



SUMMARY OF EXPERIENCE

Ms. Sparkman has over thirty-five years of experience in the environmental compliance discipline including areas of waste minimization, regulatory compliance, permit preparation, site investigation, hazards assessment and remediation, and wastewater treatment. She has been responsible for the commissioning of plant modifications and expansions to ensure all required environmental permitting has been secured, process hazard analysis (PHA) have been completed and hazards remediated. She has also facilitated numerous PHAs for both private and government clients to support the implementation of the Risk Management Program requirements.



EDUCATION

B.S.E., Chemical Engineering

University of Tennessee at Chattanooga



MEMBERSHIPS & CERTIFICATIONS

- Professional Engineer: Tennessee, Georgia, Virginia, Texas, Ohio, Oregon, Iowa
- DoE "Q" clearance (Inactive)



PROFESSIONAL EXPERIENCE

QTS Data Centers

Director of Environmental Compliance | 2025 to present

Selected project experience:

- Establishing processes and programs to allow for compliance with environmental requirements for the lifecycle of data center operation (pre-development, development and operations)
- Developing requirements documents for the selection of technology systems to be used to facilitate the management of environmental requirements for a very accelerated growth strategy globally.

BSI America Professional Services Inc

Principal EHS Consultant | 2024 to 2025

Selected project experience:

- Principal EHS Consultant with this consulting firm providing services to a broad range of clients, including research and development organizations, manufacturing, heavy and light industry, pharmaceutical and chemical manufacturers.
- Conducting environmental gaps assessments for a major data center client. These assessments are being performed to comply with audit privilege requirements for locations within the United States.

- Managing six (6) remote EHS professionals.

Amazon, Inc.

Global Environmental Governance & Systems Leader | 2020 to 2024

Launched a new global team responsible for ensuring that activities of formulating, introducing, controlling and reviewing processes, rules and technologies were in place to ensure that our operations were compliant and to reduce environmental risk. Team consisted of environmental data management, governance, permitting and compliance management.

- Developed risk-based evaluation process for new processes or facility modifications to ensure environmental, health and safety (EHS) risks were being considered. Also developed definitions that would equate to risk categories focusing on the EHS aspects.
- Led the development and launch of the AUSTIN Compliance, Waste and Donation Management, and Regulatory Interaction modules for Environmental Assurance & Protection.
- Designed the Environmental Compliance Management System (ECMS) which is an activity-based system that converts the applicable environmental requirements to a series of actionable items that will provide a concise method for associates to act on and ensure compliance. The actionable items will be activity-based as opposed to role-based to account for the fact that our associates wear many hats in the facility and their job role can change often. The activity-based system will identify activities that associates will need to perform (i.e., waste processing, emergency engine testing, etc.) in order to meet regulatory requirements designed to protect the environment.
- Designed a voice assistance tool to help with spill reporting at facilities in the U.S.

Amazon, Inc.

Regional Environmental Manager | 2015 to 2020

Oversaw the environmental program implementation for TNS, TSSL, IXD, RELO, MOD and Mexico Fulfillment Centers (approx. 125 sites).

- Led development and implementation of Pre-Sort Process for upstream management of product prior to disposition. Rolled this out initially Southeast Region and now it has been mandated for NA and is being used in the EU and APAC. This process has resulted in an increase in compliance with waste processing.
- Evaluated the inefficiencies with waste classification process to develop a design concept behind the new technology in what is now called Gensuite Waste Tracker program. Led the design concept for this tool which automates what waste hazards are assigned to every nonsalable product and reduces the classification time. This tool is now being utilized in all of NA and EU geographies.
- Developed a screening tool guidance document instructing sites on how to answer the applicable questions in the ENHESA self-assessment audit. This enabled sites across several businesses to be more efficient in focusing on only the questions that have the greatest likelihood of applying to our operations. This resulted in an overall YoY reduction in findings with the ENHESA audit.

Alcoa Inc.

Environmental Manager, Rigid Packaging | 2010 to 2015

Oversaw the environmental program and staff that provided day-to-day environmental support for Tennessee Operations. Led the deployment of an environmental dashboard system for Tennessee Operations. The deployment included the management of personnel, schedule and costs. Experience included:

- Led the environmental commissioning of the automotive production expansion at the facility. This included securing permits, overseeing construction of environmental systems (wastewater, air scrubber, etc.), leading PHA's for environmental systems and performing project completion assessments to facilitate project handover.
- Restructuring the Environmental Department and its assets to more effectively manage environmental issues and drive accountability to the department level. This resulted in an 80% reduction in compliance issues from 2010 to 2011.
- Developing and implementing environmental dashboard to be utilized in each operating department at the facility.

Alcoa Inc.

Environmental Superintendent, Smelting Operations | 2008 to 2010

Oversaw the environmental program and provided day-to-day support for the Smelting Operations and eight (8) hydro facilities. Led the deployment of an environmental data management system for Alcoa operating facility in Indiana and supported global and corporate deployment. The deployment included the management of personnel, schedule and costs. Experience included:

- Implementation of the Air Data Module for Tennessee Operations. This system included the acquisition of production data, execution of emission calculations and the generation of reports.
- Implementation of the Waste Module for Warrick Operations. This system included the management of waste shipments, the creation of manifests, and tracking of waste quantities and cost.
- Developed and delivered environmental training to operational and leadership staff.
- Led the Smelter Fluoride Team in identifying and solving a legacy issue resulting in a subsequent 30% improvement in performance.

Alcoa Inc.

Environmental Supervisor, Environmental Department | 2005 to 2008

Oversaw the water program and provided day-to-day support for two operational departments. Led the deployment of environmental data system for Tennessee Operations and supported GPP and Corporate deployment. Experience included:

- Implementation of the Task and Compliance system for Tennessee Operations. This system includes compliance and task management for environmental issues.
- Participation in the Corporate and Business Unit deployment steering teams.
- Developed, implemented and manage automated incident system for Tennessee Operations.

Alcoa Inc.

Sr. Environmental Engineer, Environmental Department | 2002 to 2005

Conducted compliance audits and provided regulatory analysis and permitting support for the air program at Tennessee Operations. Experience included:

- Implemented the Title V Information Management System. This system includes collecting daily Title V permit data from production systems and integrating it to ESS Air Module for emission calculation and compliance verification.
- Developed and update environmental webpage for Tennessee Operations. Developed, implemented and manage automated incident system for Tennessee Operations.
- Preparation of Toxics Chemical Release (TRI) Report for Tennessee Operations.

- Led Tennessee Operations in its quest to become ISO 14001 certified which required performing risk assessments on significant environmental impacts.

IT Corporation

Project Engineer, Air/Compliance | 1994 to 2002

Conducted compliance audits and provided regulatory analysis and permitting support for commercial and government clients. Experience included:

- Developing Risk Management Programs for both commercial and government facilities. The program involved applicability/eligibility determinations, hazard assessment, off-site consequence analysis (including air dispersion modeling), process safety analysis (including conducting a process hazards analysis (PHA)), accident prevention program development, and Risk Management Plan development.
- Preparation of air permit applications for chemical manufacturer and an aerospace facility. Responsibilities included site visit, emission estimate calculation, and preparation of application forms.
- Task Manager for an extensive air emissions inventory covering more than 700 sources. Responsibilities included regulatory analysis, completion of the Title V permit application, identification of all emission points, preparation of process flow diagrams, estimation of emissions, and oversight and scheduling of project personnel.
- Provided support for an extensive air emissions inventory and Title V permit application for glass manufacturing plants in California and Georgia. Responsibilities included identification of emission points, regulatory analyses, and detailed emission estimates.
- Coordinated and conducted multi-media compliance audits for a commercial & consumer equipment manufacturer. Responsibilities included developing audit protocol, staffing the audits, leading the audits, and preparing the reports.
- Provided multi-media compliance assistance to automotive facilities located in Tennessee, Kentucky, and London, Ontario. Responsibilities included developing and presenting a multi-media compliance and auditing training session to corporate personnel and participating in corporate multi-media audits for the Kentucky and Ontario facilities. Additional responsibilities included preparing permit applications (air, storm water, wastewater treatment), SARA Tier II and TRI reporting, interpreting environmental regulations and applicability determination for the facility, negotiating permit conditions with regulatory agencies, and providing input in plant design with regards to environmental issues. A volatile organic compounds (VOC) tracking system for the Tennessee facility was developed to demonstrate compliance with their air permit requirements.
- Provided multi-media compliance assistance to a light-duty construction equipment manufacturing facility located in Tennessee. Responsibilities included preparing permit applications, interpreting environmental regulations and applicability determination for the facility, negotiating permit conditions with regulatory agencies, and providing input in plant design with regards to environmental issues.

IT Corporation

Project Engineer, Environmental Compliance Management Services | 1991 to 1994

Conducted compliance audits and provided regulatory analysis for commercial and government clients. Experience included:

- Providing an extensive baseline air emissions inventory for a large government complex. Responsibilities included identification of all emission points, preparation of process flow diagrams, preparation of building layout drawings, and an estimation of emissions.

- Preparing RCRA Part B permit applications for government operations. Responsibilities included collection of data, preparation of location drawings, and regulatory review.
- Preparing Superfund Amendment and Reauthorization Act (SARA) Title III reports for commercial and governmental clients.

Westinghouse Savannah River Company

Environmental Engineer, Separations Program Environmental Group | 1989 to 1991

Provided Separations facilities environmental compliance support. Experience included:

- Responsibility for the coordination of spill control efforts including conducting annual spill response training to facility personnel.
- Responsibility for seven discharge points. Activities included coordinating and scheduling monthly sampling, preparation of monthly monitoring reports, preparation of NPDES permit, and implementing corrective action when necessary.
- Prepared SPCC plans and Best Management Practices (BMP) for the Separations facilities.



PUBLICATIONS

- Author. "Saving on Compliance", *Pollution Engineering Magazine*. June 2007 Issue.