

## ACCEPTANCE REVIEW MEMO

Licensee: NASA

License No.: 42-09388-01

Docket No.: 030-06420

Mail Control No.: 470569

Type of Action: Amend Date of Requested Action: 05-23-05

Reviewer Assigned: Date Assigned to Reviewer: 06-02-05

Reviewer(s) Who Performed Review: Torres

Response Received	Deficiencies Noted During Acceptance Review
	1. <i>Note: Notify licensee we don't name ARSO on license.</i>
	2.
	3.
	4.

Reviewer's Initials: \_\_\_\_\_

Date: \_\_\_\_\_

Branch Chief's and/or SR. HP's Initials: \_\_\_\_\_

Date: \_\_\_\_\_

<input type="checkbox"/> Yes <input type="checkbox"/> No	Action - decommissioning notification should be issued within 30 days.
<input type="checkbox"/> Yes <input type="checkbox"/> No	Termination request < 90 days from date of expiration
<input type="checkbox"/> Yes <input type="checkbox"/> No	Action to be expedited
	____ Medical emergency
	____ Licensee in noncompliance (i.e. no RSO, location of use/storage not on license, radioactive material in possession not on license)
	____ National Security
	____ Other (_____)

Branch Chief's and/or Sr. HP's Initials: \_\_\_\_\_ Date: \_\_\_\_\_

SISP Review	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>Non-Publicly Available, Sensitive</b> if <u>any</u> item below is checked
	____ Radionuclides, forms, and quantities
	____ Location of RAM
	____ Building drawings with locations of RAM
	____ Security of RAM (locks, alarms, etc.)
	____ SS&D Catalog information
	____ Specifics of Emergency Plan (routes to and from RAM, response to security events, etc.)
	____ Safeguards Information

Branch Chief's and/or Sr. HP's Initials: *[Signature]* Date: *6/2/05*

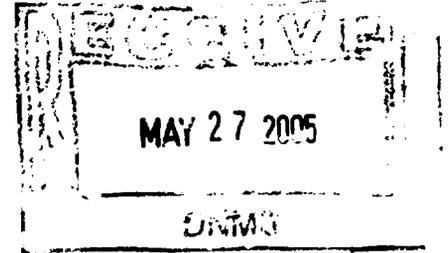
National Aeronautics and  
Space Administration  
**Lyndon B. Johnson Space Center**  
2101 NASA Road 1  
Houston, Texas 77058-3696



May 16, 2005

Reply to Attn of:

SD3-05-227



Ms. Jackie Cook  
Nuclear Materials Licensing Section  
United States Nuclear Regulatory Commission  
Region IV  
611 Ryan Plaza Drive, Suite 400  
Arlington, TX 76011-8064

Dear Ms. Cook:

NASA Johnson Space Center (JSC) hereby submits this Amendment to License Number 42-09388-01, per the enclosed Nuclear Regulatory Commission (NRC) Form 313. This Amendment revises data submitted on the License Renewal Application dated April 28, 2004. Below is a change in condition, which corresponds to enclosure 2, NRC Form 313.

1. ITEM 7 - Form 313 - Condition 12 of the License:  
The Radiation Safety Officer will remain as Mr. Dennis J. Waggett. As requested by NASA JSC Radiation Safety Committee, please amend the License to add Mr. Andrew A. Greif as the Alternate Radiation Safety Officer. Enclosure 1 shows Mr. Greif's training and experience information.
2. ITEM 11 - Form 313 - Condition 24 of the License:  
Please amend the License to authorize holding radioactive material with a physical half-life of less than 120 days for decay in storage before disposal in ordinary trash per 10 CFR 35.92, Decay in Storage. Procedures specified in condition 24 will still apply.

Cordially,

A handwritten signature in black ink, appearing to read "Jeffrey R. Davis".

Jeffrey R. Davis, M.D.  
Director, Space Life Sciences

2 Enclosures

470569

# Andrew Arthur Greif

## Health Physicist

### Experience

#### **Health Physicist**

Kelsey-Seybold, JSC Clinic, Houston, TX

July 2004 - Present

- Provide support to the radiation safety program; which includes Lasers, Microwaves, Radiofrequency Sources, Ultraviolet and Ionizing radiation (s) at the Johnson Space Center (JSC) and the White Sands Test Facility (WSTF).
- Performed rules and regulation Compliance through the review, analysis, evaluation, and monitoring, of ionizing radiation and non-ionizing source(s), proposed, and in use, at the JSC and WSTF.
- Provide customers with training classes for NASA/JSC Civil Servants and contractor employees, for the control of ionizing and non-ionizing radiation hazards in the work place.
- Maintained the Radioactive Materials Inventory, Laser Inventory, and Personnel Radiation Dosimetry database for JSC/WTSF.

#### **Senior Health Physicist**

Guidant Corporation, Pearland, TX

September 2001 – July 2004

- Appointed alternate Laser Safety Officer May 7<sup>th</sup> 2003.
- Appointed alternate Radiation Safety Officer October 1<sup>st</sup> 2001.
- Ensure that radiation safety related programs and policies (e.g., Radiation Training, Radiation Survey Program, Radioactive Sources, Radioactive Waste Management, Air Sampling and Surveillance) are in full compliance with applicable regulations by monitoring, revising, and documenting practices.
- Ensure costumer sites (200+ US and 100+ OUS sites) can legally receive radioactive material and that the material is shipped to the correct location by verifying clinical site licenses, commercial site licenses, ship-to addresses, and their activity limits.
- Authorize outgoing radioactive material shipments by reviewing packing and shipping documents.

#### **Health Physicist/First Line Manager**

CH2MHill Hanford Group, Inc., Richland, WA

May 2000 - September 2001

- Radiological work planner assigned to single shell tank operations.
- Performed procedure upgrades during transition of Tank Farms from Lockheed Martin to CH2MHill.
- Duties included work planning, writing procedures, radiological characterization plans, radiological air sampling plans, and radiological survey plans.
- Trained health physics technician first line manager for backup when needed.

#### **Radiological Engineer**

Thermo Hanford, Inc., Richland, WA.

Nov. 1996 - April 1999

- Providing radiological engineering support to a wide variety of projects to include; Environmental Restoration Disposal Facility (ERDF), 300FF-1 Operable Unit, Inactive Facilities Surveillance and Maintenance (Purex, Redox, U-Plant, 224-B, B,H,D,KE - reactors, etc.), Groundwater (well drilling, sampling, and pump & treat), and Remedial Action Radiological Areas (RARA).
- Duties included work planning, writing procedures, offsite dose assessment engineering calculations, radiological characterization plans, radiological air sampling plans, and radiological survey plans.

#### **Radiological Control Supervisor**

Thermo Hanford, Inc., Richland, WA

Jan. 1998- June 1998

- Supervised (10) RCT's for the D&D start up of 105F and DR reactors.
- Implemented new environmental characterization survey plan for 105F and DR reactors.

**Senior Radiological Control Technician**  
April 1996- Nov. 1996, April 1999 - May 2000

Thermo Hanford, Inc., Richland, WA

- Experience with most types of radiological surveys and equipment, worker protection and guidance, mentoring of RCT's, and performance of job coverage for high risk work.

**Health Physics Technician**  
September 1995 - April 1996

Bartlett Services, Paducah, KY

- Performance of contamination surveys, radiation surveys, and job coverage in support of site characterization and radioactive area reduction projects (RARP Project).
- Decontamination supervision of equipment, vehicles, and buildings.

**Graduate Research Assistant**  
May 1994 - September 1995

Los Alamos National Lab, Los Alamos, NM

- ESH-17 representative for ES&H new project reviews. Demonstrated experience in evaluating and providing air quality technical support to new and ongoing lab projects for regulatory compliance issues. Emissions measurement engineer for ESH-17 STACK UPGRADE and tritium teams.
- Responsible for design issues relating to stack upgrades, sampling systems, and surveillance. Extensive experience in the use of CAP88-PC for estimating both diffuse and point source radiological air emissions for air permitting.
- Extensive DOE interface during design, development, and implementation of the air emissions delay line at the Los Alamos Meson Physics Facility which initially reduced air emissions to the maximally exposed individual by 40 % allowing increased operating time for the linear accelerator.

**Student Health Physics Technician**  
1993 - 1994

Texas A&M University, Office of Radiological  
Safety, College Station, TX

- Shipping and receiving of radioisotopes, waste processing, instrument calibrations, and surveys.

## **Education**

**Texas A & M University, College Station, TX**

Bachelor of Science in Radiological Health Engineering - 1994  
Bachelor of Business Administration in Finance - 1988

## **Professional Affiliations**

National Registry of Radiation Protection Technologists – NRRPT (1996)  
Health Physics Society - Plenary Member (1995)

## **Training**

Laser / Radio Frequency Radiation Hazards Course – 40 hours (2005)  
Laser Safety Officer Training Course – 40 hours (2003)  
Radioactive Material Transportation – 8 hours (2002)  
Tank farm Contractor Rad Con First Line Manager Qualification (2001)  
RPP Medium/High Risk Radiation Work Planner Qualification Card (2000)  
RPP Low Risk Radiation Work Planner Qualification Card (2000)  
TWRS Containment Basics – 16 hours (2000)  
TWRS Advanced Radiological Practices – 8 hours (2000)  
Lead Radiological Worker – 8 hours (2000)  
8 Hour Haz. Waste Site Manager/Supervisor – 8 hours (1998)  
Ventilation as an Engineering Control – 24 hours (1997)  
40 Hour Haz. Waste Site Worker – 40 hours (1996)  
DOE Senior Radiological Control Technician Qualification (1996)

**APPLICATION FOR MATERIAL LICENSE**

**INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.**

**APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:**

DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY  
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS  
U.S. NUCLEAR REGULATORY COMMISSION  
WASHINGTON, DC 20555-0001

**ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:**

**IF YOU ARE LOCATED IN:**

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, MISSISSIPPI, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM  
DIVISION OF NUCLEAR MATERIALS SAFETY  
U.S. NUCLEAR REGULATORY COMMISSION, REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PA 19406-1415

**IF YOU ARE LOCATED IN:**

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

MATERIALS LICENSING BRANCH  
U.S. NUCLEAR REGULATORY COMMISSION, REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, IL 60532-4352

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING BRANCH  
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TX 76011-4005

**PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.**

1. THIS IS AN APPLICATION FOR (Check appropriate item)

- A. NEW LICENSE  
 B. AMENDMENT TO LICENSE NUMBER 42-09388-01  
 C. RENEWAL OF LICENSE NUMBER \_\_\_\_\_

2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)

Lyndon B. Johnson Space Center  
NASA  
2101 NASA Rd 1  
Houston, TX 77058-3696

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

See application dated April 28, 2004.

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Mary Van Baalen

TELEPHONE NUMBER

(281) 483-9998

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL  
a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time.

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY	AMOUNT ENCLOSED	\$

13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39, AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

CERTIFYING OFFICER -- TYPED/PRINTED NAME AND TITLE  
Jeffrey R. Davis, MD / Director, Space & Life Sciences

SIGNATURE  
*Jeffrey R. Davis*

DATE  
5/23/05

**FOR NRC USE ONLY**

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		
APPROVED BY				DATE	

This is to acknowledge the receipt of your letter/application dated 5/16/09, and to inform you that the initial processing, which includes an administrative review, has been performed.

DATE

- There were no administrative omissions. Your application will be assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.
- Please provide to this office within 30 days of your receipt of this card:

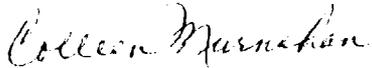
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The action you requested is normally processed within 90 days.

- A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned Mail Control Number 470569.  
When calling to inquire about this action, please refer to this mail control number.  
You may call me at 817-860-8103.

Sincerely,



Licensing Assistant

