

Michele M. Sampson

Work Experience: **U.S. Nuclear Regulatory Commission
Office of Nuclear Material Safety and
Safeguards
Division of Spent Fuel Management**

Chief, Spent Fuel Licensing Branch

07/2013 - Present

GG-1301-15

As Chief of the Licensing Branch in the Division of Spent Fuel Management, I lead a branch of 13 Project Managers and two Licensing Assistants. My branch manages and coordinates the safety and environmental reviews and issues initial licenses for spent fuel storage cask designs under 10 Code of Federal Regulations (10 CFR) Part 72, including the certification of storage systems under the general license provisions of 10 CFR Part 72. The Branch also manages and coordinates the safety and environmental reviews and issues initial licenses for interim spent fuel and high-level waste storage facilities under 10 CFR Part 72, including the licensing of nuclear utility specific facilities and private facilities. The safety and environmental reviews and licenses for DOE applications for storage and transport systems are reviewed and approved by my Branch. In addition, the Branch manages and coordinates the safety and environmental reviews, and issues certificates of compliance for commercial transportation cask designs under 10 CFR Part 71. This includes transportation containers for spent fuel, UF₆, fresh fuel, oxides, contaminated waste, sealed sources, and Naval Reactor shipments. We provide technical support for development of guidance for the design, analysis, fabrication, and operation of spent fuel and non-spent fuel shipping containers under 10 CFR Part 71, and spent fuel storage cask designs, and interim spent fuel and high-level waste storage facilities under 10 CFR Part 72. The Branch routinely coordinates and develops guidance with other U.S. Government and International Agencies on transportation policy and safety issues, and provides guidance to industry and the public. As the NRC's representative to the International Atomic Energy Agency's Transportation Safety Standards Committee (TRANSSC), I lead the agency's efforts to influence the development of international transportation and spent fuel storage safety standards, attending TRANSSC meetings twice per year, and encourage interaction with our international regulatory partners to enhance the safety of transportation and spent fuel storage.

Chief, Thermal and Containment Branch

07/2011 - 07/2013

GG-1301-15

In this position, I successfully led a staff of thermal and mechanical engineers. My Branch had responsibility for technical review of the thermal and containment performance for spent nuclear fuel dry cask storage systems and transportation packaging designs. Routine duties included: assignment of work; review of work products such as requests for additional information and safety evaluation reports; approval of training, travel, and time entry; and product line lead for international product line in Divisional budget.

Senior Project Manager**10/2008 - 07/2011****GG1301-15**

In this position, I served as a Senior Project Manager and principal licensing reviewer with responsibility for:

(1) coordinating the safety and environmental reviews for the licensing and certification of spent fuel and other radioactive material transportation package designs; (2) coordinating the development and implementation of an agreement with the Canadian Nuclear Safety Commission and U.S. Department of Transportation for unilateral transportation package approval between our countries; and (3) conducting special projects related to spent fuel storage and transportation package designs. I routinely led multi-disciplinary teams, including structural, thermal, materials, dose assessment, containment, and criticality reviewers, to develop the safety evaluation and authorization documentation for spent fuel and radioactive material packages. As a Senior Project Manager, I assisted new staff in developing qualification and participated as a Board member for both Project Manager and Technical Reviewer staff Qualification Boards.

Project Manager**06/2007 - 10/2008****GG-1301-14**

As a Project Manager working in the Rules, Inspections and Operations Branch, I had direct responsibility for current Part 71 rulemaking efforts and coordination with the Department of Transportation Pipeline and Hazardous Materials Safety Administration's concurrent rulemaking effort to incorporate updates to the TS-R-1 "Regulations for the Safe Transportation of Radioactive Material." I led the Agency's initiative with the Canadian Nuclear Safety Commission to publish NUREG-1886, "Joint Canada - United States Guide for Approval of Type B(U) and Fissile Material Transportation Packages " and develop the implementation protocol to support publication of the final guide document.

In addition to regulatory development, I led the review of environmental impact documentation for both the Division of High Level Waste Repository Safety in NMSS, and to support NRO in review of the Environmental Report portion of new reactor combined license applications. As a routine part of my work, I responded to requests from NRC regional staff, other NRC offices, and agreement state personnel for technical assistance, advice and recommendations on transportation of radioactive material.

**U.S. Department of Transportation
Federal Railroad Administration****Railroad Safety Specialist (HM)****07/2004 - 06/2007****GS-2121-14**

In this position, I served as a Federal Railroad Administration (FRA) expert on Railroad transportation of hazardous materials (HM). This required effective and accurate response to oral and written inquiries of how to package, identify, transport and handle hazardous materials. Other duties included: conducting complex investigative and enforcement projects covering extensive geographical areas and

multi- regional activities; developing strategies to resolve unique problems concerning the safe transportation of HM by rail; analyzing FRA field inspection and accident reports along with carrier and manufacturers reports to determine the effectiveness of FRA safety programs and enforcement activities; evaluating petitions for exemptions from the regulations for the Pipeline and Hazardous Materials Safety Administration, and develop rail specific movement approvals in accordance with 49 CFR 174.50; and participating in the development of enforcement policies and providing technical guidance and direction to regional specialists and field inspection force concerning proper enforcement of the HM rules and regulations, through verbal guidance and various documents including Hazardous Material Guidance Documents. I provided training to field inspectors during in-house training sessions and provided formal presentations to the public and interested groups such as labor, railroad management, shippers, and Federal/State/local government entities related to root cause analysis and the safe transport of radioactive materials. I represented FRA as an expert on appropriate legislative, inter-modal, and professional technical committees.

**U.S. Department of Transportation
Research and Special Programs Administration**

Transportation Specialist (Enforcement)

01/2000 - 07/2004

GS-2101-13

In this position, I was responsible for development and management of the Radioactive Materials Enforcement Program within the Special Investigations unit of the Office of Hazardous Materials Enforcement (OHME). The program included field inspection of radioactive materials shippers, carriers and packaging manufacturers a minimum of 15 weeks per year; radioactive materials shipment incident investigations; training and development of regional inspection staff, including evaluation of field inspector's capability to participate in radioactive materials inspections program; joint-inspection work with other federal and state agencies; support on transportation issues to US Nuclear Regulatory Commission and agreement state regulatory agencies for enforcement action; presentations, outreach, meetings and mass mailings to increase awareness of the radioactive materials enforcement program; and coordination on rulemakings and other changes affecting the regulated community. I provided technical expertise to Office of Chief Counsel staff in support of hazardous materials enforcement cases. I also represented RSPA as a member of the ANSI N14.7 technical writing committee to develop a national standard for Type A radioactive materials package design, testing and maintenance.

Roy F. Weston/Weskem LLC

Technical Manager

11/1999 - 12/1999

Responsible for development of Transportation Plan submittal for all hazardous materials shipping performed in support of Department of Energy sub-contract operations. Participated in the bid development and transition team planning for Roy F. Weston in Weskem LLC successful contract award at both Oak Ridge, TN and Paducah, KY facilities.

**United States Enrichment Corporation
Lockheed Martin Utility Services, Inc.**

Packaging and Transportation Manager

03/1993 - 09/1999

Front line supervisor for packaging and transportation personnel. Responsible for management of all Packaging and Transportation department daily activities including schedule development and assignment of shipments, including hazardous waste and radioactive materials shipments by ground, air, rail and water, based on staff availability and capability. In addition to staffing, I was responsible for management of department budget with included facility inbound/outbound freight costs, development of transportation contracts, and carrier selections. The overriding goal of our operations was regulatory compliance with Department of Transportation, Environmental Protection Agency, and Nuclear Regulatory Commission (NRC) shipping regulations. Key accomplishments included: initiated UF6 product shipping contract for a savings of \$420,000 over the life of the two- year contract; program manager for multi-site project to develop 10 CFR Part 71 Quality Assurance program for submittal to the NRC, and transition use of all NRC licensed Type AF radioactive materials packages from Department of Energy Certificates of Compliance to NRC Certificates of Compliance; developed and maintained Transportation section of the NRC license application for operation of Gaseous Diffusion Plants under 10 CFR Part 76; hired and trained new employees to perform Packaging & Transportation functions; transition from government tenders to corporate transportation contracts with minimal cost impact to department budget, including negotiation of rail contracts; revision of shipping procedures, streamlining processes to generate increased efficiency with existing personnel.

Education:

Murray State
University Murray,
KY US
Master's Degree - 12/1995
Major: Masters of Business Administration

University of Tennessee
Knoxville, TN US
Bachelor's Degree - 08/1989
Major: B.S., Transportation & Logistics

Job Related Training:

Graduate of NRC's Leadership Potential Program.

Harvard School of Public Health "Effective Risk Communication: Theory, Tools and Practical Skills for Communicating About Risk" May 2008.

Duke Environmental Leadership Program
"Implementation of the National Environmental Policy Act, Custom Course for NRC" September 2007.

National Transportation Safety Board "Accident

Investigation Orientation for Rail Professionals, RPH-301" December 2006.

OPM "Executive Development Seminar: Leading Change" at the Eastern Management Development Center, March 2006.

Professional Training Program "Radiation Safety Officer Training" at Oak Ridge Associated Universities, August 2005.

Federal Railroad Administration "HM Recurrency 2005 Tank Car Filling Limit/Filling Density Requirements" training, June 2005.

Battelle/TotalSecurity.US "FMCSA Hazardous Materials Security Training, May 2005.

OPM "Contemporary Leadership Issues Seminar" at the Eastern Management Development Center, September 2004.

Duratek Federal Services, Inc. "Radioactive Material Shipper Certification Training" June 2004.

US Nuclear Regulatory Commission "Applied Health Physics (H-109)" 5-week training course, March - April 2002.

USDOT Transportation Safety Institute (TSI) "International Maritime Dangerous Goods Course" August 2001.

Federal Law Enforcement Training Center "Inspector Safety Training Class" April 2001. This course was developed specifically for Research and Special Programs Administration enforcement personnel. USDOT TSI "Hazardous Materials Compliance and Enforcement Course" April 2000.

US Department of Energy (USDOE) "Advanced Hazardous Materials Transportation Compliance Workshop (HST- 233)" June 1998, August 1996, and August 1993.