

Joseph A. Jones, PE



Education:

Bachelor of Science in Civil Engineering, New Mexico State University, May 1984
Registered Professional Engineer - New Mexico PE #10846

Sandia National Laboratories, Albuquerque, New Mexico (1989 - Present)

NRC programs:

Project manager and technical lead on emergency response and incident response projects related to nuclear power plant accidents. Lead author for NUREG / CR-6863 "Development of Evacuation Time Estimates for Nuclear Power Plants" and co-author for NUREG / CR-6864 "Identification and Analysis of Factors Affecting Emergency Evacuations" both published in January, 2005. Technical reviewer for Evacuation Time Estimates in support of Early Site Permits (ESP), having completed ETE reviews for Grand Gulf, Clinton, North Anna, and Vogtle.

Technical lead for the emergency response activities on the NRC State of the Art Reactor Consequence Analysis (SOARCA) project. Requires developing evacuation time estimates to 20 miles from the plant and assessing potential consequences.

Project manager and technical lead supporting the NRC Operations Center in updating response procedures and developing the incident response manual.

Project manager and technical lead for the NRC sponsored study of alternative protective actions (PAR project). Performing consequence assessments of multiple alternative protective actions to determine whether improved health and safety benefits are achieved.

Other programs:

Project manager for Department of Homeland Security project on development of removable coating for use in containing contamination from radiological dispersal devices.

Project manager for the Defense Advanced Research Projects Agency (DARPA) project on development of strippable coating for decontamination of Cs, Sr, and Co.

Technical lead for the Low Level Radioactive Waste volume reduction program in Russia. Technical responsibilities included subcontractor management, design review, procurement, and system testing for major components. Design required the integration of existing regulatory and code requirements into the modification of 30 year old facilities to support subsystems required to treat the waste.

Program Manager for the Solid Radioactive Waste facility conceptual design funded by Norway and located in Northwest Russia. Included performing a requirements analysis to ensure compliance with U.S. and Russian standards was maintained. Integration of subsystem design and regulatory requirements between U.S., Norwegian, and Russian subcontractors and development of trade studies and design optimization were also required. Managed Russian, Norwegian, and US subcontractors in strict compliance with the project plan resulting in project completion within schedule and under budget.

Project engineer for the Mobile Solid Radioactive Waste Processing Facility in northwest Russia. This is the AMEC 1.4 project to design, procure, construct and commission a mobile facility for processing radioactive waste. Responsibilities included support in development of contract requirements, design reviews, and consultation on solid radioactive waste processing.

Member of the Sandia Architectural/Civil Standards Committee for 5 years with responsibilities including performing Quality Assurance reviews on all Sandia facility development projects, updating Sandia construction specifications, standard drawings, and the Sandia Design Development Manual.

Fred Denney & Associates, Consulting Engineers, Albuquerque, New Mexico (1984 - 1989)

Senior engineer in responsible charge of staff engineers, designers, field, and office technicians. General responsibilities included developing design requirements, engineering, and project management for civil infrastructure projects.

Publications

NUREG/CR-6863. "Development of Evacuation Time Estimate Studies for Nuclear Power Plants." Jones and Dotson, January 2005 (SAND2004-5900)

NUREG/CR-6864. "Identification and Analysis of Factors Affecting Emergency Evacuations." Dotson and Jones, January, 2005 (SAND2004-5901)

SAND2006-2019P. L. Dotson, J. Jones, J. Schelling, "Analysis of a Hypothetical Radiological Dispersal Device (RDD) Event Scenario." July, 2003

SAND2006-1921 Robert Moore, Mark Tucker, Joe Jones, "Radiological Dispersal Device (RDD) Contamination Containment Technology Project." May, 2006

SAND2006-3133 J. Jones, J. Schelling, et. al., "Radiological Dispersal Device at the Port of Singapore." May, 2006

SAND2005-5793. J.A. Jones, M. McRoberts, M. Martell. "Equipment Compatibility and Logistics Assessment for Containment Foam Deployment."

SAND2004-6740 "An Approach for Development of an Expert System for Threat Analysis"; Christopher A. Aas, Lori J. Dotson, Joseph A. Jones, and Mert Fewell, Sandia National Laboratories; James Kaminski and Louis Restrepo, Omicron Safety and Risk Technologies

SAND2004-3576 Robert Moore, Mark Tucker, Joseph Jones, et.al., "Decontamination of Chemical/Biological/Radiological Contaminated Support Equipment for the Joint Strike Fighter." July 2004

SAND2003-0541P "Plutonium ZPPR Plates Leave Sandia" J.A. Jones, G. F. Polansky, C. Ottinger, D. Parks (Idaho National Environmental and Engineering Laboratory)

SAND2002-3232, Joe Jones, Chris Aas, et.al., "Feasibility Study of an Integrated Systems Solution to the Potential Threat of Radiological Dispersal Devices (RDD), November, 2002

SAND2002-1115P, J. Jones, G. Polansky, et. al., "Nonactinide Isotopes and Sealed Sources Management Group, Fiscal Year 2001 Annual Report."

SAND2002-3114P J. Jones, G. Polansky, D. Parks (INEEL), et. al., "Nuclear Materials Management and Disposition at Argonne National Laboratory – East." September, 2002

SAND2002-4210 J. Jones, G. Polansky, D. Parks (INEEL), et. al., "Disposition of Excess Nuclear Materials at Los Alamos National Laboratory." February 2003

SAND2001-3001. R. Moore, J. Jones, et. al., "Bench Scale Testing of In Situ Formation of Apatite in Hanford Soils for Sorption of Uranium and Technetium"

L. Dotson, N. Bixler, and J. Jones. "Efficacy of Alternative Sheltering and Evacuation Strategies in Reducing Dose to the Public from Nuclear Power Plant Accident Plumes." Nuclear Regulatory Commission, November 17, 2005

Robert Moore, Mark Tucker, Joe Jones, "Final Report: Aqueous-Based, Strippable Gel for Radionuclide Capture Decontamination." October, 2005

J. Jones, L. Dotson, and J. Schelling. "Technical Advances that may Change the Understanding of PAR Development and Implementation." Nuclear Regulatory Commission, March 15, 2005

J. Jones and L. Dotson. "Efficacy of Alternative Sheltering and Evacuation Strategies in Terms of Implementation, Realism, and Cost Issues." Nuclear Regulatory Commission, October 6, 2005

Joe Jones, L. Dotson, M. Gruebel, S. Carson. "Technical Review and Recommended Modifications to NUREG-4831, State of the Art in Evacuation Time Estimate Studies for Nuclear Power Plants" June 24, 2004

GD Roberson, Department of Energy; J.A. Jones; et. al., Sandia National Laboratories. "Improving the Tracking of High Risk Radiological Sealed Sources within the DOE Complex". Institute of Nuclear Materials Management (INMM) Conference, 2004

J. Jones, G. Polansky, D. Parks (INEEL), et. al., "A Material Management and Disposition Plan for Excess Materials at Sandia National Laboratories." July 2002

J. Jones, G. Polansky, D. Parks (INEEL), et. al., "Nuclear Materials Management and Disposition at Rocky Flats", 2002

J. Jones, G. Polansky, D. Parks (INEEL), et. al., "Nuclear Materials Management and Disposition at Fernald." 2002

J. Jones, J. Schelling and J. Low (DOE/AL). "Addendum #1 Cesium-Strontium (Cs/Sr) Management Alternatives Trade Study." May 2002.

J. Jones, J. Schelling and J. Low (DOE/AL). "Cesium-Strontium (Cs/Sr) Management Alternatives Trade Study." July 31, 2001.

J. Jones, G. Polansky, and D. Parks (INEEL). "Nonactinide Isotopes and Sealed Sources Material Management and Disposition Plan for Pacific Northwest National Laboratory (PNNL)", June 2001

J.H. Saloio, J.A. Jones, C.A. Aas, et al., "Low-Level Radioactive Waste Volume Reduction in Russia – Processing of Solid and Liquid Waste from Submarine Dismantlement," Radwaste Solutions, A Publication of the American Nuclear Society, January/February, 2001

J. Jones, B. Borgaas (Kavearner Norway), Boris Lesokhin, (Nuclide Russia) et. al., "Solid Radioactive Waste Storage Facility Conceptual Design Report." 1999

J.H. Saloio, J.A. Jones, C.A. Aas, et al., "Low-Level Radioactive Waste Volume Reduction in Russia – Processing of Solid and Liquid Waste from Submarine Dismantlement," Presented at 4th International Conference on Environmental Radioactivity in the Arctic, Edinburgh, Scotland, September 20-23, 1999.

J.A. Jones, J.H. Saloio, et al., "Preliminary Design of Expandable, Regional Storage Facilities to Address Russian Radioactive Waste Storage Problems," paper presented at 4th International Conference on Environmental Radioactivity in the Arctic, Edinburgh, Scotland, September 20-23, 1999.

J.A. Jones, J.H. Saloio, et al., "Siting Criteria, Selection, and Environmental Impact of a Solid Radioactive Waste Interim Storage Facility in The Barents Region of the Arctic Far North" paper presented at 2nd International Conference on Environmental Radioactivity in the Arctic, Tromso, Norway, June 1997.