

**HELEN A. GROGAN**  
**CASCADE SCIENTIFIC, INC.**

**Education**

Ph.D., Imperial College of Science and Technology, University of London, 1984  
B.S., Honors in Botany 2(1), Diploma of Imperial College, Associate of the Royal College of Science, University of London, 1980

**Professional Experience**

**Cascade Scientific, Inc.**

(1995–present)

**Independent Consultant**

(1992–1995)

In 1992, moved to the United States and worked as an independent consultant; in 1995, established Cascade Scientific. Worked with *Risk Assessment Corporation (RAC)* on a variety of projects and dose reconstruction studies. Initially these studies focused on the past releases of radioactive and nonradioactive materials that impacted members of the public living outside the boundaries of each facility. Worked with other *RAC* contractors on Phase II of the Historical Public Exposures Studies on Rocky Flats from October 1992 through September 1999. Emphasized quantifying the organ-specific cancer incidence risk and its uncertainty following exposure to plutonium from inhalation. Follow-on work to quantify the organ-specific cancer risk coefficients following exposure to plutonium from ingestion, continued through December 2001. Also assisted in the development of a web-based interactive tool designed to allow members of the public to estimate individual risks from historical releases of plutonium from Rocky Flats. *RAC* successfully completed Phases I (data retrieval and assessment) and II (source term calculation and ingestion pathway data retrieval) of the Savannah River Site Dose Reconstruction Project in 1995 and 1999, respectively. Developed a risk-based screening methodology for radionuclide releases to the Columbia River from past operations of the Hanford Nuclear Site, Washington. Objective was to identify the relevant radionuclides, exposure pathways and critical groups for dose calculations, and ascertain if these had been considered in the Hanford Environmental Dose Reconstruction (HEDR) Project dose calculations. Particular emphasis was placed on exposures to Native Americans.

Continue to work closely with *RAC* assuming responsibilities for the technical aspects of projects conducted by *RAC* and its subcontractors. Worked with other *RAC* contractors on an independent analysis of exposure and risks to the public from radionuclides and chemicals released by the Cerro Grande Fire at Los Alamos. The Cerro Grande Fire occurred in May 2000, and burned across a large part of the Los Alamos National Laboratory. The analysis was completed successfully in June 2002. In 2002, Dr. Grogan started working with other *RAC* contractors on the *RACER* project in the development of a computer-based tool to view and understand chemical and radioactive materials that are measured in the environment around Los Alamos National Laboratory, and a tool to rank the sources of these materials based on potential human-health risk. These tools are designed to assist decision makers on ways to reduce risk to public health and the environment and to spend taxpayer resources more effectively. In 2006

completed a dose reconstruction of radionuclide releases from a former uranium milling facility in Colorado.

In 1996 and 1997, worked with *RAC* to plan and hold two technical workshops in Tacoma and Seattle, Washington, for the Centers for Disease Control and Prevention. The 1997 workshop involved a panel of 13 technical experts to address four key issues relating to past releases of iodine-131 from the U.S. Department of Energy nuclear weapons site near Hanford, Washington, that remained after reference individual doses were published by the HEDR Project. The 1996 workshop included a panel of five technical experts to address a range of predefined issues that related to developing a computerized dose assessment tool that would allow individual citizens in the northwest United States to obtain estimates of the radiological doses they may have received from past releases from the Hanford Site facilities.

Assisted in developing an International Features, Events and Processes (FEP) Database for the Nuclear Energy Agency, Organization for Economic Cooperation and Development, France, to be used in the performance assessment of radioactive waste disposal systems. Between 1992 and 2002, periodically worked as a consultant to Nagra (Swiss National Cooperative for the Disposal of Radioactive Waste) on a range of program related projects.

### **Intera Information Technologies**

Environmental Systems Assessment Group (1989–1992)

Involved in a wide range of projects concerned with the assessment of radioactive and nonradioactive hazardous wastes. Provided technical assistance to Nagra to coordinate and execute the Kristallin I and Wellenberg '92 safety assessments for high-level waste and low-/intermediate-level waste disposal. Responsible for technically coordinating Intera contracts with Nagra. Key projects included the following:

- Acted as technical secretariat to BIOMOVs (BIospheric MOdel Validation Study) – an international cooperative effort to test models designed to quantify the transfer and accumulation of radionuclides and other trace substances in the environment.
- Developed an outline methodology for the comparative assessment of environmental impacts from landfilled wastes generated by prescribed processes for Her Majesty's Inspectorate of Pollution, Department of the Environment.
- Conducted a project for the Commission of the European Communities (CEC) in collaboration with IMA (Spain) to compare the approaches used to justify land based disposal of toxic wastes and solid radioactive wastes, to identify where technical improvements to these approaches could be made, and to develop methods for their implementation.
- Conducted scenario analyses for the Nagra Kristallin I and Wellenberg projects and developed the supporting databases to provide a structured and consistent framework for identifying important phenomena (features, events, and processes) that need to be accounted for in repository performance assessment.
- Investigated the post-disposal implications of gas generated from a low-/intermediate-level waste repository for Nagra.

- Investigated the objectives, targets and methods for post–emplacement monitoring of a deep low-/intermediate-level waste repository for Nagra.

### **Paul Scherrer Institute**

(Formerly Swiss Federal Institute for Reactor Research) Switzerland (1984–1989)

Served as a member of the repository performance assessment group whose work was largely sponsored by Nagra. Responsible for the biosphere modeling aspects of the performance assessment of high-level waste and low-/intermediate-level waste repositories. During the summer of 1987, worked with Robert Gardner, Ph.D and F. Owen Hoffman at Oak Ridge National Laboratories to gain experience in probabilistic modeling techniques.

Actively participated in BIOMOVs. As chairperson for test scenario B2 (Irrigation with Contaminated Groundwater), was responsible for producing and editing the technical report presenting the results of the study.

Involved in developing an approach for modeling microbial impact on the performance of a waste repository, and in April 1988, become technical coordinator for the new Nagra microbiology program, which was designed to quantitatively consider microbial effects in a radioactive waste repository for use in subsequent performance assessments. This effort involved coordinating research groups within Switzerland and in other European countries.

In January 1988, was promoted to the position of sub-program leader for the geosphere and biosphere transport modeling. This work encompassed performance assessment in general, including scenario evaluation and consequence analysis. The principle objective was to provide models that described radionuclide transport through the geosphere and biosphere, through to doses to man, which could be used in the performance assessment of a final radioactive waste repository.

### **Committee Memberships**

Member, National Research Council of the National Academies Committee to Review the Worker and Public Health Activities Program Administered by the Department of Energy and the Department of Health and Human Services. 2005-2006.

Member, U.S. Environmental Protection Agency, Science Advisory Board's Radiation Advisory Committee. 2001-2007.

Member, Merit panel convened by CH2M-Hill Hanford Group Inc., with concurrence of the Department of Energy and the State of Washington Department of Ecology. Review of the *Preliminary Performance Assessment for Waste Management Area C at the Hanford Site, Washington*. 2004

Consultant to the Environmental Models Subcommittee of the Executive Committee, U.S. Environmental Protection Agency. 1999-2000.

Member, Scientific Committee 64-19 on Dose Reconstruction, National Council on Radiation Protection, 1994-2000.

### Courses Taught

Risk Assessment for Radioactively Contaminated Sites: Los Alamos Case Study. Geologic Disposal of High-Level Waste. ITC School of Underground Waste Storage and Disposal. June 25-28, 2007. Las Vegas, Nevada. 24 Attendees.

Conversion to Dose and Risk. Part of Three Short Courses for Regulators and Radiation Health Specialists: Emerging Topics in Radiation Protection and Risk Assessment. March 16-18, 2004. Kiawah Island, South Carolina. 25 Attendees.

Model Testing and Uncertainty. Part of Three Short Courses for Regulators and Radiation Health Specialists: Emerging Topics in Radiation Protection and Risk Assessment. March 16-18, 2004. Kiawah Island, South Carolina. 25 Attendees.

Testing Models Used for Risk Assessment. Part of a five-day course developed and presented by Risk Assessment Corporation. Calculating and Understanding Risks from Radionuclides Released to the Environment. November 15-19, 1999. Seattle, Washington. 40 Attendees.

Testing Models Used for Risk Assessment. Part of a five-day course developed and presented by Radiological Assessment Corporation. Calculating and Understanding Risks from Radionuclides Released to the Environment. April 28 – May 2, 1997. Santa Fe, New Mexico. 150 Attendees.

### Book and Journal Publications

Nair, S., **H.A. Grogan**, M.J. Minski, and J.N.B. Bell. 1983. "Models for the Prediction of Doses from the Ingestion of Terrestrial Foods." In *Ecological Aspects of Radionuclide Releases*. Edited by P.J. Coughtrey, J.N.B. Bell, and T.M. Roberts. Oxford: Blackwell Scientific. 141–159

**Grogan, H.A.** and F. van Dorp. 1988. "The Reliability of Environmental Transfer Models Applied to Waste Disposal." In *Reliability of Radioactive Transfer Models*. Edited by G. Deems. Elsevier Applied Science. EUR 11367. 276–284.

**Grogan, H.A.**, N.G. Mitchell, M.J. Minski, and J.N.B. Bell. 1988. "Pathways of Radionuclides from Soils to Wheat." In *Pollutant Transport and Fate in Ecosystems*. Edited by P.J. Coughtrey, M.H. Martin, and M.H. Unsworth. Oxford: Blackwell Scientific Publications. 353–370.

Bell, J.N.B., M.J. Minski, and **H.A. Grogan**. 1988. "Plant Uptake of Radionuclides." *Soil Use and Management* 4 (3): 76–84.

van Dorp, F., **H.A. Grogan**, and C. McCombie. 1989. "Disposal of Radioactive Waste." *International Journal of Radiation Applications and Instrumentation Part C. Radiat. Phys. Chem.* 34 (2): 337–347

- McKinley, I.G. and **H.A. Grogan**. 1991. "Radionuclide Sorption Databases for Swiss Repository Safety Assessments." *Radiochimica Acta* 52/53: 415–420.
- McKinley, I.G. and **H.A. Grogan**. 1991. "Consideration of Microbiology in Modeling the Near-Field of a L/ILW Repository." *Experientia* 47: 573–577.
- West, J.M., **H.A. Grogan**, and I.G. McKinley. 1991. "The Role of Microbiology in the Geological Containment of Radioactive Wastes." In *Diversity of Environmental Biogeochemistry*. Developments in Geochemistry: 6. Edited by J. Berthelin. Elsevier Science Publishers B V. 205–215.
- Little, R.H., **H.A. Grogan**, G.M. Smith, and C. Torres. 1993. "Land Disposal Practices in Europe and North America." *J. Inst. Water and Environmental Management* 7 (4): 354–363.
- Grogan, H.A.**, W.K. Sinclair, and P.G. Voillequé. 2001. Risks of Fatal Cancer From Inhalation of Plutonium-239,240 By Humans: A Combined Four Method Approach With Uncertainty Evaluation. *Health Physics* 80(5): 447–461.
- Rood, A.S., **H.A. Grogan** and J.E. Till. 2001. A Model for a Comprehensive Assessment of Exposure and Lifetime Cancer Incidence Risk from Plutonium Released from the Rocky Flats Plant, 1953-1989. *Health Physics* 82(2): 182–212.
- Till, J.E., A.S. Rood, P.G. Voillequé, P.D. McGavran, K.R. Meyer, **H.A. Grogan**, W.K. Sinclair, J.W. Aanenson, H.R. Meyer, H.J. Mohler, S.K. Rope, and M.J. Case. 2002. Risks to the Public from Historical Releases of Radionuclides and Chemicals at the Rocky Flats Nuclear Weapons Plant. *J. Exp. Analysis and Env. Epidemiology* 12: 355–372.
- Mohler, H.J., K.R. Meyer, **H.A. Grogan**, J.W. Aanenson, and J.E. Till. 2004. Application of NCRP Air Screening Factors for Evaluating Both Routine and Episodic Radionuclide Releases to the Atmosphere. *Health Physics* 86(2): 135–144.
- J.E. Till and **H.A. Grogan**. 2006. "Applied Modeling and Computations in Nuclear Science: the Foundation for Risk Assessment and Decision Making." In *Applied Modeling and Computations in Nuclear Science*. ACS Symposium Series 945. Edited by T.M. Semkow, S. Pommé, S.M. Jerome, and D.J. Strome. American Chemical Society, Washington, DC.
- H.A. Grogan**, J.W. Aanenson, P.D. McGavran, K.R. Meyer, S.S. Mohler, H. J. Mohler, J.R. Rocco, A.S. Rood, J.E. Till and L.H. Wilson. 2006 "Applied Modeling of the Cerro Grande Fire at Los Alamos: An Independent Analysis of Exposure, Health Risk, and Communication with the Public." In *Applied Modeling and Computations in Nuclear Science*. ACS Symposium Series 945. Edited by T.M. Semkow, S. Pommé, S.M. Jerome, and D.J. Strome. American Chemical Society, Washington, DC.
- National Research Council of the National Academies. *Review of the Worker and Public Health Activities Program Administered by the Department of Energy and the Department of Health and Human Services*. Review Committee Members—Przybylowicz, E.P (Chair), E.H. Clark II, I. Feller, P. Fenner-Crisp, R.W. Field, S.M. Friedman, **H.A. Grogan**, J. Mandel, G.

Paulson, R.K. Sokas, D.O. Stram, T. Zheng. The National Academies Press, Washington, DC.

Till, J.E. and **H.A. Grogan** (editors). 2008. *Radiological Risk Assessment and Environmental Analysis*. Oxford University Press, New York. (in press)

**Grogan, H.A. 2008.** "Model Validation." Chapter 14 in *Radiological Risk Assessment and Environmental Analysis*. Oxford University Press, New York. pp. 837-868. (in press)

### Technical Reports

**Grogan, H.A.,** J.N.B. Bell, M.J. Minski, and S. Nair. 1984. *An Experimental Study of the Time Dependence of Uptake from Soil of Cs-137, Ru-106, Ce-144, and Tc-99 into Green Vegetables, Wheat and Potatoes*. CEGB report TPRD/B/0416/N84. Berkeley Nuclear Laboratories, Berkeley, Calif, 94704, United Kingdom.

**Grogan, H.A.** 1985. "Biosphere Modeling." EIR Bulletin Nr. 56 23. CH-5232 Villigen PSI, Switzerland.

**Grogan, H.A.** 1985. *Concentration Ratios for BIOPATH: Selection of the Soil-to-Plant Concentration Ratio Database*. EIR Bericht Nr. 575, CH-5232 Villigen PSI, Switzerland. Nagra Technical Report Series NTB 85-16. CH-5430 Wettingen, Switzerland.

**Grogan, H.A.** 1985. *Biosphere Modelling of a HLW Repository – Scenario and Parameter Variations*. EIR Bericht Nr. 561, CH-5232 Villigen PSI, Switzerland. Nagra Technical Report Series NTB 85-48. CH-5430 Wettingen, Switzerland.

McKinley, I.G., J.M. West, and **H.A. Grogan**. 1985. *An Analytical Overview of the Consequences of Microbial Activity in a Swiss HLW Repository*. EIR Bericht Nr. 562, CH-5232 Villigen PSI, Switzerland. Nagra Technical Report Series NTB 85-43. CH-5430 Wettingen, Switzerland.

**Grogan, H.A.** and F. van Dorp. 1986. *BIOMOVs Test Scenario Model Comparison Using BIOPATH*. EIR Bericht Nr. 599, CH-5232 Villigen PSI, Switzerland. Nagra Technical Report Series NTB 86-23. CH-5430 Wettingen, Switzerland.

**Grogan, H.A.,** ed. 1989. *BIOMOVs Technical Report 6 – Scenario B2: Irrigation with Contaminated Groundwater*. National Institute of Radiation Protection, Box 60204, S-10401 Stockholm, Sweden.

**Grogan, H.A.** and I.G. McKinley. 1989. *An Approach to Microbiological Modelling Application to the Near-Field of a Swiss Low/Intermediate Level Waste Repository*. Nagra Technical Report Series NTB 86-09. CH-5430 Wettingen, Switzerland

- Grindrod, P., M.J. Williams, **H.A. Grogan**, and M.D. Impey. 1990. *STRENG: A Source Term Model for Vitrified High Level Waste*. Nagra Technical Report Series NTB 90-48. CH-5430 Wettingen, Switzerland.
- Baeyens, B., **H.A. Grogan**, and F. van Dorp. 1991. *Biosphere Modelling for a Deep Radioactive Repository: Treatment of the Groundwater-Soil Pathway*. PSI Technical Report PSI Bericht Nr. 98. CH-5232 Villigen PSI, Switzerland.
- Grogan, H.A.**, B. Baeyens, H. Müller, and F. van Dorp. 1991. *Biosphere Modelling for a Deep Radioactive Repository: Site-Specific Consideration of the Groundwater-Soil Pathway*. PSI Technical Report PSI Bericht Nr. 99. CH-5232 Villigen PSI, Switzerland.
- Stenhouse, M.J. and **H.A. Grogan**. 1991. *Review of Reactions of Hydrogen and Methane in the Geosphere and Biosphere*. Nirex Safety Series Report, NSS/R262. Available from UK Nirex Ltd, Curie Ave, Harwell, Oxon, OX11 0RH, United Kingdom.
- Grogan, H.A.**, D. Charles, and G.M. Smith. 1991. *An Outline Methodology for Comparative Assessment of Environmental Impacts from Landfilled Wastes*. DoE Report No. DOE/HMIP/RR/91/058. Available from Romney House, 43 Marsham Street, London SW1P 3PY, United Kingdom.
- Grogan, H.A.**, K.J. Worgan, G.M. Smith, and D.P. Hodgkinson. 1992. *Post-Disposal Implications of Gas Generated from Low and Intermediate Level Wastes*. Nagra Technical Report Series NTB 92-07. CH-5430 Wettingen, Switzerland.
- Watkins, B.M. and **H.A. Grogan**. 1994. *Overview of Information Concerning Microbial Effects on Radioactive Waste Repositories*. Nagra Technical Report Series NTB 93-40. CH-5430 Wettingen, Switzerland.
- Grogan, H.A.**, K.R. Meyer, P.G. Voillequé, S.K. Rope, M.J. Case, H.R. Meyer, R.E. Moore, T. Winsor, and J.E. Till. 1994. *Verification of Phase I Source Term & Uncertainty Estimates*. Final Task 2 Report prepared by *Radiological Assessments Corporation* for the Colorado Department of Public Health and Environment.
- Stetar, E.A., M.J. Case, L.W. Bell, **H.A. Grogan**, K.R. Meyer, H.R. Meyer, S.K. Rope, D.W. Schmidt, T.F. Winsor, and J.E. Till. 1995. *Identifying Sources of Environmental Monitoring and Research Data. Savannah River Site Dose Reconstruction Project*. RAC Report No. 2 CDC-SRS-95-Final. *Radiological Assessments Corporation*.
- Meyer, K.R., P.D. McGavran, P.G. Voillequé, **H.A. Grogan**, L.W. Bell, H.R. Meyer, S.K. Rope, and J.E. Till. 1995. Phase I Data Retrieval and Assessment. *Evaluation of Materials Released from the Savannah River Site*. RAC Report No. 6 CDC-SRS-95-Final. *Radiological Assessments Corporation*.

- Grogan, H.A.**, M.O. Langan, H.R. Meyer, E.A. Stetar, and J.E. Till. 1995. *Identification and Cataloging of Information Sources. Savannah River Site Dose Reconstruction Project. RAC Report No. 3 CDC-SRS-95-Final. Radiological Assessments Corporation.*
- Centers for Disease Control and Prevention. 1996. *Calculating and Interpreting Radiological Doses and Risks for Individuals Exposed to Radionuclides Due to Historical Releases from the Hanford Nuclear Reservation.* Technical Workshop Report. Prepared by **H.A. Grogan.** RAC Report No. 5-CDC-Task Order 2-1996-FINAL. *Radiological Assessments Corporation.*
- Centers for Disease Control and Prevention. 1998. *Issues Related to Estimating Doses Due to I-131 Releases to the Atmosphere from the Hanford Site.* Technical Workshop Report. Prepared by **H.A. Grogan.** RAC Report No. 2-CDC-Task Order 4-1998-FINAL. *Radiological Assessments Corporation.*
- Sumerling, T.J., **H.A. Grogan** and P.A. Smith. 1999. *Scenario Development for Kristallin-1.* Nagra Technical Report Series NTB 93-13. CH-5430 Wettingen, Switzerland.
- Grogan, H.A.**, P.D. McGavran, H.R. Meyer, K.R. Meyer, H.J. Mohler, A.S. Rood, W.K. Sinclair, P.G. Voillequé and J.M. Weber. 1999. *Technical Summary Report for the Historical Public Exposures Studies for Rocky Flats Phase II.* RAC Report No. 14-CDPHE-RFP-1999-FINAL. Prepared by *Radiological Assessments Corporation.* Neeses, South Carolina for Colorado Department of Public Health and Environment ([www.cdphe.state.co.us/rf](http://www.cdphe.state.co.us/rf)). September.
- Meyer, K. R., **H.A. Grogan**, and J.E. Till. 1999. *RAC Responses to Public Questions and Concerns.* RAC Report No.12-CDPHE-1999-FINAL. Prepared by *Radiological Assessments Corporation,* Neeses, South Carolina for Colorado Department of Public Health and Environment ([www.cdphe.state.co.us/rf](http://www.cdphe.state.co.us/rf)). August.
- Rood, A.S. and **H.A. Grogan.** 1999. *Estimated Exposure and Lifetime Cancer Incidence Risk from 903 Area Plutonium Releases at the Rocky Flats Plant.* RAC Report No. 1-CDPHE-RFP-1999-FINAL. Prepared by *Radiological Assessments Corporation.* Neeses, South Carolina for Colorado Department of Public Health and Environment ([www.cdphe.state.co.us/rf](http://www.cdphe.state.co.us/rf)). August.
- Rood, A.S. and **H.A. Grogan.** 1999. *Estimated Exposure and Lifetime Cancer Incidence Risk from Plutonium Released from the 1957 Fire at the Rocky Flats Plant.* RAC Report No. 2-CDPHE-RFP-1999-FINAL. Prepared by *Radiological Assessments Corporation.* Neeses, South Carolina for Colorado Department of Public Health and Environment ([www.cdphe.state.co.us/rf](http://www.cdphe.state.co.us/rf)). August.
- Rood, A.S. and **H.A. Grogan.** 1999. *Estimated Exposure and Lifetime Cancer Incidence Risk from Plutonium Released from the 1969 Fire at the Rocky Flats Plant.* RAC Report No. 7-CDPHE-RFP-1999-FINAL. Prepared by *Radiological Assessments Corporation.* Neeses,

- South Carolina for Colorado Department of Public Health and Environment (www.cdphe.state.co.us/rf). August.
- Rood, A.S. and **H.A. Grogan**. 1999. *Comprehensive Assessment of Exposure and Lifetime Cancer Incidence Risk from Plutonium Released from the Rocky Flats Plant, 1953–1989*. RAC Report No. 13-CDPHE-RFP-1999-FINAL. Prepared by *Radiological Assessments Corporation*, Neeses, South Carolina for Colorado Department of Public Health and Environment (www.cdphe.state.co.us/rf). September.
- Rope S.K., K.R. Meyer, M.J. Case, **H.A. Grogan**, D.W. Schmidt, M. Dreicer, T.F. Winsor, and J.E. Till. 1999. *Evaluation of Environmental Data for Historical Public Exposures Studies on Rocky Flats*. RAC Report No. 1-CDPHE-RFP-1997-FINAL(Rev.1). Prepared by *Radiological Assessments Corporation*, Neeses, South Carolina for Colorado Department of Public Health and Environment (www.cdphe.state.co.us/rf). August.
- Grogan, H.A.**, W.K. Sinclair, and P.G. Voillequé, 2000. *Assessing Risks of Exposure to Plutonium*. RAC Report No. 5-CDPHE-RFP-1998-FINAL(Rev.2). Prepared by *Radiological Assessments Corporation*, Neeses, South Carolina for Colorado Department of Public Health and Environment (www.cdphe.state.co.us/rf). February.
- Killough, G. G., A.S. Rood, J.W. Aanenson, K.R. Meyer, **H.A. Grogan**, W.K. Sinclair, and J.E. Till. 2000. *Task 5: Independent Calculation*. Radionuclide Soil Action Level Oversight Panel. RAC Report No. 16-RSALOP-RSAL-1999-FINAL. *Risk Assessment Corporation*. February.
- Till, J.E., Aanenson, J.W., Boelter, P.J., M.C. Case, M. Dreicer, **H.A. Grogan**, M.O. Langan, P.D. McGavran, K.R. Meyer, R. Meyer, H.J. Mohler, A.S. Rood, R.C. Rope, S.K. Rope, L.A. Stetar, P.G. Voillequé, T.F. Winsor, W. Yang. 2001. *Evaluation of Materials Released from the Savannah River Site. Savannah River Site Environmental Dose Reconstruction Project*. Phase II: Source Term Calculation and Ingestion Pathway Data Retrieval. RAC Report No.1-CDC-SRS-1999-Final. Final Report. Prepared by *Radiological Assessments Corporation*, Neeses, South Carolina for Centers for Disease Control and Prevention. April.
- Mohler, H.J., K.R. Meyer, J.W. Aanenson, and **H.A. Grogan**. 2002. *Analysis of Exposure and Risks to the Public from Radionuclides and Chemicals Released by the Cerro Grande Fire at Los Alamos. Task 3: Calculating and Communicating Risks: Observations and Recommendations*. RAC Report No.15-NMED-2001-FINAL(Rev.1). Prepared by *Risk Assessment Corporation*, Neeses, South Carolina for New Mexico Environment Department, Santa Fe. June 12.
- Rood, A.S., J.W. Aanenson, S.S. Mohler, P.D. McGavran, H.J. Mohler, and **H.A. Grogan**. 2002. *Analysis of Exposure and Risks to the Public from Radionuclides and Chemicals Released by the Cerro Grande Fire at Los Alamos. Task 1.7: Final Report on Estimated Risks from Releases to Air*. RAC Report No. 3-NMED-2002-FINAL(Rev.1). Prepared by *Risk Assessment Corporation*, Neeses, South Carolina for New Mexico Environment Department, Santa Fe. June 12.

Mohler, S.S., J.W. Aanenson, **H.A. Grogan**, L. Hay Wilson, P.D. McGavran, K.R. Meyer, Ph.D., H.J. Mohler, J.R. Rocco, and A.S. Rood. 2002. *Analysis of Exposure and Risks to the Public from Radionuclides and Chemicals Released by the Cerro Grande Fire at Los Alamos. Summary Report. RAC Report No. 5-NMED-2002-FINAL.* Prepared by Risk Assessment Corporation, Neeses, South Carolina for New Mexico Environment Department, Santa Fe. June 12.

**Grogan, H.A.**, A.S. Rood, J.W. Aanenson, and E.B. Liebow. 2002. A Risk-based Screening Analysis for Radionuclides Released to the Columbia River from Past Activities at the U.S. Department of Energy Nuclear Weapons Site in Hanford, Washington. RAC Report No. 3-CDC-Task Order 7-2002-FINAL. Prepared by Risk Assessment Corporation, Neeses, South Carolina for the Centers for Disease Control and Prevention, Atlanta. November.

Kosson, D., **H. Grogan**, K. Higley, R. Maddalena, and C. Whipple. 2004. Merit Panel Review of the C-Tank Farm Closure Performance Assessment. Final Report. Submitted to CH2M-Hill Hanford Group, Inc. April 20.

**Grogan, H.A.**, K.R. Meyer, S.S. Mohler, A.S. Rood, P.G. Voillequé, and J.E. Till. 2004. *Assessment of Thyroid Doses Received by Specified Individuals from Releases of Iodine-131 from Hanford.* In re: Hanford Nuclear Reservation Litigation. Master File No. CY-91-3015-WFN. RAC Report No.14-Hanford Litigation. RAC Expert Report. August 13.

Aanenson, J.W., J. Goldberg, **H.A. Grogan**, L.H. Wilson, G.G. Killough, K.R. Meyer, H.J. Mohler, S. Mohler, J.R. Rocco, A.S. Rood, P. Shanahan, W.K. Sinclair, C. Slack, E.A. Stetar, J. Wilson, J E. Till. 2004. *Risk Analysis, Communication, Evaluation, and Reduction at LANL-Contemporary Risk Assessment: Demonstration of an Integrated Methodology.* RAC Report No. 11-RACER LANL-2004-FINAL. Risk Assessment Corporation. Neeses, South Carolina. December.

Wilson, L.H, J.R. Rocco, S. Mohler, E.A. Stetar, **H.A. Grogan**, H.J. Mohler, J. Wilson, B. Jacobs, P. G. Voillequé and J E. Till. 2007. *Risk Analysis, Communication, Evaluation, and Reduction at LANL. Decision Support Tool Methodology.* RAC Report No. 18-RACER LANL-2007-FINAL. Risk Assessment Corporation. Neeses, South Carolina. July.

Stetar, E.A, L.H. Wilson, J.R. Rocco, S. Mohler, **H.A. Grogan** and J E. Till. 2007. *Risk Analysis, Communication, Evaluation, and Reduction at LANL. Focus Group Data Evaluation.* RAC Report No. 19-RACER LANL-2007-FINAL. Risk Assessment Corporation. Neeses, South Carolina. July.

### Conference Proceedings

**Grogan, H.A.**, J.N.B Bell, and M.J. Minski. 1983. "Time Dependent Transfer of Ru-106, Cs-137, Ce-144 and Tc-99 from Soil to Wheat." In *The Transfer of Radioactive Materials to the Terrestrial Environment Subsequent to an Accidental Release to Atmosphere.* Vol. 1. Commission of the European Communities. Dublin, Ireland. 395-402.

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