
JEFFREY L. ZIMMERLY
CORPORATE QUALITY ASSURANCE MANAGER / ENVIRONMENTAL ENGINEER
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EDUCATION: B.S., Health Physics, Francis Marion University, 1996

EXPERIENCE SUMMARY:

Mr. Zimmerly serves as an Environmental Engineer supporting various government, utility, and industrial clients in the areas of environmental impact assessment, radiological transportation risk assessment, accident analysis, human health and ecological risk assessment, air quality modeling and compliance, occupational and environmental health physics, and radioactive waste management. Mr. Zimmerly has assisted many companies in preparing Environmental Reports (ERs) to submit as part of Combined License (COL) applications to the Nuclear Regulatory Commission (NRC). As part of these efforts, Mr. Zimmerly has contributed to ER sections related to severe accidents and severe accident mitigation alternatives. Mr. Zimmerly also serves as the Tetra Tech NUS (TtNUS) Corporate Quality Assurance (QA) Manager.

PROJECT EXPERIENCE:

Environmental Engineer; Performance Assessments for the H- and F-Tank Farm High-Level Waste Tanks; Savannah River Site Remediation; February 2010 to present. Mr. Zimmerly developed the dose equations for the inadvertent human intruders and members of the public for the performance assessments. The equations were codified into the GoldSim Model for simulation. Information required for the dose assessment, including dose conversion factors, bioaccumulation factors, and ingestion and inhalation rates were also developed.

Deputy Project Manager; Author, Third-Party Environmental Impact Statement (EIS) for El Paso, Southern Natural Gas; Federal Energy Regulatory Commission (FERC); March 2007 to August 2009. Mr. Zimmerly assists in managing the preparation of the Environmental Assessment (EA) and related documents under the guidance of the FERC Project Manager for the South System Expansion III project. The project consists of 88 miles of various diameter pipe and modifications to compressor stations in Louisiana, Mississippi, Alabama, and Georgia. The EA analyzes impacts across four southern states traversing numerous sensitive resource locations. Preparation and publication of the EA involves review and support of cooperating state and federal agencies, preparing a Notice of Intent to Prepare an EIS for publication in the *Federal Register*, reviewing of Environmental Resource Reports, and preparing Data Requests in coordination with the FERC Staff. Mr. Zimmerly is also authoring and reviewing several sections of the draft and final EA.

Health Physicist; Safety Light Corporation/EPA; January 2006 to present. Mr. Zimmerly serves as a Health Physicist supporting the preparation of a Remedial Investigation/Feasibility Study (RI/FI) of the Safety Light Corporation site in Bloomsburg, PA for the U.S. Environmental Protection Agency (EPA). The EPA proposed listing the site, which has a history of several commercial processes and waste disposal activities involving radioactive material, on the National Priority List. Mr. Zimmerly performed the human health and ecological risk assessments using the RESRAD, RESRAD-OFFSITE, and RESRAD-BIOTA codes and was a contributing author for the Remedial Investigation Reports and Feasibility Studies.

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Environmental Engineer; ER in Support of a COL Application to the NRC; Florida Power and Light; February 2008 to present. Mr. Zimmerly serves as an analyst for the preparation of an ER for the construction of two new nuclear reactors at the Turkey Point site in Florida. Mr. Zimmerly was a contributing author for the transportation of radioactive waste sections using the RADTRAN code, which calculates impacts of radioactive material transportation. Mr. Zimmerly was a contributing author for the Severe Accident and Severe Accident Mitigation Alternatives sections.

Radiological Transportation, Global Nuclear Energy Partnership (GNEP) EIS, DOE Office of Nuclear Energy; January 2007 to December 2008. Mr. Zimmerly reviewed the radioactive materials transportation analysis for the GNEP EIS. The transportation analysis was performed using the RADTRAN and TRAGIS codes and analyzed the routing and human health impacts from the transportation of various types of radioactive and nonradioactive materials and wastes between the various facilities and waste repositories proposed in the GNEP EIS.

Environmental Engineer; ER in Support of a COL and Early Site Permit Application to the NRC; Exelon; December 2007 to present. Mr. Zimmerly is an analyst for the preparation of an ER for two new nuclear reactors at the Victoria Site in Victoria County, TX. Mr. Zimmerly performed the impact analysis for heat dissipation to the atmosphere using the Seasonal/Annual Cooling Tower Impact (SACTI) code, as well as the analysis for an alternative heat dissipation to the atmosphere system. He also analyzed the noise impacts from the construction and operation of the new units. Mr. Zimmerly was a contributing author for the transportation of radioactive waste sections using the RADTRAN code, which calculates impacts of radioactive material transportation.

Environmental Engineer; ER in Support of a COL Application to the NRC; Nuclear Innovation North America LLC; December 2006 to present. Mr. Zimmerly is the QA Manager for the preparation of an ER for the construction of two new nuclear reactors at the South Texas Project (STP) site in Matagorda County, TX. Mr. Zimmerly is responsible for the validation and documentation of every statement of fact in the ER for the COL. Mr. Zimmerly performed the impact analysis for heat dissipation to the atmosphere using the SACTI code. Mr. Zimmerly was a contributing author for the transportation of radioactive waste sections using the RADTRAN code, which calculates impacts of radioactive material transportation. Mr. Zimmerly was a contributing author for the Severe Accident and Severe Accident Mitigation Alternatives sections.

Health Physicist; EPA; January 2004 to present. Mr. Zimmerly is an instructor for the EPA's Emergency Response Training Program. He currently provides radiation safety overview training for environmental professionals and EMS first responders. He also provides technical support on radiological emergency response issues to Tetra Tech Superfund Technical and Response Team (START) program managers in eight EPA Regions.

Environmental Engineer; ER in Support of a COL Application to the NRC; South Carolina Electric and Gas (SCE&G); January 2006 to present. Mr. Zimmerly serves as the QA Manager and as an analyst for the preparation of an ER for the construction of new nuclear reactors at an existing SCE&G site. As the QA Manager, Mr. Zimmerly is responsible for the validation and documentation of every statement of fact in the ER for the COL. As an analyst, Mr. Zimmerly performed the impact analysis for heat dissipation to the atmosphere using the SACTI code, as well as the analysis for an alternative heat dissipation to the atmosphere system.

Environmental Engineer; ER in Support of an Early Site Permit Application for Vogtle Electric Generating Plant; Southern Nuclear Company; January 2005 to July 2009. Mr. Zimmerly was an analyst for the ER in support of an Early Site Permit application prepared by Southern Nuclear Company

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for submittal to the NRC. Mr. Zimmerly authored or co-authored several sections in the ER, including environmental impacts to members of the public, noise, and heat dissipation to the atmosphere.

Environmental Engineer; FERC Third-Party EIS for Duke Energy Transmission Company; 2006 to 2007. Mr. Zimmerly assisted in the preparation of the EIS and related documents for the Southeast Supply Header Project. The project involved review and supporting interagency documents provided by local, state and other federal agencies, preparing a Notice of Intent to Prepare an EIS to be published in the *Federal Register*, review and supplementing Environmental Resource Reports supplied by the pipeline company, and authoring sections of the EIS.

Environmental Engineer; Industrial Wastewater Closure Module for the High-Level Waste Tank 18 and Tank 19 System; Westinghouse Savannah River Company; Aiken, South Carolina; August 2000 to December 2004. Mr. Zimmerly assisted in the long-term performance modeling required in support of the individual Tank Module. He is the author of several chapters of the Tank Modules including Chapter 8, "Performance Evaluation," Appendix A, "Fate and Transport Modeling," and Appendix B, "Accounting for Tank Impacts Against Performance Objectives."

Environmental Safety & Health Representative; Demolition and Removal of Buildings and Facilities; U.S. Department of Energy-Savannah River; Westinghouse Savannah River Company; April 2003 to July 2003. Mr. Zimmerly provided support as the Environmental Safety & Health site representative for demolition and removal of excess building and facilities at U.S. Department of Energy – Savannah River under contract to Westinghouse Savannah River Company.

Environmental Engineer; Savannah River Site High-Level Waste Tank Closure EIS; Westinghouse Savannah River Company; Aiken, South Carolina; August 2000 to May 2002. Contributing author of the Summary and Chapter 4, "Environmental Consequences," of the EIS. Assisted in the long-term performance modeling required in support of this EIS and individual Tank Modules. Participated in the effort to respond to public comments on the Draft EIS contained in Appendix D of the Final EIS.

Environmental Engineer; Final EIS for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain; Jason Technology; Las Vegas, NV; December 2000 to December 2001. Assisted the socioeconomic analyst with the manipulation, interpretation and presentation of the socioeconomic data and modeling results. Contributing author of the Data and Calculation Packages required for the EIS.

Environmental Engineer; Idaho High-Level Waste and Facilities Disposition Final EIS; Idaho National Engineering and Environmental Laboratory, Idaho; October 2000 to September 2002. Performed the transportation risk analysis for the transportation of the vitrified waste and grout by truck and train, using computer codes RADTRAN, RISKIND, HIGHWAY, and INTERLINE. Prepared the text for this analysis in the EIS.

Health Physicist; Confidential Client, California; November 2000. Investigated contaminants in the soil and prepared the text on the Nature and Extent of Radioactivity in Surface Soils. Performed the analysis of the soil using the computer code MICROSIELD.

Environmental Engineer; Human Health and Ecological Risk Assessment; MolyCorp Mountain Pass Mine; San Bernardino County, California; May 2000 to May 2005. Constructed the Human Health and Ecological Risk Assessment tables and calculations for the radiation exposure. Coordinated with other offices to complete the risk assessment for the non-radioactive contaminants. Located and interpreted parameters required for this assessment and incorporated them into the risk assessment. Reviewed other related documents for alternatives in the risk assessment.

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Environmental Engineer; Naval Facilities Engineering Command; Key West, Florida; June 2000 to Present. Provides support for various field efforts including ecological sample collection, field chemistry analysis, and media sampling for laboratory analysis of soil, sediment, surface water, and groundwater at operable units within various Navy facilities. Created reports to document and describe the sampling activities, present the sampling results, assess whether or not the goals of sampling were achieved, and provide conclusions and recommendations for any further actions.

Environmental Inspector; FERC; September 2002 to present. Provides support as an Environmental Inspector for FERC, conducting inspections ensuring environmental compliance during linear construction of natural gas pipeline projects nationwide. The inspections are performed to ensure that interstate pipeline construction complies with the National Environmental Policy Act (NEPA), because typically an EA or an EIS is required for the projects. Evaluates pipeline companies during various stages of construction and restoration to assess their compliance with FERC regulations, and then documents and relays observations and recommendations directly to the FERC project managers.

Health Physicist; Argonne National Laboratory; Argonne, IL; May 2001 to May 2002. Conducted the independent verification of the RESRAD-BUILD code, version 3.1, which is used to derive residual radioactive material guidelines for contaminated buildings. Tasks included testing the RESRAD-BUILD databases, libraries, parameters, pathway models, and uncertainty analysis features by creating Excel spreadsheet models, using the Crystal Ball uncertainty analysis add-in for Excel, and using the MicroShield code to benchmark external radiation exposure pathways.

Nuclear Engineer/Health Physicist; Various Commercial Nuclear Utility Clients; May 2000 to present. Performing analyses and calculations to support the ERs for nuclear power plant license renewals before the NRC. License extension work includes the analysis of alternatives to the relicensing, electric shock analysis, and meteorology and air quality. Nuclear power plant sites include Susquehanna, Oyster Creek, Robinson, Summer, Brunswick, Pilgrim, Point Beach, Davis-Besse, Millstone, Dresden, Quad Cities, Wolf Creek, Kewaunee, Palo Verde, Three Mile Island, Vogtle, Crystal River, Duane Arnold, Salem, Hope Creek, South Texas Project, and Calloway.

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CHRONOLOGICAL WORK HISTORY:

Environmental Engineer; Tetra Tech NUS, Inc.; Aiken, South Carolina; May 2000 to Present.

Intern; Westinghouse Savannah River Company; Aiken, South Carolina; May 1998 to August 1998.

Served as an intern with the Westinghouse Savannah River Company. His duties were to research the possibility for simultaneous determination of alpha, beta, and gamma radiation using a heterogeneous scintillating flow cell detection system that utilizes pulse shape discrimination.

Intern; Carolina Power and Light; North and South Carolina; 1995 to 1996.

Mr. Zimmerly served as an intern with the Carolina Power and Light Company at the Brunswick Plant in Southport, North Carolina. His duties were to support the Health Physics group in creation of databases for hazardous chemicals, and data management and trend tracking. He also supported the programs group in preparation for and during a refueling outage.

Mr. Zimmerly also served as an intern with the Carolina Power and Light Company at the Robinson Project in Hartsville, South Carolina. His duties were to support the Health Physics group in areas including dosimetry, respiratory protection, radioactive waste management, shipping, shift work, job coverage, training, and outage activities.

TRAINING:

OSHA 40-Hour HAZWOPER Training; 6/2000
OSHA 8-Hour HAZWOPER Refresher Course; 9/2009
OSHA 8-hour Supervisory Training; 4/2002
OSHA 8-hour Supervisory Refresher Training; 9/2009
ISO 9001:2000 36-Hour Certified Lead Auditor Training; 5/2007
Noise and Vibration Fundamental Training; Southern Research; 11/2008
Multi-Agency Radiation Survey and Assessment (MARSSIM); USEPA; 1/2004
RESRAD and RESRAD-BUILD Training Workshop; USDOE ANL; 5/2001

PROFESSIONAL AFFILIATIONS:

Health Physics Society
American Nuclear Society