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(she/her)

Margaret C. Pollock, M.S.

Managing Environmental Scientist

Ms. Pollock is an environmental scientist with 20 years of professional experience in quantitative data analysis, research, and database development to support a wide range of environmental projects, including hazard assessment, exposure assessment, cost evaluation, and historical operations. She has been instrumental in developing interactive information management tools to summarize literature reviews and to record hazard assessments for thousands of chemicals in multiple countries. She has also researched and documented historical operations at dozens of sites for litigation related to environmental liability and historical state of knowledge.

Areas of Expertise

- Exposure Assessment
- Database Development
- Statistical Methods
- Cost Estimation/Allocation

Services

- Data Quality Management
- Cost Estimation & Analysis
- PRP Cost Recovery/Allocation
- Data Acquisition & Visualization
- Database Development
- Historical Site Analysis

Education

- M.S., Earth Science,
  Dartmouth College
- B.S., Earth and Atmospheric Science,
  Georgia Institute of Technology

Selected Projects

Database Development: Developed database and user interface to record hazard assessment conclusions and chemical registration details for thousands of products. The system allows users to record hazard conclusions at the substance level, and it automates the hazard calculations for mixtures of substances.

Literature Review Dashboard: Developed dashboard tool to summarize results of epidemiology literature review allowing studies to be selected by key elements of study design.

Review of Flame Retardant Levels in Dust: Conducted a comprehensive review of the scientific literature on indoor dust levels of several flame retardants and conducted statistical analyses to determine whether levels varied by type of indoor environment. Published summary of results in peer-reviewed journal.

Review of Arsenic Levels in Food and Air: Conducted a comprehensive review of the scientific literature on arsenic measurements in air and food to inform state of knowledge of arsenic exposure through inhalation and diet. Published summary of results in peer-reviewed journal.

Statistical Analysis of Exposure Data: Evaluated relationships between metal exposures and health outcomes using data from the National Health and Nutrition Examination Survey (NHANES).

Human Health Risk Assessment: For toxic tort litigation, evaluated cancer and non-cancer risks from potential exposure to chlorinated solvents in private well water based on monitoring and private well data, as well as individual exposure information.

Cost Estimation: Used probabilistic cost modeling tools to develop a total cost distribution, cash flow forecast, and expected value for a portfolio of utility sites.

Cost Allocation: Used information about historical operations, waste disposal practices, and site characterization data to implement a multi-party cost allocation for past and expected future costs associated with the groundwater remedy presented in the Interim Record of Decision for a site in California.

Selected Publications and Presentations

Handler, JI; Gutierrez, SR; Mayo, MJ; **Pollock, MC.** 2018. "GIS for environmental litigation." *Bloomberg Environmental and Energy News.* September 18.

Lewis, AS; Reid, KR; **Pollock, MC;** Campleman, SL. 2012. "Speciated arsenic in air: Measurement methodology and risk assessment considerations." *J. Air Waste Manage. Assoc.* 62(1):2-17.

Dodge, DG; **Pollock, MC;** Sax, SN; Petito Boyce, C; Goodman, JE. 2011. "Risk characterization of the brominated flame retardant decabromodiphenyl ethane in indoor dust." *Toxicologist - Supplement to Toxicological Sciences* 120(Suppl. 2):271.

Dodge, DG; **Pollock, MC;** Petito Boyce, C; Goodman, JE. 2009. "Review of brominated and halogen-free flame retardant levels in indoor dust." *J. Environ. Protection Sci.* 3:58-74.