

APPENDIX A
INDUSTRIAL/ACADEMIC/RESEARCH INSPECTION FIELD NOTES

Region I

Inspection Report No. 97-001

License No. 29-01022-06

Licensee (Name & Address):

Docket No. 030-05248

Department of the Army
U.S. Army Communications -
Electronics Command AMSEL-SF-RER
Fort Monmouth, New Jersey 07703-5024

Licensee Contact Richard Lovell, Asst. RPO

Telephone No. 908-532-9723

Amendments Issued Since Last Inspection: (Numbers) 40 and 41

Dates of Above Amendments: April 29, 1997 and May 27, 1997

Priority: 02

Program Code 03610

Date of Last Inspection August 9-11 and 15, 1997

Date of This Inspection September 29 and 30, 1997

Type of Inspection:

☐ Announced

☒ Unannounced

☒ Routine

☐ Special

☐ Initial

☐ Reinspection

Next Inspection Date September 1999

☒ Normal ☐ Reduced ☐ Extended

Justification for change in normal inspection frequency:

Summary of Findings and Action:

☒ No violations cited; Clear NRC Form 591 or regional letter issued

☐ Violation(s), NRC Form 591 issued

☐ Violation(s), regional letter issued

☐ Followup on previous violations

Information in this record was deleted
in accordance with the Freedom of Information
Act, exemptions 2

FOIA-2006-0238

Inspector: Richard Gibson, Jr.
(Signature)

Date October 6, 1997

Approved:

[Signature]
(Signature)

Date

10/14/97 HH/15

Issue Date: 01/XX/97

A-1

87110, Appendix A

Field notes are to be used by the inspector to assist with the performance of the inspection. Note that all areas indicated in the field notes are not required to be addressed during each inspection. However, for those areas not covered during the inspection, a notation ("Not Reviewed") should be made in each section where applicable. Additionally, all areas covered during the inspection should be documented in sufficient detail to describe what activities and/or records the inspector observed. For example, the types of records that were reviewed and the time periods covered by those records should be noted. If the licensee demonstrates any practices at your request, describe those demonstrations. The observations and demonstrations you describe in this report, along with measurements and some records review, should substantiate your inspection findings.

NOTE: For inspections of radioactive drug distributors, ensure that all applicable sections (regarding 10 CFR Part 32) of the radiopharmacy field notes are completed.

1. INSPECTION, LICENSING, AND INCIDENT HISTORY

A. Violations were identified during any of the last two inspections or two years, whichever is longer. (N/A = Initial insp.) ☐ N/A ☐ Y ☒ N

B. Response letter(s) or 591(s) dated August 18, 1995

C. Violations from previous inspection(s):

REQUIREMENT CITED

STATUS

D. Any repeat violation(s) identified? ☐ Y ☐ N
If "Yes," explain:

- E. License amendments issued since last inspection, or program changes noted in the license:

<u>AMENDMENT #</u>	<u>DATE</u>	<u>SUBJECT</u>
41	5/27/97	amend license to change location for the J. L. Shepherd Model 81-140 calibrator from the Evans Area (Bldg 9401) to the Area
40	4/29/97	amend license to provide services for analysis of test samples for other person.

Ex 2

- F. During this inspection, was the licensee's implementation of all of the above amendments or program changes inspected/observed? ☐ N/A ☒ Y ☐ N
- G. During this inspection, were any violations identified involving any of the above amendments or program changes? ☐ N/A ☐ Y ☒ N
- H. List any incidents or events reported to NRC since the last inspection (Note: "None" indicates that regional event logs, event files, and the licensing file have no evidence of any incidents or events since the last inspection): ☒ None

INCIDENT OR EVENT

- I. During this inspection, were the incidents/events reviewed with the licensee, and was the licensee's follow-up to the incidents/events examined? ☒ N/A ☐ Y ☐ N

- J. Describe the licensee's follow-up in response to the events/incidents listed in 1.H.:

Comments:

2. ORGANIZATION AND SCOPE OF PROGRAM

- A. Describe the licensee's organizational structure to indicate the "chain-of-command" from senior management to authorized users of licensed material. Show or describe where the RSO and Chairperson of the RSC are located in the licensee's organization and to whom they report:

U.S. Army Communications - Electronics Command (CECOM), Directorate of Safety Risk Management, Steve Horne is the Director; the Division of Radiological Engineering, Joseph M. Santarsiero is the Chief and the Radiation Safety Officer for the license; Richard Lovell is the Assistance to the Radiation Protection Officer (RPO). There are seven health physicists with CECOM and three contract health physicists.

B. Identify licensee personnel contacted during the inspection (including those individuals contacted by telephone).

- * Steven A. Horne, Dept. of the Army Civilian (DAC), Chief, Directorate of Safety Risk Management
- * Joseph M. Santarsiero, DAC, Chief, Radiological Engineering Division (RED)
- * Richard J. Lovell, DAC, Health Physicist, RED
- # Burton Cummings, Contractor, Health Physicist, RED
- # Al Perrella, Contractor, Health Physicist, RED
- # Alice Frampton, DAC, Safety Specialist
- # Stanley Kronenberg, Research Scientist, Physic
- # Alex Cosentino, Supply Technician Leader

(Use the following identification symbols:)

- # Individuals present at entrance meeting
- * Individuals present at exit meeting
- + Individuals contacted by telephone

- C. Authorized for multiple locations of use (x) Y () N
If yes, may use ATTACHMENT A as a guide
for inspecting laboratories.
- D. Authorized for multiple permanent field office locations (x) Y () N
(1) Inspection performed at multiple field offices (x) Y () N
(2) If "Yes," list office locations inspected:

Ft. Monmouth's Evans Area and the Charles Wood Area.

- E. Authorized for temporary job site locations () Y (x) N
(1) Inspection performed at temporary job site(s) () Y () N
(2) If not, describe why not:

- F. Briefly describe scope of activities, including types and quantities of use involving licensed material, frequency of use, staff size, etc.

CECOM, under the broad scope license, conducts sample analysis, instrument calibration services and emergency response to Ft. Monmouth. In addition, CECOM provides services in sample analysis, RADCON training, and emergency response to other government military facilities to support the Department of the Army (DOA) RADCON mission. The Directorate of Safety Risk Management staffs are the primary users and they are responsible for the services under the broad scope license. Dr. S. Kronenberg, Research Scientist conducts research in instrument testing, sample analysis and commodities in the developmental stages to support the mission. Radioactive materials are used as sealed sources in calibrators and checks sources for the calibration of instruments to support the DOA mission.

Ex2

3. MANAGEMENT OVERSIGHT

- A. Radiation Safety Committee (RSC) required [L/C]¹ (x) Y () N
- (1) RSC fulfills license requirements [L/C] (x) Y () N
- (2) Records maintained [L/C] (x) Y () N
- B. Radiation Safety Officer (RSO)
- (1) Authorized on license [L/C] (x) Y () N
- (2) Fulfills duties as RSO (x) Y () N
- C. Audits, Reviews, or Inspections
- (1) Audits are required [L/C] (x) Y () N
- (2) Audits or inspections are conducted (x) Y () N
- Audits conducted by Gordon M. Lodde, HP
- Frequency Annually

Here and throughout the field notes, "L/C" means "license condition."

- (3) Content and implementation of the radiation protection program reviewed annually by the licensee [20.1101(c)]² (x) Y () N
- (4) Records maintained [20.2102] (x) Y () N
- D. Use by authorized individuals [L/C] (x) Y () N
- E. If supervision permitted by the license or by regs, authorized users supervise adequately [L/C] (x) Y () N

4. FACILITIES

- A. Facilities as described in license application [L/C] (x) Y () N
- B. Facilities are secured to prevent unauthorized access [L/C] (x) Y () N
- C. Describe any self-contained dry-source-storage irradiators and/or survey instrument calibrators (model, radionuclide, activity, use, etc.) () N/A

[

Ex2

In a letter dated October 6, 1997, the representative from J.L. Shepherd electronically disconnected the source to prohibit deliberate raising. Also, the licensee submitted a survey of the building at the 5.2 curies source position.

- (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] (x) Y () N
- (3) Access to high/very high radiation areas controlled [20.1601-1602, L/C] (x) Y () N
- (4) Adequate protection of shield integrity, fire protection [L/C] (x) Y () N

Basis for Findings:

RSC - meetings are conducted quarterly, records of minutes were reviewed for September 11, 1997 to December 17, 1996. Records were as required.

Audits - conducted annually by the U.S. Army Center for Health Promotion and Preventive Medicine and the licensee's consultant.

Here and throughout the field notes, sections of 10 CFR are referenced only by their section numbers.

5. EQUIPMENT AND INSTRUMENTATION

A. Instruments and equipment:

- (1) Appropriate operable survey instrumentation possessed and readily accessible [L/C] (x) Y () N
- (2) Calibrated as required [20.1501, L/C] (x) Y () N
- (3) Calibration records maintained [20.2103(a)] (x) Y () N

- B. Procedures established to identify and report safety component defects [21.21] (x) Y () N

Basis for Findings:

Survey instruments are calibrated annually by Ludlum Measurements, Inc. Instruments observed by the inspector were a Ludlum Model 5, S/N 44292, a Ludlum Model 3, S/N 20243, a Ludlum Model 19s, S/N 131255, S/N 111352, S/N 13280 and S/N 131253. The survey instruments were calibrated at the required frequency.

6. MATERIALS RECEIPT, USE, TRANSFER, AND CONTROL

- A. Isotope, chemical form, quantity, and use, as authorized [L/C] (x) Y () N

- B. Licensed materials secured to prevent unauthorized removal or access [20.1801-1802] (x) Y () N

- (1) Licensed material in storage in controlled or unrestricted areas is secured from unauthorized removal or access [20.1801] (x) Y () N

- (2) Licensed material in controlled or unrestricted areas and not in storage is controlled and under constant surveillance [20.1802] (x) Y () N

- (3) Access to restricted areas is limited [20.1003] (x) Y () N

- C. Describe how packages are received and by whom: () N/A

Packages containing radioactive material are received in building 116 receiving area. Alex Cosentino, Supply Tech Leader, contacts the health physicists from the Directorate of Safety Risk Management who will conduct the receipt surveys. Building 116 is the designated facility on base for the receipt of packages containing radioactive material.

- D. Written package opening procedures established and followed [20.1906(e)] (x) Y () N

- E. All incoming packages with DOT labels wiped, unless exempted (gases and special form) [20.1906(b)(1)] (x) Y () N

- F. Incoming packages surveyed [20.1906(b)(2)] (x) Y () N

- G. Monitoring in (E) and (F) above, performed within time specified [20.1906(c)] (x) Y () N

- H. Transfer(s) between licensees performed [30.41] (x) Y () N

- I. All sources surveyed before shipment and transfer [20.1501(a), L/C] (x) Y () N
- J. Records of surveys and receipt/transfer maintained [20.2103(a), 30.51] (x) Y () N
- K. Transfers among licensee's authorized users or locations performed as required [L/C] () N/A (x) Y () N
- L. Arrangements made for packages containing quantities of radioactive material in excess of Type A quantity [20.1906(a)] () N/A (x) Y () N
- M. Package receipt/distribution activities evaluated for compliance with 20.1301 [20.1302] () N/A (x) Y () N

Basis for Findings:

Security to all areas where radioactive material is used and stored, is maintained by HPs in Directorate of Safety Risk Management and Dr. Kronenberg.

7. TRAINING, RETRAINING, AND INSTRUCTIONS TO WORKERS

- A. Instructions to workers/students [10 CFR 19.12] (x) Y () N
- B. Training program required [L/C] (x) Y () N

(1) If so, briefly describe training program:

Authorized users of radioactive material are given 2 and 3 years work permits by the RSC for use of radioactive material. Initial and refresher training are given by the HP staffs annually. Records of training were reviewed for the dates from September 15, 1997 to December 6, 1996. Records were as required.

- (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

- C. Individual's understanding of procedures and regulations is adequate (x) Y () N

- (1) Current operating procedures (x) Y () N
- (2) Emergency procedures (x) Y () N
- (3) Use of survey instrumentation (x) Y () N

- D. Revised Part 20
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 NRC 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] (x) Y () N
- (6) Grave danger posting [20.1902] () N/A (x) 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 |

Basis for Findings:

The licensee conducts emergency RADCON drills annually at Ft. Monmouth. The primary and secondary personnel are the HPs of Directorate of Safety Risk Management. The last emergency exercise was conducted on September 11, 1997 on Ft. Monmouth's Charles Wood area.

8. AREA RADIATION SURVEYS AND CONTAMINATION CONTROL

- A. Briefly describe area survey requirements [20.1501(a), L/C]:

The licensee performs monthly radiation and contamination surveys of areas where radioactive material is used and stored.

- | | | |
|----|--|--------------|
| B. | Performed as required [20.1501(a), L/C] | (x) Y () N |
| | (1) Contamination found | (x) Y () N |
| | (2) Corrective action taken and documented | (x) Y () N |
| C. | Records maintained [20.2103, L/C] | (x) Y () N |
| D. | Handling and use of radioactive materials [L/C] | |
| | (1) Protective clothing worn | (x) Y () N |
| | (2) Personnel routinely monitor or frisk themselves after procedures or before leaving | (x) Y () N |
| | (3) No eating/drinking/smoking in use/storage areas | (x) Y () N |
| | (4) No food, drink, or personal effects stored in use/storage areas | (x) Y () N |
| | (5) Proper dosimetry worn | (x) Y () N |
| | (6) Radioactive waste disposed in proper containers | (x) Y () N |
| | (7) No pipetting by mouth | (x) Y () N |
| | (8) Use of shielding/distance while using/storing material | (x) Y () N |

Basis for Findings:

Monthly radiation and contamination surveys were conducted in buildings 9045, 9019, the radioactive material storage trailer, Mobile Lab #2, 9383 and 9401. Records were reviewed for the dates from August 11, 1997 to September 18, 1995. Records were as required.

- E. Protection of members of the public

- (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)];

- and (3) the air emissions to the atmosphere are within the constraint level [20.1101] (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, 20.2107] (x) Y () N

F. Leak tests and Inventories [L/C]

- (1) Performed as required () N/A (x) Y () N
- (2) Adequate analysis methodology and sensitivity () N/A (x) Y () N
- (3) Records maintained [L/C] (x) Y () N

Basis for Findings:

Leak tests and inventory are conducted by the licensee every six months. Records of leak tests and inventory were reviewed for the dates from September 25, 1997 to September 1995.

9. RADIATION PROTECTION

- A. Licensee performed exposure evaluation [20.1501] (x) Y () N
- B. Licensee incorporated ALARA considerations in the radiation protection program [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) Processor U.S. Army Ionizing RAD Frequency Quarterly
- (4) Processor 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(b), L/C] () Y () N
- (2) Briefly describe licensee's program for monitoring and controlling internal exposures [20.1701-1702, L/C]:
- (3) Air sampling performed () Y () N
- (4) Monitoring/controlling program implemented () Y () N
- (5) Respiratory protection equipment [20.1703, L/C] () Y () N

E. Reports

() N/A

- (1) Reviewed by Radiation Safety Officer Frequency Quarterly
- (2) Inspector reviewed personnel monitoring records for period May 7, 1997 to November 8, 1996
- (3) Prior dose determined for individuals likely to receive doses [20.2104] (x) Y () N
- (4) Maximum exposures TEDE 22 mrem Other _____
- (5) Maximum CDEs _____ Organs _____
- (6) Maximum CEDE _____
- (7) Licensee sums internal and external [20.1202] () Y () N
- (8) TEDEs and TODEs within limits [20.1201] () Y () N
- (9) NRC Forms or equivalent [20.2104(d), 2106(c)]
- (a) NRC Form 4 (x) Y () N Complete: (x) Y () N
- (b) NRC Form 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 dose to embryo/fetus [20.1208] () Y () N
- and records maintained [20.2106(e)] () Y () N

- F. Who performed PSEs at this facility (number of people involved and doses received)? [20.1206, 20.2104-2105, 20.2204] (x) N/A

- G. Records of exposures, surveys, monitoring, and evaluations maintained [20.2102-2103, 20.2106, L/C] (x) Y () N
- H. Licensee advises each worker annually of worker's dose [19.13(b)] (x) Y () N

Basis for Findings:

Review of records on file and interview with personnel.

10. RADIOACTIVE WASTE MANAGEMENT

() N/A

A. Disposal

() N/A

(1) Decay-in-storage

(x) N/A

- (a) Procedures approved [20.2001(a)(2), L/C] () Y () N
 (b) In accordance with [L/C] () Y () N
 (c) Labels removed or defaced [20.1904(b)] () Y () N

(2) Special procedures performed as required [L/C] () Y () N

(3) Liquid scintillation (LS) media and animal carcasses [20.2005] () N/A (x) Y () N

(4) Improper/unauthorized disposals [20.2001] () Y () N

(5) Records maintained [20.2103(a), 20.2108, L/C] (x) Y () N

B. Effluents

(x) N/A

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

(a) Material is readily soluble or readily dispersible [20.2003(a)(1)] () Y () N

(b) Monthly average release concentrations do not exceed Appendix B values [20.2003] () 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] () Y () N

(d) Procedures to ensure representative sampling and analysis properly implemented [20.1501(a)(2), L/C] () Y () N

(2) Release to septic tanks [20.2003] (x) N/A () Y () N

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

(3) Waste incinerated (x) N/A () Y () N

(a) License authorizes [20.2004(a)(3)] () Y () N

(b) Licensee directly monitors exhaust () Y () N

(c) Airborne releases evaluated and controlled [20.1501, 20.1701] () Y () N

(4) Control of effluents and ashes [20.1201, 20.1301, 20.1501, 20.2001, L/C] (x) N/A
 {See also IP 87102, RG 8.37}

(a) Air effluent less than 10 mrem constraint limit [20.1101] () Y () N

(b) If no. licensee reported appropriate information to NRC () Y () N

I. Corrective actions implemented
and on schedule

() Y () N

(c) Description of effluent monitoring program

- (i) Monitoring-system hardware equipment adequate () Y () N
- (ii) Equipment calibrated as appropriate () Y () N
- (iii) Air samples/sampling technique (charcoal, HEPA, etc.) analyzed with appropriate equipment () Y () N

Basis for Findings:

C. Waste Management

() N/A

(1) Waste compacted [L/C]

() 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, 20.1904] (x) Y () N
- (d) Package integrity maintained [L/C] (x) Y () N

(3) Packaging, Control and Tracking

[Part 20, App. F.III.] [20.2006(d)]:

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

- (a) Not packaged for disposal in cardboard or fiberboard boxes [61.56(a)] (x) Y () N
- (b) Liquid wastes solidified, (i.e., less than 1% freestanding liquid) and void spaces minimized [61.56(a), (b)] () Y () N
- (c) Does not generate harmful vapors [61.56] (x) Y () N
- (d) Structurally stable (will maintain its physical dimensions and form under expected disposal conditions) [61.56(b)] (x) Y () N

- (e) Packages properly labeled
[App. F.III.A.2] (x) 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] (x) Y () N
- (g) Shipments not acknowledged within 20 days after transfer are investigated and reported [App. F.III.A.8] (x) N/A () Y () N
- (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), 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

Basis for Findings:

Radioactive waste generated from the use of radioactive material under the broad scope license is transferred to a land disposal facility for proper disposal. The Army's Industrial Operation Command (IOC), transfer waste containing radioactivity for the licensee. Records of the manifest dated 9/23/97 were reviewed.

11. 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. (x) Y () N
- B. Records include all required information [30.35(g)] (x) Y () N
- (1) List of restricted areas [30.35(g)(3)] indicates that laboratories or other rooms have been released since the last inspection (x) Y () N
- (2) Confirmatory measurements show that each room is within release limits, and licensee records adequately document the basis for releasing each room (x) Y () N
- C. Copies of the licensee's decommissioning cost estimates and funding methods on file (x) Y () N
- D. If the licensee uses a parent company guarantee or a self-guarantee as funding method, does the file contain a copy of the financial test performed for the licensee's most recently completed fiscal year? (x) N/A () Y () N
- E. If "Yes" to D., do the financial test ratios meet the criteria in 10 CFR Part 30, Appendix A, Section II for parent company guarantees and Appendix C, Section II for self guarantees? () Y () N
- F. Date that licensee's financial assurance instrument was submitted to NRC, if applicable: () N/A
- G. Date that licensee's decommissioning plan was submitted to NRC, if applicable: () N/A
- H. Have radiological conditions at the licensee's facility changed since the financial assurance mechanism and/or decommissioning plan was submitted due to:
- (1) Incidents or events? () N/A () Y () N
- (2) Unplanned process upsets or changes? () N/A () Y () N
- (3) Unauthorized material, form, or possession limit changes? () N/A () Y () N
- (4) Any other changes? () N/A () Y () N

If "Yes" to any of the above (1)-(4),
notify regional management.

Basis for Findings (include comments and measurements on any areas the licensee released for unrestricted use):

At the time of this inspection, the licensee is currently decommissioning the Evans area of Ft. Monmouth. Radioactive materials from the Evans area will be either transferred for proper disposition or transferred to the Charles Wood area for continue use or storage.

12. COMPLIANCE WITH DECOMMISSIONING TIMELINESS RULE N/A

- A. License to conduct a *principle activity* has expired or been revoked () Y () N
- B. Licensee has made a decision to permanently cease *principal activities*, at the entire site, or any separate buildings, or any outdoor areas, including inactive burial grounds () Y () N
- C. A 24-month duration has passed in which no *principal activities*, have been conducted under the license at the site, or at any separate buildings, or any outdoor areas, including inactive burial grounds () Y () N
- D. If "Yes" to either A or B or C:
(1) Identify Site/Bldg/Area: _____
(2) Date of occurrence of A, B, or C: _____

NOTE: If "No" to A and B and C, decommissioning timeliness rule does not apply.
If "Yes" to either A or B or C, then complete Attachment B, "Decommissioning Timeliness Field Notes," for this licensee.

Basis for Findings:

13. TRANSPORTATION (10 CFR 71.5(a) and 49 CFR 170-189) () N/A

A. Licensee Transports: [complete sections (1) - (4), as applicable]

- (1) Limited Quantities, and/or Instruments and Manufactured Articles: (Radioactive Material, excepted package, [additional info], 7, UN 2910) () N/A
- (a) Package meets general design requirements [173.410] () Y () N
- (b) Radiation level ≤ 0.005 mSv/hr (0.5 mrem/hr) (Exclusive use instruments and articles, 2 mrem/hr) () Y () N
- (c) Contamination less than 173.443 limits, QC examination/test performed prior to each shipment [173.475(I)] () Y () N
- (d) Limited Quantity Package marked "Radioactive" [173.421(a)(4)] () Y () N
- (e) 173.422 certification statement attached/enclosed ("This package conforms to the conditions and limitations specified in...") () Y () N

(2) Type A Quantities (Radioactive Material, nos. 7, UN 2982) () N/A

(a) Packaging:

- (i) Packaging is proper for contents (i.e., DOT 7A), is unimpaired, and is prepared correctly [173.475(a)-(f)] (x) Y () N
- (ii) All packages meet general design requirements [173.410] (x) Y () N
- (iii) DOT 7A Package meets additional Type A design requirements [173.412, 178.350] (x) Y () N

(b) Recordkeeping:

- (i) Special Form source records [173.476(a)] (x) Y () N
- (ii) DOT 7A performance/design documentation [173.415(a)] (x) Y () N

(c) Hazards communications requirements (consult the "NRC field reference charts" that correspond to elements (i) through (v), below):

- N/I
- (i) Shipping Papers [172.200-205] () Y () N
 - (ii) Marking Packages [172.300-338] () Y () N
 - (iii) Labeling Packages [172.400-450] () Y () N
 - (iv) Placarding Vehicles [172.500-560] () Y () N
 - (v) Emergency Response information and guidance [172.600-604] () Y () N

(d) Radiation level/Contamination limits [173.441, 173.443]

- (i) Package levels within limits (x) Y () N
- (ii) QC examination/test performed prior to each shipment [173.475(I)] (x) Y () N

(3) Type B Quantities (Radioactive Material, nos. 7, UN 2982) () N/A

- (a) Packaging is proper for contents (i.e., Type B), is unimpaired, and is prepared correctly [173.475(a)-(f)] (x) Y () N
- (b) Inspector must complete Section 2 of NRC Inspection Procedure (IP) 86740
- (c) Sections 2.c. and 2.d., shown in the previous section for Type A Quantities, also apply. Complete those sections.

N/I (4) LSA Material and SCO (Radioactive Material, LSA, nos. 7, UN 2912) or (Radioactive Material, SCO, nos. 7, UN 2913) () N/A

(a) If licensee makes significant LSA/SCO shipments, inspector should complete Inspection Requirement 03.02 of Temporary Instruction (TI) 2515/133 (issued 3/15/96)

(b) Otherwise, if licensee has a minor LSA/SCO program:

(i) Licensee properly characterizing material as LSA/SCO [173.403] () Y () N

(ii) All packages meet general design requirements [173.410] () Y () N

(iii) Proper LSA/SCO packaging selected and used [173.475, 173.427] () Y () N

(iv) Placarding exclusive use vehicles, marking package "Radioactive-LSA" or "Radioactive-SCO," as appropriate [173.427(a)(6)] () Y () N

(v) Shipping Papers [172.200-205] (see "NRC field reference chart" for content and exceptions) () Y () N

B. DOT HAZMAT Employee Training Program [49 CFR 172.700-704]:

(1) Each HAZMAT employee receives training and is tested [172.702] (x) Y () N

(2) Recurrent training at least every 2 years [172.704(c)(4)] (x) Y () N

(3) HAZMAT employee training includes general awareness, function-specific, and safety training [172.704] (x) Y () N

(4) HAZMAT employer recordkeeping includes employee name, completion date, description/copy/location of training materials, name and address of training provider, and certification [172.704(d)] (x) Y () N

N/I C. Carrier Modal Specific Requirements, Highway Transportation [49 CFR Part 177]: () N/A

(1) Driver Training, or CDL w/ HAZMAT endorsement [177.800, 177.816] () Y () N

(2) Incident Reporting to DOT [177.807, see also 171.15 and 171.16] () Y () N

(3) Shipping Paper Accessibility (on seat or in driver's side door pocket, readily visible) () Y () N

(4) Placarded Vehicles Routing and Driver Training requirements [177.825 and 49 CFR 397 Subpart D (i.e., the motor carrier regs)] () Y () N

(5) Sum of total package TIs on non-exclusive use vehicle < 50 [177.842(a)] () Y () N

(6) Packages blocked/braced for transport [177.842(c)] () Y () N

N/I D. Miscellaneous Requirements

- (1) No labeled packages carried in passenger compartments [173.448(c)] () Y () N
- (2) Overpack requirements observed, if packages are offered in overpack. Overpack marked w/ proper shipping name and number, package and overpack labeled as needed, marked "inner package complies" [173.24] () Y () N
- (3) Expanded and changed A1/A2 values from the 4/1/96 rule changes have been implemented [173.435] (verify only once per licensee) () Y () N
- (4) Written instructions included with exclusive use shipments [173.403] () Y () N

Basis for Findings:

13. POSTING AND LABELING

- A. NRC Form 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 and 20.1904, respectively, and the licensee is not exempted by 20.1903 or 20.1905 (x) Y () N

Basis for Findings:

All required documents to be posted were located at various bulletin boards at both Charles Wood and Evans areas.

14. GENERIC COMMUNICATION OF INFORMATION

- 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

Basis for Findings:

Review records and interview with personnel.

15. NOTIFICATION AND REPORTS

- A. Licensee in compliance with 19.13, 30.50 (reports to individuals, public and occupational, monitored to show compliance with Part 20) () N/A (x) Y () N
- B. Licensee in compliance with 20.2201, 30.50 (theft or loss) (x) None () Y () N
- C. Licensee in compliance with 20.2202, 30.50 (incidents) (x) None () Y () N
- D. Licensee in compliance with 20.2203, 30.50 (overexposures and high radiation levels) (x) None () Y () N
- E. Licensee aware of NRC Ops Center phone number [(301)-816-5100] (x) Y () N
- F. Licensee in compliance with [20.2203] (constraint on air emissions) (x) None () Y () N

Basis for Findings:

Review records and interview with personnel.

16. SPECIAL LICENSE CONDITIONS OR ISSUES

(x) N/A

- A. Special license conditions or issues to be reviewed:
- B. Evaluation:

17. OBSERVATIONS/DEMONSTRATIONS OF LICENSED ACTIVITIES

Briefly describe the activities and procedures observed and/or demonstrated during the inspection. For example, if you observed licensee personnel working in radiation areas using licensed material or performing functions associated with radiation safety such as receiving or transporting licensed material; conducting or receiving training; disposing of radioactive waste; conducting surveys; or making measurements, then describe what you saw. If the licensee demonstrated any practices at your request, describe those demonstrations. The observations and demonstrations you describe here, and elsewhere in the "Basis for Findings" sections of this report, along with measurements and some records review, should substantiate your inspection findings.

Describe what activities or procedures were observed and/or demonstrated by the licensee during the inspection:

None at the time of this inspection.

The following sections should be completed in a narrative format by the inspector to briefly describe the measurements performed by the inspector, inspection findings, and any post-inspection communications with regional staff.

18. NRC INSPECTOR'S MEASUREMENTS

() N/A

A. Survey instrument Serial No. Date of calibration
Ludlum Model 14C NRC 019617 December 5, 1996

B. Inspector performed CONFIRMATORY measurements () Y (x) N

C. Inspector performed INDEPENDENT measurements (x) Y () N

D. Briefly describe the types of measurements performed (i.e., exposure rates, wipe tests, soil samples, air flow measurements; etc.), locations where measurements were taken, the results of these measurements (mR/hr, dpm, etc.), and whether inspector's results conflicted with the licensee's measurements. If independent measurements were not made, justify why they were not performed on this inspection:

Radiation measurements were taken on contact with the calibrator at the Charles Wood area and the calibrators in use and in storage at the Evans area. Radiation measurements were also taken in the general areas of the facilities where radioactive material is used and stored. Radiation measurements indicated 2 mr/hr to 5 mr/hr on contact with the calibrators and < 0.1 mr/hr in the general areas.

19. CONTINUATION OF REPORT ITEMS

(x) N/A

20. VIOLATIONS, NON-CITED VIOLATIONS (NCVs), AND OTHER ISSUES

(x) N/A

NOTE: Briefly state (1) the requirement and (2) how and when the licensee violated the requirement. For non-cited violations (NCVs), indicate why the violation was not cited. Attach copies of all licensee documents needed to support the violation.

21. DEBRIEF WITH REGIONAL STAFF

- A. Was inspection feedback provided to regional licensing staff?

(x) Y () N

If "Yes," name of individual on the licensing staff: Steven Shaffer, HP, Site Decommissioning Branch

If "Yes," describe issues discussed:

Ex2 []

- B. Briefly describe post-inspection communications with other regional staff (inspector's supervisor, Agreement State officer, State liaison officer, etc.):

Same discussion with my branch chief

22. PERFORMANCE EVALUATION FACTORS (PEFs)

- | | | |
|----|---|----------------------|
| 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 | () N/A () Y (x) N |
| E. | Inadequate consulting services or inadequate audits conducted | () N/A () Y (x) N |

Remarks (consider the above assessment and/or other pertinent PEFs with regard to the licensee's oversight of the radiation safety program):

None

Regional follow-up on above PEFs citations:

Continue routine inspection, note all material at the Evans area will be either transferred to the Charles Wood area or properly disposed of.

END

Attachments:

- A. "Laboratory Inspection Field Notes"
- B. "Decommissioning Timeliness Inspection Field Notes"

N/A

- ### Basis for Findings:

- ### Basis for Findings:

7. Receipt and Transfer

- A. Incoming packages properly surveyed () Y () N
B. Interlaboratory transfers performed as specified in the license () N/A () Y () N
C. Records maintained () Y () N

Basis for Findings:

8. Personnel Dosimetry

- A. Appropriate dosimetry assigned and worn () N/A () Y () N
B. Results available to lab personnel () Y () N
C. Bioassays performed () N/A () Y () N

Basis for Findings:

9. Handling Waste

- A. Procedures followed () Y () N
B. Proper storage (area, containers, labeling, etc.) () Y () N
C. Liquid/solid waste disposal () Y () N
D. Incineration () N/A () Y () N
E. Compaction () N/A () Y () N
F. Sewer discharge () N/A () Y () N
G. Records maintained () Y () N

Basis for Findings:

10. Inventory

- A. Inventory conducted () N/A
B. Records maintained () Y () N

Basis for Findings:

11. Storage and use of licensed material

- | | | |
|----|---|-------------|
| A. | Adequate method to prevent unauthorized access | () Y () N |
| B. | Condition of areas acceptable | () Y () N |
| C. | Personnel wear disposable gloves and protective clothing while handling material | () Y () N |
| D. | Personnel routinely monitor or frisk themselves after procedures or before leaving | () Y () N |
| E. | No eating/drinking/smoking in use/storage areas | () Y () N |
| F. | No food, drink, or personal items stored in use/storage areas | () Y () N |
| G. | Use of shielding/distance while using/storing material | () Y () N |
| H. | RAM is under surveillance and control (when not in storage) in an unrestricted area | () Y () N |
| I. | Proper dosimetry worn | () Y () N |
| J. | Radioactive waste disposed of in proper containers | () Y () N |
| K. | No pipetting by mouth | () Y () N |

Basis for Findings:

12. Posting and Labeling

- | | | |
|----|--|-------------|
| A. | NRC Form 3 "Notice to Workers" | () Y () N |
| B. | Parts 19, 20, 21, Section 206 of Energy Reorganization Act, procedures for Part 21, and license documents or a notice indicating where documents can be examined | () Y () N |
| C. | Other posting and labeling requirements met | () Y () N |

Basis for Findings:

13. Violations Identified:

APPENDIX A - ATTACHMENT B
DECOMMISSIONING TIMELINESS FIELD NOTES N/A

Licensee: _____

Date of Inspection: _____

1. COMPLIANCE WITH DECOMMISSIONING TIMELINESS RULE

(NOTE: Repeat the answers given in Section 12 of the main body of the field notes. The issues in subsequent sections are dependent on the answers to these questions.)

- A. License to conduct a *principle activity* has expired or been revoked () Y () N
- B. Licensee has made a decision to permanently cease *principal activities*, at the entire site, or any separate buildings, or any outdoor areas, including inactive burial grounds () Y () N
- C. A 24-month duration has passed in which no *principal activities*, have been conducted under the license at the site, or at any separate buildings, or any outdoor areas, including inactive burial grounds () Y () N
- D. If "Yes" to either A or B or C above:
- (1) Identify Site/Bldg/Area: _____
- (2) Date of occurrence of A, B, or C: _____

2. NOTIFICATION REQUIREMENTS

- A. Licensee has provided written notification to NRC within 60 days of the occurrence of 1.A., 1.B., or 1.C. above () Y () N
- If "Yes," date of notification: _____
- B. If the licensee is requesting to delay initiation of the decommissioning process, the licensee has provided written notification to NRC within 30 days of occurrence of 1.A., 1.B., or 1.C. above () N/A () Y () N
- If "Yes," date of notification: _____

Comments:

3. DECOMMISSIONING PLAN/SCHEDULE REQUIREMENTS

- A. Licensee is required to submit a decommissioning plan per 10 CFR 30.36(g), 40.42(g), 70.38(g), or 10 CFR Part 72? ☐ Y ☐ N

If "No" to 3.A., answer the following items B. - F.:

- B. The decommissioning work scope is covered by current license conditions ☐ Y ☐ N
- C. Decommissioning has been initiated within 60 days of notification to NRC, or NRC has granted a delay ☐ Y ☐ N
- D. If licensee has initiated decommissioning, give date the decommissioning was initiated:
Initiation date: _____
- E. If decommissioning has been completed, it was completed within 24 months of notification to NRC ☐ N/A ☐ Y ☐ N
- F. If decommissioning is still scheduled to be completed, it is on schedule to be completed within 24 months of notification to NRC ☐ N/A ☐ Y ☐ N

Comments:

If "Yes" to 3.A., answer the following items G. - J.:

- G. The decommissioning plan has been submitted to NRC within 12 months of notification ☐ Y ☐ N
If "Yes," date of submittal: _____
If NRC approved, date of NRC approval: _____
- H. Has the licensee submitted an alternative schedule request? ☐ Y ☐ N
If "Yes," date of submittal: _____

- I. If decommissioning has been completed, it was completed within 24 months after approval of the decommissioning plan () N/A () Y () N
- J. If decommissioning is still scheduled to be completed, it is on schedule to be completed within 24 months after approval of the decommissioning plan () N/A () Y () N

Comments:

Violations identified, if any:

USACEC Director of Safety Risk Manager
ATTN: AMSEL-SF
Fort Monmouth, NJ 07703-5024
17 July 1997

----- Telephone Numbers -----
Main: 732-532-9SAF (DSN 992-9SAF) (992-9723)
732-427-4427 (DSN 987-4427)
732-532-0084 (DSN 992-0084)
732-427-3112 (DSN 987-3112)
----- Facsimile Numbers -----
Bldg 2539 (Main Office): 732-532-6403 (DSN 992-6403)
732-542-7161 (No DSN)
Bldg 9045 (Evans Area): 732-427-2667 (DSN 987-2667)
----- MILNET: amsel-sf@cecom3.monmouth.army.mil -----

ID/Location	Extension	Branch	ID/Location	Extension	Branch
-------------	-----------	--------	-------------	-----------	--------

<i>HP</i> BIANCHI, Hugo	x6444	RE	NOWIK, Bill	x6418	SEP
BOYLAN, Chuck (c)	x6420	SEP	<u>PERRELLA, Al</u> (c)	75370	RE *
BRENNAN, Tom	x6404	SEC	PHAM, Thang	x6417	SEP
BRYANT, Alton (c)	x6416		PIAZZA, Frank	x6443	RE <i>Safe. Eng</i>
BURBELO, Andrew	x6415	SEP	PONTOLILLO, Inge (c)	x6421	
CHAN, Steven	x6413	SEP	POWERS, Mary	x6430	A
COCCO, Joe	x6436	SEP	PROCTOR, Ken	x6446	RE
CORNBLATT, Jeanette	x6423	A	RUSSO, Leonard	x6414	SEP
<i>HP</i> CRAIG, Dave (c)	x75591	RE	**SANTARSIERO, Joe	x6427	RE <i>Supervisory HP</i>
<i>HP</i> <u>CUMMINGS</u> , Burt (c)	75606	RE *	SILBER, Barry	x6440	RE <i>HP</i>
<i>Safe Staff</i> <u>DEGUMBIA</u> , Ron SGT	75370	RE	SOFFER, Lou	x6434	SEP
<i>HP</i> <u>FRAMPTON</u> , Alice	x6432	RE *	TOBIAS, John	x6412	SEP
GABRIEL, PAUL (c)	X6419		VEGA, Wilfredo	x6407	SEC
<i>HP</i> GOLDBERG, Craig	x6405	RE	VIDSENS, Gail	x6426	RE <i>Adm.</i>
GRAHAM, Linda	x6429	SE	VONSTEENBURG, Al	x6409	SEP
<i>HP</i> GRIMES, Jim (c)	x6438	RE	ZIOLA, Gary	x6433	RE <i>HP</i>
HANRAHAN, Jay	x6406	SEC			
<i>HP Intern</i> HEZEL, KARL	x6442	RE			
HORNE, Steve	x6401	SF			
KLIMEK, PHIL	x6437	SEP	Computer Room	x6422	
KIERNAN, David	x6447	SEP	Conference Room	x6402	
**LASCALA, Rich	x6410	SEC	Training Room	x6403	
<i>HP</i> LOVELL, Rich	x6441	RE			
**MANCINI, Fern	x6411	SEP			
<i>Adm.</i> MANKOWSKI, GRACE (c)	x6425	RE	Lab (Evans)	(732) 427-5370	
MCLANE, GEORGE	X6439	SEP			
MOY, Elaine	x6408	SEC	OSHA SELFM-SO	20083	

Notes: 1) Extensions 6xxxx are On-Post Fort Monmouth only, for outside access dial main number and enter 0 for secretary

----- USACECOM Safety Field Office (VHFS) -----
ATTN: AMSEL-SF-SEC-V
Vint Hill Farms Station, Warrenton, VA 22186-5390
Bldg 2400, Room 222D, 540-349-7192 (DSN 229-xxxx)
1-800-793-4093
Facsimile 540-341-8239

----- USACECOM Safety Field Office (Ft. Belvior) -----
10150 Craig Hill Rd., Ste. 12, Fort Belvior VA, 22060-5851
Bldg 331, 703-704-xxxx (DSN 654-xxxx) Facsimile -3431

ID	Ext.	Office	ID	Ext.	Office
BENT, Corey	-2094	AMSEL-SF-FB	KAY, Burleigh	-1779	(c)
BUTLER, Debbie	-3354	AMSEL-SF-FB	THACKSTON, Joell	-2282	(c)
DICKENS, Steph	-3417	AMSEL-SF-FB	WOO, Thanh	-1806	(c)
HAYNES, David	-3682	AMSEL-SF-FB			
HO, Gaines	-2093	AMSEL-SF-FB			

----- Contact Linda Graham to update info -----

RADIATION WORKERS - CIVILIAN
(As of 1 Sep 1997)

<u>NAME</u>	<u>SSN</u>
1. Clack, Peter	[REDACTED]
2. Cummings, Burton (Contractor)	[REDACTED]
3. Do, Ted Quang	[REDACTED]
4. Kronenberg, Stanley	[REDACTED]
5. Perrella, Albert (Contractor)	[REDACTED]
6. SSG Ron DeGumbia (Military)	[REDACTED]