

17119 Horseshoe Bend  
Waller, TX 77484  
August 28, 2008

RECEIVED

SEP 30 2008

DNMS

Dwight Chamberlain  
Division of Nuclear Materials Safety  
Nuclear Regulatory Commission  
611 Ryan Plaza Drive  
Suite 400  
Arlington, TX 76011-8064

**RE: State License Number 42-01068-07, Halliburton Energy Services Radiation Safety Officer**

Effective August 22, 2008 I am no longer serving in the capacity as the Radiation Safety Officer for any activities associated with the above referenced license or Halliburton Energy Services.

If you should have any questions please do not hesitate to contact Lawrence Pope at 713-759-2641.

Sincerely,



Dwaine Brown

DDB/

Corporate Radiation Safety Officer

## **STEVEN E. WOODS**

### **Summary**

- Radiation Safety Oversight
- Nuclear Licensing
- Nuclear Waste Management and Disposal and Environmental Management
- Training

### **Education**

- BS Chemical Engineering, The University of Oklahoma, 1985
- Introduction to Gamma Spectroscopy, Canberra Industries, Inc., Meriden, CT.
- Radioactive Material Transportation and Disposal, Applied Radwaste Management, Inc., Oakridge, TN.
- Decontamination and Decommissioning, Nevada Technical Associates, Inc., Henderson, NV.
- Industrial Radiographer Administrators' Seminar, AEA Technology, Burlington, Mass.
- Radiation Protection Supervisor, NRPB, Glasgow, Scotland.
- Implementing the MARSSIM Approach for Design and Conduct of Radiological Surveys, ORAU, Oakridge, TN.
- IMDG Dangerous Goods Training, DGI Training Center, San Francisco, CA.
- Laser Safety Officer Training, Laser Safety Institute, Orlando, FL
- Radiation Safety Officer Training, Radiation Safety Institute of Canada, Toronto, ON.
- IATA Dangerous Goods Training, IATA Training Center, Miami, FL
- IATA/49CFR/IMDG Dangerous Goods Training, DGI Training Center, Seattle, WA.

### **Qualifications**

#### **Radiation Safety**

- Manage the Radiation Safety Program for Halliburton Company, which includes research and development along with the manufacture and use of generally licensed devices, loose radioactive tracers, and well logging sources worldwide.
- Sole company expert in the regulatory requirements of the manufacture and distribution of HES Generally Licensed devices. (Densometers) as used worldwide.
- Oversee the personnel dosimetry program for 1300 personnel.
- Responsible for radioactive materials accountability/tracking for over 6,000 radioactive sources and licensing worldwide.
- Responsible for global nuclear audit program oversight.
- As a member of the Halliburton Corporate Radiation Safety Committee, responsibilities include:
  - Establishing appropriate administrative procedures to assure the control of procurement and use of radioactive material.
  - Completion of safety evaluations of proposed uses of radioactive material taking into consideration such matters as the adequacy of facilities and equipment, training and experience of the users, and the operating and handling procedures prior to use of the material for technology, manufacturing and field operations worldwide.

- Responsible for providing on site emergency assistance worldwide for radiological issues.

### **Training**

- Develop and provide personnel training on the radiation safety program, implemented and provided worldwide. This training consists of:
  - Radiation Safety for Local Radiation Safety Officers,
  - Radioactive Materials Shipping by all modes,
  - Local Regulations and Licensing requirements,
  - Import and Export requirements and processes,
  - Conduct of Quarterly and Random Compliance Audits.
- Develop and provide personnel training on NORM screening, clean up and disposal worldwide.
- Responsible for development and implementation of the Radiological Controls Training Program for the United States Nuclear Navy at the Moored Training Ship. This training consisted of:
  - The Radiation Worker Training Program,
  - The Radiological Controls Technician Training Program,
  - The Respiratory Protection Program,
  - The Total Containment Program.
- Instructed Naval personnel in the following programs:
  - The chemistry controls associated with the operation of nuclear reactors,
  - Personnel radiation safety including such areas as personnel exposure, measurement, and control,
  - Contamination measurement and controls during operation and maintenance,
  - Radiation measurements and ways to reduce radiation fields.

### **Nuclear Waste Management and Disposal and Environmental Management**

- Conduct radioactive waste clean up, reduction, packaging, shipment, and disposal.

### **Regulatory Oversight**

- Appointed by the Governor of Oklahoma and serve as Chairman of the Oklahoma Radiation Management Advisory Council. The Council has the charter to initiate rulemaking on its own or upon request by the Environmental Quality Board or the Department of Environmental Quality.
- Responsible for 47 licenses and coordination of all regulated activities and negotiations.
- Provide guidance and assistance on international licensing and negotiations both virtual and onsite.
- Conduct licensing activities relating to Naturally Occurring Radioactive Material (NORM) throughout North America for internal and external customers.
- Serve as an elected member of the Chickasaw Nation Legislature.
- Served as an elected member of the Chickasaw Nation Supreme Court. Had jurisdiction to decide disputes arising under any provision of the Chickasaw Nation Constitution or any legislation enacted by the Tribal Legislature.

### **Employment**

- Senior Radiation Safety Officer, 3/90 - Present, Halliburton Company, Duncan, Oklahoma
- Board Member of Chickasaw Nation Industries Inc., 2004 to present.
- Member of the Oklahoma Radiation Management Advisory Council, 7/93 to Present.

- Tribal Legislator, 10/2002 to present, The Chickasaw Nation, Ada, Oklahoma
- Supreme Court Justice, 10/92 to 9/2002, The Chickasaw Nation, Ada, Oklahoma
- Radiological Controls Training Specialist, 1/88 to 3/90, Nuclear Power Naval Training Center Westinghouse Electric Corporation, Charleston, South Carolina
- Radiation and Chemistry Instructor, 11/85 to 1/88, Naval Reactors Facility - Westinghouse Electrical Corporation, Idaho Falls, Idaho

### **Professional Affiliations**

- Health Physics Society
- American Nuclear Society

### **Publications**

- "The Development of a Corporate Policy for Dealing with Naturally Occurring Radioactive Material", 1992 Annual Conference of the Colorado Hazardous Waste Management Society, Denver, Colorado, October 22, 1992.
- "Implementing a Corporate-Wide Policy for Dealing with Naturally Occurring Radioactive Materials", 1993 Annual General Meeting, Canadian Institute of Mining and Metallurgy, Calgary, Canada, May, 1993.
- "Processing and Disposal of Scales Containing Naturally Occurring Radioactive Materials", Geilo, Norway, April, 1993.
- "The Disposal of Naturally Occurring Radioactive Materials Through Hydraulic Fracturing", Health Physics Society, 38th Annual Meeting, Atlanta, GA, July, 1993.
- "Radioactive Tracers in Oil and Gas Production: Practical Considerations in the 1990's," SPE 27236, Second International Conference on Health, Safety & Environment in Oil & Gas Exploration and Production, Jakarta, Indonesia, January, 1994.
- "Processing and Disposal of Scales Containing Naturally Occurring Radioactive Materials," Energy-Sources Technology Conference, Offshore and Arctic Operations Symposium, American Society of Mechanical Engineers, New Orleans, LA, January, 1994, Offshore and Arctic Operations, 1994, PD-Vol. 58, pp. 107-112.
- "Safety Considerations for the Recovery of NORM-Contaminated Production Tubing," CIM 94-22, presented at The Petroleum Society of CIM 45th Annual Technical Meeting and AOSTRA 1994 Annual Technical Conference, Calgary, Canada, June, 1994.
- "Hydraulic Fracturing: A Proven N.O.R.M. Disposal Method," presented at the Offshore and Arctic Operations 1995 Symposium, The Energy and Environmental EXPO '95, The Energy-Sources Technology Conference and Exhibition, Houston, TX, January, 1995.
- "Development of a Comprehensive NORM Program," presented at the GRI/API NORM Management and Disposal Technical Session, Houston, TX, October, 1995.
- "NORM Disposal by Well Injection with Cement Stabilization", presented at the Air & Waste Management Association 89th Annual Meeting & Exhibition, Nashville, TN, June, 1996.
- "Assessment of a High Level NORM Site", Health Physics Society, Midyear Topical Meeting, Albuquerque, New Mexico, January 1999.
- "Local Radiation Safety Officer Training for a Global Company", SPE 74187, presented at the International Conference on Health, Safety & Environment in Oil & Gas Exploration and Production, Kuala Lumpur, Malaysia, March, 2002.
- "Radioactive Source Control and Accountability in a Global Environment", 47th annual meeting of the Health Physics Society, Tampa, Florida, June 2002.
- "Decommissioning of a Reactor Component Decontamination Facility", 2003 annual meeting of the American Nuclear Society, San Diego, CA, June 2003.

- “Transportation Regulations and the ALARA Principle”, 2004 North America ALARA Symposium, Kissimmee, Florida, January 2004.
- “Radiation Safety as an Integral Part of the Transportation Regulations”, Health Physics Society Annual meeting 2006. Providence RI.
- “Safeguards and Security at a Facility Level”, ANS 163396, presented at the 2006 annual meeting of the American Nuclear Society, Albuquerque, NM.
- “Radiation Safety Concerns when merging a US and Canadian Company”, CRCPD annual meeting 2008, Greensboro, NC.

# HALLIBURTON

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1015 W. Bois D'Arc • Post Office Drawer 1431  
Duncan, OK 73536-0103  
Office: 580-251-3936 • Fax: 580-251-4050 • Cell: 580-618-0791

August 22, 2008

U.S. NRC Region IV  
Texas Health Resources Tower  
612 E. Lamar Blvd., Suite 400  
Arlington, TX 76011-4125

Attn: Jack Whitten

RE: License 42-01068-07

Subject: Change of Radiation Safety Officer

Dear Mr. Whitten:

Halliburton Energy Services wishes to change Radiation Safety Officers by removing Darrell Dwaine Brown and adding Steven E. Woods as the Corporate Radiation Safety Officer, Resume attached.

If you should need any additional information, please advise.

Sincerely



Steve Woods  
Senior Radiation Safety Officer

## ACCEPTANCE REVIEW MEMO (ARM)

**Licensee:** Halliburton Energy Services, Inc.    **License No.:** 42-01068-07  
**Docket No.:** 030-06392    **Mail Control No.:** 471917  
**Type of Action:** Amend    **Date of Requested Action:** 08-22-08  
**Reviewer Assigned:**    **ARM reviewer(s):** Torres

Response	Deficiencies Noted During Acceptance Review
	[ ] Open ended possession limits. Submit inventory. Limit possession. [ ] Submit copies of latest leak test results. [ ] Add IC L.C./Fingerprint LC, add SUNSI markings to license. [ ] Confirm with licensee if they have NARM material.

**Reviewer's Initials:** \_\_\_\_\_ **Date:** \_\_\_\_\_

<input type="checkbox"/> Yes	<input type="checkbox"/> No	Request for unrestricted release Group 2 or >. Consult with Bravo Branch.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Termination request < 90 days from date of expiration
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Expedite (medical emergency, no RSO, location of use/storage not on license, RAM in possession not on license, other)
<input type="checkbox"/> Yes	<input type="checkbox"/> No	TAR needed to complete action.

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

**SUNSI Screening according to RIS 2005-31**

Yes     No    **Sensitive and Non-Publicly Available** if any item below is checked

General guidance:

- \_\_\_\_\_ RAM = or > than Category 3 (Table 1, RIS 2005-31), use Unity Rule
- \_\_\_\_\_ Exact location of RAM [suite #, bldg. #, location different from mailing address] (whether = or > than Category 3 or not)
- \_\_\_\_\_ Design of structure and/or equipment (site specific)
- \_\_\_\_\_ Information on nearby facilities
- \_\_\_\_\_ Detailed design drawings and/or performance information
- \_\_\_\_\_ Emergency planning and/or fire protection systems

Specific guidance for medical, industrial and academic (above Category 3):

- \_\_\_\_\_ RAM quantities and inventory
- \_\_\_\_\_ Manufacturer's name and model number of sealed sources & devices
- \_\_\_\_\_ Site drawings with exact location of RAM, description of facility
- \_\_\_\_\_ RAM security program information (locks, alarms, etc.)
- \_\_\_\_\_ Emergency Plan specifics (routes to/from RAM, response to security events)
- \_\_\_\_\_ Vulnerability/security assessment/accident-safety analysis/risk assess
- \_\_\_\_\_ Mailing lists related to security response

**Branch Chief's and/or HP's Initials:** ATC    **Date:** 9-4-08

SEP 11 2008

This is to acknowledge the receipt of your letter/application dated  
8-22-08, 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:

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** 471917.  
When calling to inquire about this action, please refer to this mail control number.  
You may call me at 817-860-8103.

Sincerely,

*Colleen Murnahan*

Licensing Assistant



BETWEEN:

License Fee Management Branch, ARM  
and  
Regional Licensing Sections

: (FOR LFMS USE)  
: INFORMATION FROM LTS  
: -----  
: Program Code: 03111  
: Status Code: 0  
: Fee Category: 5A  
: Exp. Date: 20171031  
: Fee Comments:  
: Decom Fin Assur Reqd: Y  
: ::

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: HALLIBURTON ENERGY SERVICES, INC.  
Received Date: 20080825  
Docket No: 3006392  
Control No.: 471917  
License No.: 42-01068-07  
Action Type: Amendment

2. FEE ATTACHED

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

3. COMMENTS

Signed Colleen Murnahan  
Date 9-02-08

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /\_/)

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

2. Correct Fee Paid. Application may be processed for:

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

3. OTHER \_\_\_\_\_  
\_\_\_\_\_

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

Brown  
17119 Horseshoe Bend  
Waller, TX 77484

HOUSTON TX 772  
28 AUG 2008 PM 2 T



Dwight Chamberlain  
Division of Nuclear Materials Safety  
Nuclear Regulatory Commission  
611 Ryan Plaza Drive  
Suite 400  
Arlington, TX 76011-8064

76011+4005

