



DEPARTMENT OF THE ARMY
HEADQUARTERS, U. S. ARMY MATERIEL COMMAND
5001 EISENHOWER AVENUE, ALEXANDRIA, VA 22333-0001

May 23, 1985

US Nuclear Regulatory Commission
Region I
ATTN: Materials Licensing Branch
631 Park Avenue
King of Prussia, PA 19406

Reference: AMCSF-P/85-0100

Gentlemen:

Fowarded are four copies of the U.S. Army Electronics Research and Development Command's request to amend U.S. Nuclear Regulatory Commission Source Material License Number SMB-1183. The amendment requests change to radiation protection personnel.

Please acknowledge receipt of correspondence on enclosed DA Form 209, Mail Reply Card.

Sincerely,

Darwin N. Taras
Chief, Health Physics
Safety Office

Enclosures

Copies Furnished:

HQDA(DASG-PSP-E) WASH DC, 20310 2 cys w/encl
Director, AMC FSA, Charlestown, IN 47111 w/encl
COMMANDERS

ERADCOM, ATTN: AMDEL-SS, Adelphi, MD 20783 w/o encl

ERADCOM, ATTN: AMDEL-SS-FM, Ft. Monmouth, NJ 07703 w/o encl

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"OFFICIAL RECORD COPY"

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FREE EXEMPT

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DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY ELECTRONICS RESEARCH
AND DEVELOPMENT COMMAND
2800 POWDER MILL RD., ADELPHI, MD 20783

REPLY TO
ATTENTION OF

AMDEL-SS

SUBJECT: Change in Radiation Protection Officer,
Source Material License 1183

Commander
U. S. Army Materiel Command
ATTN: AMCSF-P(D. Taras)
5001 Eisenhower Avenue
Alexandria, Virginia 22333-0001

1. Request NRC Source Material License No. 1183 be amended as follows:
 - a. Change Mr. David W. Griffis to be Alternate Radiation Protection Officer, when at Evans Area, from Primary Radiation Protection Officer.
 - b. Add Mr. Scott L. Davis as Primary Radiation Protection Officer. Mr. Davis had previously been approved as RPO for this license.
 - c. Mr. Richard Rast to remain as an Alternate Radiation Protection Officer.
2. Resumes for Mr. Griffis, Mr. Davis, and Mr. Rast are enclosed.
3. POCs are Mr. David W. Griffis, Commercial: (202) 394-3446/7 or AV 290-3446 at Adelphi, Maryland, and Mr. Scott L. Davis, Commercial: (201) 544-5292 or AV 996-5292 at Ft. Monmouth, New Jersey.

FOR THE COMMANDER:

3 Encl
as

KENNETH S. NORRIS
COL, GS
Chief of Staff

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MAY 29 1985

Item 16, Form NRC 313I, Formal Training in Radiation Safety

SCOTT L. DAVIS

| <u>TYPE OF TRAINING</u> | <u>WHERE TRAINED</u> | <u>DATE</u> | <u>DURATION OF TRAINING</u> | <u>ON THE JOB</u> | <u>FORMAL COURSE</u> |
|-------------------------|---|---------------|-----------------------------|-------------------|----------------------|
| a. Principles | Columbia State Community College, Columbia, TN | Feb 75-Jun 78 | 3 Yrs | Yes | Yes |
| | University of Tennessee Center for Health Sciences, Memphis, TN | Sep 78-Jun 80 | 2 Yrs | Yes | Yes |
| b. Mathematics | Columbia State Community College, Columbia, TN | 1975-78 | 3 Yrs | Yes | Yes |
| | University of Tennessee Center for Health Sciences, Memphis, TN | 1978-80 | 2 Yrs | Yes | Yes |
| c. Measurement | Columbia State Community College, Columbia, TN | 1975-78 | 3 Yrs | Yes | Yes |
| | University of Tennessee Center for Health Sciences, Memphis, TN | 1978-80 | 2 Yrs | Yes | Yes |
| d. Biological | Columbia State Community College, Columbia, TN | 1975-78 | 3 Yrs | Yes | Yes |
| | University of Tennessee Center for Health Sciences, Memphis, TN | 1978-80 | 2 Yrs | Yes | Yes |

Item 17, Form NRC 313I, Experience

SCOTT L. DAVIS

| <u>ISOTYPE</u> | <u>MAXIMUM AMOUNT</u> | <u>WHERE GAINED EXPERIENCE</u> | <u>DURATION OF EXPERIENCE</u> | <u>TYPE OF USE</u> |
|-----------------------|-----------------------------|---|---------------------------------------|---------------------------------|
| Atomic Nmbrs. 3-83 | 6 Ci | Evans Area, Ft. Monmouth, NJ | 18 months | Research & Development |
| Am-241 | 35 mCi | Evans Area, Ft. Monmouth, NJ | 18 months | " |
| C-14 | 7 uCi | Evans Area, Ft. Monmouth, NJ | 18 months | " |
| CO-57 | 100 mCi | Evans Area, Ft. Monmouth, NJ | 18 months | " |
| Co-58 | 10 mCi | UTCHS-Lebonheur Child. Hosp. | 24 months | Medical |
| Co-60 | 660 Ci | Evans Area, Ft. Monmouth, NJ | 18 months | Research & Development |
| Co-60 | 2048 Ci (sealed sources) | Evans Area, Ft. Monmouth, NJ | 18 months | " |
| Co-60 | 125,000 Ci (pool source) | Evans Area, Ft. Monmouth, NJ | 18 months | " |
| Cs-137 | 400 Ci | Evans Area, Ft. Monmouth, NJ | 18 months | " |
| Eu-149 | 50 mCi | Evans Area, Ft. Monmouth, NJ | 18 months | " |
| Ga-67 | 10 mCi | UTCHS-Lebonheur Child. Hosp. | 24 months | Medical |
| H-3 | 300 Ci | Evans Area, Ft. Monmouth, NJ | 18 months | " |
| I-131 | 50 mCi | CSCC/Maury Co. Hosp. Columbia, Tennessee | 24 months | " |
| In-111 | 10 mCi | UTCHS-Lebonheur Child. Hosp. | 24 months | " |
| Kr-85 | 5 mCi | Evans Area, Ft. Monmouth, NJ | 18 months | R&D, Instrument Check Source |
| Ni-63 | 5 mCi | Evans Area, Ft. Monmouth, NJ | 18 months | R&D |
| P-32 | 10 mCi | CSCC/Maury Co. Hosp. Columbia, Tennessee | 24 months | Medical |
| Pm-147 | 1.2 Ci | Evans Area, Ft. Monmouth, NJ | 18 months | R&D |
| Po-210 | 1.0 Ci | Evans Area, Ft. Monmouth, NJ | 18 months | R&D |
| Pu-238 | 50 gms | Evans Area, Ft. Monmouth, NJ | 18 months | R&D |
| Pu-239 | 5 mCi | Evans Area, Ft. Monmouth, NJ | 18 months | R&D |

Item 17, Form NRC 313I, Experience Cont.

SCOTT L. DAVIS

| <u>ISOTPYE</u> | <u>MAXIMUM AMOUNT</u> | <u>WHERE GAINED EXPERIENCE</u> | <u>DURATION OF EXPERIENCE</u> | <u>TYPE OF USE</u> |
|------------------------------------|---------------------------|---|---------------------------------------|----------------------------|
| Ra-Be (neutron source) | 23 mCi | Evans Area, Ft. Monmouth, NJ | 18 months | Research & Development |
| Ra-226 (implants) | 10 mCi | CSCC/Maury Co. Hosp. | 24 months | Medical |
| Sr-90 | 5 Ci | Evans Area, Ft. Monmouth, NJ | 18 months | R&D |
| Tc-99 | 30 mCi | CSCC/Maury Co. Hosp. Columbia, Tennessee | 24 months | Medical |
| Tc-99m | 20 mCi | UTCHS-Lebonheur Child. Hosp. | 24 months | Medical |
| Th-232 (Natural or depleted) | 22 lbs | Evans Area, Ft. Monmouth, NJ | 18 months | R&D |
| U-235 (Natural or depleted) | 16 lbs | Evans Area, Ft. Monmouth, NJ | 18 months | R&D |

Item 16, Form NRC 3131, Formal Training in Radiation Safety

DAVID W. GRIFFIS

| <u>TYPE OF TRAINING</u> | <u>WHERE TRAINED</u> | <u>DATE</u> | <u>DURATION OF TRAINING</u> | <u>ON THE JOB</u> | <u>FORMAL COURSE</u> |
|-------------------------|---|--|-----------------------------|-------------------|----------------------|
| a. Principles | Texas A&M University College Sta, TX. Courses leading to- wards a BS & MS in Nuclear Engrng - - Health Physics option | Jan 74 - May 78 (approx 40 semester hours under- graduate and 40 hours graduate.) | 4 Yrs | No | Yes |
| b. Mathematics | San Antonio J.C, San Antonio, TX; Texas Tech U, Lubbock, TX and Texas A&M U Courses leading to- wards AS, BS (Chem), BS (Nuc Engr) and MS degrees. Courses included through advanced Calculus (graduate level) and statistics (graduate level) | Sep 69 - May 78 (approx 25 semester hours) | 9 Yrs | No | Yes |
| c. Measurement | Texas A&M U College Sta, TX Courses leading to- wards BS & MS degrees in Nuclear Engineer- ing - Health Physics option. (Courses included undergraduate level counting laboratory and graduate level OJT/formal course assisting in Health Physics operations at two University research reactors and a research accelerator facility. | Jan 74 - May 78 (approx 15 semester hours) | 4 yrs | Yes | Yes |

DAVID W. GRIFFIS

| <u>TYPE OF TRAINING</u> | <u>WHERE TRAINED</u> | <u>DATE</u> | <u>DURATION OF TRAINING</u> | <u>ON THE JOB</u> | <u>FORMAL COURSE</u> |
|-----------------------------|--|--|-------------------------------------|---------------------------|--------------------------|
| | Harry Diamond Laboratories Adelphi, MD Assisting the HDL RPO in routine Health Physics operations | Nov 83 - Jan 84 | 60 days | Yes | No |
| | ERADCOM Field Safety Ofc., Ft. Monmouth, NJ Routine Health Physics operations. | Feb 85 - May 85 | 90 | Yes | No |
| d. Biological | San Antonio JC, TX; Texas Tech U; Texas A&M U Courses leading towards AS, BS (Chem), and MS degrees. Courses included through Histology and Embryology (undergrad level) and Biochemistry and Radiation Biology(graduate level) | Sep 69 - May 78 (approx 35 semester hours) | 9 years | No | Yes |

Item 17, Form NRC 313I, Experience

DAVID W. GRIFFIS

| <u>ISOTYPE</u> | <u>MAXIMUM AMOUNT</u> | <u>WHERE GAINED EXPERIENCE</u> | <u>DURATION OF EXPERIENCE</u> | <u>TYPE OF USE</u> |
|--------------------------|------------------------------|------------------------------------|---------------------------------------|------------------------------|
| Atomic Nrs 3 - 83 | 6 Ci | Evans Area, Ft. Monmouth, NJ | 90 days | Routine Health Physics |
| Am-241 | 35 mCi | Evans Area, Ft. Monmouth, NJ | 90 days | Routine Health Physics |
| C-14 | 200 uCi | Harry Diamond Laboratories | 60 days | " |
| Cl-36 | 0.8 uCi | Harry Diamond Laboratories | 60 days | " |
| Co-57 | 100 mCi | Evans Area, Ft. Monmouth, NJ | 90 days | " |
| Co-60 | 2048 Ci (sources sealed) | Evans Area, Ft. Monmouth, NJ | 90 days | " |
| Co-60 | 125,000 Ci (pool sources) | Evans Area, Ft. Monmouth, NJ | 90 days | " |
| Cs-137 | 400 Ci | Evans Area, Ft. Monmouth, NJ | 90 days | " |
| H-3 | 300 Ci | Evans Area, Ft. Monmouth, NJ | 90 days | " |
| Kr-85 | 5 mCi | Evans Area, Ft. Monmouth, NJ | 90 days | " |
| Ni-63 | 10 uCi | Harry Diamond Laboratories | 60 days | " |
| Np-237 | 25 gms | Harry Diamond Laboratories | 60 days | " |
| Pb-210/Bi-210 (RaD&E) | 20 uCi | Harry Diamond Laboratories | 60 days | " |
| Pm-147 | 15 mCi | Harry Diamond Laboratories | 60 days | " |
| Po-210 | 0.5 mCi | Evans Area, Ft. Monmouth, NJ | 90 days | " |
| Pu-238 | 50 gms | Evans Area, Ft. Monmouth, NJ | 90 days | " |
| Pu-239 | 63 gms | Harry Diamond Laboratories | 60 days | " |
| Pu-Be Sources | unk | Texas A&M UNiversity, TX | 90 days | " |

Item 17, Form NRC 313I, Experience - Cont.

DAVID W. GRIFFIS

| <u>ISOTOPE</u> | <u>MAXIMUM AMOUNT</u> | <u>WHERE GAINED EXPERIENCE</u> | <u>DURATION OF EXPERIENCE</u> | <u>TYPE OF USE</u> |
|----------------|---------------------------|------------------------------------|---------------------------------------|------------------------------|
| Ra-226 | 20 mCi | Evans Area, Ft. Monmouth, NJ | 90 days | Routine Health Physics |
| Sr-90 | 5 Ci | Evans Area, Ft. Monmouth, NJ | 90 days | " |
| Th-232 | 22 lbs | Evans Area, Ft. Monmouth, NJ | 90 days | " |
| Tl-204 | 100 uCi | Harry Diamond Laboratories | 60 days | " |
| U-235 | 22 gms | Harry Diamond Laboratories | 60 days | " |
| U-238 | 137 gms | Harry Diamond Laboratories | 60 days | " |
| U-(depleted) | 25 gms | Harry Diamond Laboratories | 60 days | " |

In addition, Mr. Griffis has assisted in performing routine health physics surveys for the 11 MeV Aurora Facility, 3 MeV HIFX Facility at Harry Diamond Laboratories, and industrial X-ray units at Harry Diamond Laboratories and the Fort Monmouth Evans area, as well as performing routine medical X-ray compliance inspections at a variety of sites between May 1979 and June 1982. Mr. Griffis' current assignment includes the staff supervision of radiation protection programs at a number of geographic areas.

TRAINING AND EXPERIENCE WITH RADIATION AND
RADIOACTIVE MATERIAL

MR RICHARD RAST

EDUCATION BS Degree in Chemistry, Seton Hall University, Patterson, NJ.

EXPERIENCE: Biological and Clinical Chemistry, Serology and Hematology -
2 years, Monmouth Medical Center and Patterson Army Hospital,
Fort Monmouth, NJ - 1950-52.

Health Physics, Research and Development and Calibration of radiation sensitive systems; design, fabrication and encapsulation of isotopes for calibration systems up to 200 curies level - 1952-62

During past 23 years in the Radiac R&D Group, Mr Rast has applied his knowledge of physics, health physics, mathematics, and electronics to the solution of engineering problems and equipment design relating to the radiac development program. Specifically, he has worked on field calibration devices, design of new portable radiac equipment, a Remote Large Area Radiac Training Set and a Recording Radiation Monitor, Tactical Radiac Survey Instrument IM-74B, Alpha Radiac Survey Instrument AN/PDR-56F, and X-Ray Probe DT-590/PDR-56F - 1962-85

Actively participated in Nuclear Weapons tests at Nevada Test Site (NTS); operations "UPSHOT KNOTHOLE," "TEAPOT," and "SMALL BOY." Also operations "CASTLE," "REDWING," and "HARDTACK" at Pacific Proving Ground, Eniwetok, Marshall Island.

MR RICHARD RAST

ACTUAL USE OF RADIOISOTOPES

| <u>ISOTOPE</u> | <u>QUANTITY</u> | <u>PLACE</u> | <u>DURATION</u> | <u>TYPE OF USE</u> |
|----------------------------------|-------------------------|--------------|-----------------------------------|---|
| ^{60}Co | 200 Curies | Nevada | 6 mos total | Equipment Calibration- Hi-range |
| ^{60}Co | 200 Curies | Eniwetok | 8 mos total | Dosimetry |
| ^{60}Co | UDM-1 (1-9 curies) | Evans | 22 yrs (on an as needed basis) | Calibration-Dosimetry R&D |
| ^{137}Cs | UDM-1A (120 curies) | Evans | 20 yrs (on an as needed basis) | Calibration-Dosimetry R&D |
| ^{137}Cs | Mrc 794 (220 curies) | Evans | 3 years | Calibration Development |
| ^{90}Sr ^{90}Y | Up to 2 Curies | Evans | 16 years | Calibration Development |
| ^{60}Co | 3500 Curies | Evans | 9 years | Equipment Calibration Hi-range Dosimetry R&D |

Additional Note:

| | | | | |
|------------------|---|-------|----------|--|
| X-Ray Machine | 320 Kv IsoVolt with traceability to the NBS | Evans | 23 years | Energy Dependence for for Radiac Instrument |
|------------------|---|-------|----------|--|