL LISTED STATES
1 : SAME AS STATE IN ADDRESS
2 : ALL STATES
3 : NON-AGREEMENT STATES
AUTHORIZED STATES: (USE ONLY IF ABOVE IS ZERO)
REPORTING IDENTIFICATION SYMBOL:
APPROVAL FOR: REDISTRIBUTION: N STORAGE ONLY: N
TEMPORARY JOB SITES: N INCINERATION: N
BURIAL: N
EXEMPTIONS: (1)10 CFR 35.49(A)(B) (2)10 CFR 35.100-.500

REVIEWER
PLEASE UPDATE MCH 7/26/96

- ☐ 5 half-lives
- ☐ > 65 day half-lives
- ☐ Extended storage
- ☐ 10 CFR 20.302/20.2002
- ☒ N/A

7/26/96

MATERIAL TYPE : A1 FORM CODE: SS AGGREGATE CODE: SS
MODEL NUMBER :
DESCRIPTION :
TOTAL QUANTITY : 0000002.000000000 UNIT: CI
OTHER : # SOURCES:

MATERIAL TYPE : A1X FORM CODE: ANY AGGREGATE CODE: A
MODEL NUMBER :
DESCRIPTION :
TOTAL QUANTITY : 0000500.000000000 UNIT: MCI
OTHER : # SOURCES:

MATERIAL TYPE : DU FORM CODE: MET AGGREGATE CODE: MET
MODEL NUMBER :
DESCRIPTION :
TOTAL QUANTITY : 0000999.000000000 UNIT: KG
OTHER : # SOURCES:

MATERIAL TYPE : H3 FORM CODE: ANY AGGREGATE CODE: A
MODEL NUMBER :
DESCRIPTION :
TOTAL QUANTITY : 0000005.000000000 UNIT: CI
OTHER : # SOURCES:

MATERIAL TYPE : I125 FORM CODE: ANY AGGREGATE CODE: A
MODEL NUMBER :
DESCRIPTION :
TOTAL QUANTITY : 0000001.000000000 UNIT: CI
OTHER : # SOURCES:

MATERIAL TYPE : I131 FORM CODE: ANY AGGREGATE CODE: A
MODEL NUMBER :
DESCRIPTION :
TOTAL QUANTITY : 0000002.000000000 UNIT: CI
OTHER : # SOURCES:

MATERIAL TYPE : MO99 FORM CODE: ANY AGGREGATE CODE: A
MODEL NUMBER :
DESCRIPTION :
TOTAL QUANTITY : 0000010.000000000 UNIT: CI
OTHER : # SOURCES:

MATERIAL TYPE : TC99M FORM CODE: ANY AGGREGATE CODE: A
MODEL NUMBER :
DESCRIPTION :
TOTAL QUANTITY : 0000010.000000000 UNIT: CI
OTHER : # SOURCES: ___

MATERIAL TYPE : XE133 FORM CODE: ANY AGGREGATE CODE: A
MODEL NUMBER :
DESCRIPTION :
TOTAL QUANTITY : 0000002.000000000 UNIT: CI
OTHER : # SOURCES: ___

MATERIAL TYPE : ______ FORM CODE: ___ AGGREGATE CODE: ___
MODEL NUMBER :
DESCRIPTION :
TOTAL QUANTITY : UNIT:
OTHER : # SOURCES: ___

MATERIAL TYPE : ______ FORM CODE: ___ AGGREGATE CODE: ___
MODEL NUMBER :
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DESCRIPTION :
TOTAL QUANTITY : UNIT:
OTHER : # SOURCES: ___

MATERIAL TYPE : ______ FORM CODE: ___ AGGREGATE CODE: ___
MODEL NUMBER :
DESCRIPTION :
TOTAL QUANTITY : UNIT:
OTHER : # SOURCES: ___

NAME	AUTHORIZATION
DESIGNEES OF FAMC RAD.COMMITT.	ALL

ADDRESS WHERE MATERIAL IS USED OR POSSESSED

BUILDING: FITZSIMONS ARMY MEDICAL CENTER
ROOM:
STREET: ~~12131 E.~~ COLFAX AVENUE
CITY: AURORA
STATE: CO

BUILDING:
ROOM:
STREET:
CITY:
STATE:

BUILDING:
ROOM:
STREET:
CITY:
STATE:

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BUILDING:
ROOM:
STREET:
CITY:
STATE:

DOCKET: 03001233 LIC: 05-00046-13 NAME: ARMY, DEPARTMENT OF THE

PARTY ISSUING MECHANISM:
NAME: DEPT. OF THE ARMY
ADDR1: FITZSIMONS ARMY MEDICAL CENTER
ADDR2:
CITY: AURORA
STATE: CO ZIP: 80045

ASSUR TYPE : C (C=CERT D=DFP)
MECH TYPE : SI
MECH AMOUNT: 000750000
APPROVED? Y DATE: 920406
EXPIRES ? N DATE:

PARTY ISSUING MECHANISM:
NAME:
ADDR1:
ADDR2:
CITY:
STATE: ZIP:

ASSUR TYPE : _ (C=CERT D=DFP)
MECH TYPE : _
MECH AMOUNT:
APPROVED? DATE:
EXPIRES ? _ DATE:

PARTY ISSUING MECHANISM:
NAME:
ADDR1:
ADDR2:
CITY:
STATE: ZIP:

ASSUR TYPE : _ (C=CERT D=DFP)
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MECH AMOUNT:
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EXPIRES ? _ DATE:

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ADDR2:
CITY:
STATE: ZIP:

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EXPIRES ? _ DATE:

PARTY ISSUING MECHANISM:
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ADDR2:
CITY:
STATE: ZIP:

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MECH AMOUNT:
APPROVED? DATE:
EXPIRES ? _ DATE:

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CITY:
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MECH AMOUNT:
APPROVED? DATE:
EXPIRES ? _ DATE:

PARTY ISSUING MECHANISM:
NAME:
ADDR1:
ADDR2:
CITY:
STATE: ZIP:

ASSUR TYPE : _ (C=CERT D=DFP)
MECH TYPE : _
MECH AMOUNT:
APPROVED? DATE:
EXPIRES ? _ DATE:

License: 05-00046-13 Amendment: 58

Docket: 030-01233

Licensee: Department of the Army
U.S. Army Garrison, Fitzsimons

Certification of Application Review for a Part 30, 40, and 70 License

I certify that I have reviewed the letter dated June 14, 1996, as supplemented by any letters referenced in the license in accordance with guidance provided by the Office of Nuclear Materials Safety and Safeguards applicable Standard Review Plan and associated checklist and have concluded that:

_____ A. If the license is being terminated, I have received adequate documentation to demonstrate that all radioactive materials and contamination possessed under this license has been properly removed and the licensee's facilities are suitable for unrestricted use, or that the radioactive material is covered by another valid license.

__X__ B. For a _____ new license, __X__ amendment, or _____ renewal:

(1) The application is for a purpose authorized by the Act;
(2) The applicant's proposed equipment and facilities are adequate to protect health and minimize danger to life or property;
(3) The applicant is qualified by training and experience to use the material for the purpose requested in such manner as to protect health and minimize danger to life;
(4) The applicant satisfies any special requirements contained in Parts 32-40 and 70; and
(5) The application is not for commercial waste disposal by land burial or for any other activity which the Commission has determined will significantly affect the quality of the environment.

M C Hernandez 7/26/96
Reviewer Date

Jacqueline D Burks JUL 26 1996
Health Physicist Date

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

July 26, 1996

Department of the Army
U.S. Army Garrison, Fitzsimons
ATTN: Captain Annette Boatwright
HSHG-RP
Aurora, Colorado 80045-5000

SUBJECT: LICENSE AMENDMENT

Please find enclosed License No. 05-00046-13. You should review this license carefully and be sure that you understand all conditions. If you have any questions, you may contact the reviewer who signed your license at 817-860-8100.

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

8/27

ORIGINAL SENT TO DCS 8/96

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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,

M. C. Hernandez

Christi Hernandez, Radiation Specialist
Nuclear Materials Licensing Branch

Docket: 030-01233
License: 05-00046-13
Control: 466151

Enclosures: As stated