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(she/her)

Areas of Expertise

- Contaminant Fate & Transport
- Exposure Reconstruction & Assessment
- Emerging Contaminants/PFAS
- Multimedia Spills & Releases
- Historical Site Investigation
- PRP Cost Recovery/Allocation

Education

- M.S., Environmental Engineering, Rice University
- B.S., Civil & Environmental Engineering, Rice University
- Licensed Professional Engineer in Virginia

Hilary J. Robinson, M.S., P.E.

Senior Environmental Engineer

Ms. Robinson is a licensed environmental engineer with over 15 years experience in exposure reconstruction and the evaluation of chemical fate and transport processes, particularly related to large-scale chemical releases with multimedia impacts and/or emerging contaminants. She conducts ecological, occupational, and public health evaluations for contamination- and incident-related exposures. Ms. Robinson has provided technical support for toxic tort, cost liability/allocation, and CERCLA projects that span across many industries, environmental media, and contaminants, including oil, per- and polyfluorinated substances (PFAS), radionuclides, polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), glycol ethers, and metals.

Selected Projects

Regional PFAS Investigation: Developed a system to identify and map likely sources of PFAS within a riverine watershed, including likely discharge pathways and relative contributions. Assessed potential sources, regulatory drivers, and permit status.

Cost Allocation: Developed technical models to allocate CERCLA remediation costs in an urban waterway, based on chemical sampling of PCBs, PAHs, and other contaminants. Identified potentially responsible parties (PRPs) and performed assessments of historical industry releases to support allocation proposals.

Risk Evaluation for Pipeline Spills: Used hydrocarbon fate and transport modeling to evaluate ecological and health risks posed by large, interstate pipelines. Participated in meetings to convey results to regulators and stakeholders.

Radioactive Material Exposure Assessment: Conducted community exposure assessments and provided expert support to toxic tort actions involving alleged releases from radioactive material disposal sites. Quantified historical releases to various environmental media and individual dose reconstruction.

Assessment of Semiconductor Manufacturing Exposures: Conducted occupational exposure reconstruction and assessment at historical semiconductor manufacturing facilities. Developed individualized worker exposure assessments for manufacturing processes, including the use of glycol ethers.

Exposure Assessment for Airborne Release: Conducted individualized exposure assessments for an airborne emergency incident. Managed an extensive database of multi-organizational sampling data for multi-month exposures to a complex airborne chemical mixture.

Impacts of Oil/Gas Infrastructure: Conducted a spatial assessment of oil and gas infrastructure across thousands of acres of low-lying lands and marsh areas. Evaluated the impacts of such infrastructure on water quality and regional land loss.

Selected Publications and Presentations

Robinson, H; Leitz, E. 2022. "Risk and Liability – PFAS Mitigation and Managing Liabilities." Webinar organized by Regenesys, November 17.

French-McCay, D; **Robinson, H;** Bock, M; Crowley, D; Schuler, P; Rowe, J. 2022. "Counter-historical study of alternative dispersant use in the Deepwater Horizon oil spill response." *Mar. Pollut. Bull.* 180:113778.

Robinson, H; Bauer, G. 2020. "A Toolbox for Exposure Assessment of Large Chemical Releases and Spills." Poster presented to International Society of Exposure Science, Annual Meeting.

Robinson, H; Gardiner, W; Wenning, R; Rempel-Hester, MA. 2017. "Spill impact mitigation assessment framework for oil spill response planning in the Arctic environment." *Int. Oil Spill Conf. Proc.* 1:1325-1344.