

# Tony Finding, CHMM

Director, Remediation Strategies



3157 Limestone Rd, Cochranville, PA 19330

Office: 610.593.5500 | Direct: 610.806.5287 | Email: tfinding@bstiweb.com

## Areas of Specialization

- Risk management for contaminated sites
- Environmental permitting and compliance
- Environmental chemistry and field analysis
- Construction site management
- Life-cycle costs analysis
- Remedial investigations, technology evaluations and feasibility studies
- Remediation system design, implementation and operation
- Remediation system troubleshooting, rehabilitation and optimization of existing or underperforming systems
- Design and implementation of enhanced in-situ bioremediation (EISB) programs
- Design and implementation in-situ chemical oxidation (ISCO) and in-situ chemical reduction (ISCR) programs
- Industrial wastewater process performance and process evaluations
- Industrial wastewater process upgrades and optimization support

## Overview of Project Experience

- Environmental Professional since 1997.
- Directly responsible for the management and implementation of over 300 remedial projects throughout the Mid-Atlantic Region.
- Completed numerous remedial investigations and feasibility studies coupled with life-cycle cost analysis to determine the most appropriate remedial alternative given site circumstances and closure goals.
- Directed the rehabilitation, modification and/or troubleshooting of existing remedial systems that were designed, installed and operated by others. The rehabilitation of the existing systems facilitated operational efficiency from both compliance and cost perspectives.
- Experienced with conventional and innovative remedial technologies including: air sparging, soil venting, dual-phase extraction, NAPL recovery systems, groundwater treatment systems, advanced oxidation systems and thermal remediation.
- Skilled in decommissioning, demolition and recycling at remediation sites.

## Education

B.S., Environmental Science  
Slippery Rock University, 1997

## Registration/Certification

Certified Hazardous Materials  
Manager (CHMM)

NJDEP certified Industrial Wastewater  
Treatment System  
Operator (Class – N2)

Maryland certified Industrial  
Wastewater Works Operator  
(Class 1)

OSHA certified Hazardous Waste  
Operations and Emergency  
Response  
(HAZWOPER per 29 CFR 1910.120)

OSHA certified Confined Space  
Entry & Rescue Training  
(per 29 CFR 1910.146)

## Affiliations

Institute of Hazardous Materials  
Managers

Interstate Technology and  
Regulatory Council (ITRC) –  
Remediation Management  
of Complex Sites





## Overview of Project Experience (continued)

- Managed and implemented numerous groundwater monitoring programs under Pennsylvania's Land Recycling and Environmental Remediation Standards Act (Act 2).
- Managed and implemented numerous groundwater and surface water monitoring programs under EPA Regions II and III oversight.
- Experienced in National Pollution Discharge Elimination System (NPDES) permitting and compliance monitoring.
- Experienced in air permitting and compliance monitoring.
- Knowledgeable in the collection and identification of freshwater macro-invertebrates.
- Experienced in bench and field water chemistry instruments and analyzers to determine appropriate treatment technologies.
- Completed numerous bench-scale treatability studies for in-situ and ex-situ treatment technologies.

## Key Projects

- **Petroleum Pipeline Installation Support, Pennsylvania.** Responsible for managing a team of Pennsylvania-licensed P.G.s and field technicians to oversee each horizontal directional drill location to ensure adherence to approved drilling techniques, specifications and materials for the installation of a pipeline across hundreds of miles through Pennsylvania.
- **Drinking Water Supply Compliance, NJ/PA.** Assembled a team to collect hundreds of grab, first-draw and follow up flush samples for lead and copper analysis to ensure compliance with Federal and State regulations.
- **Mushroom Growing and Processing Facility, Kennett Square, PA.** Retained to evaluate circumstances causing discharge permit non-compliance for TSS and BOD from a wastewater system. A thorough evaluation of mechanical and chemical processes identified certain design parameters that required an upgrade to manage increased throughput.
- **Manufactured Gas Processing Plant, Philadelphia, PA.** Managed the installation and operation of a 39-point air sparge system and 9-point soil vapor extraction system to prevent offsite migration of vapor, adsorbed and dissolved-phase benzene impacts.
- **Dry Cleaner, Hockessin, DE.** Designed an interim remedial measure to reduce chlorinated solvent source impacts to groundwater. Highlights included innovative SVE extraction point design to capture sparge gases.
- **EPA Region III NPL Site, Malvern, PA.** Optimized and operated an enhanced in-situ bioremediation system to reduce dissolved chlorinated solvents in fractured bedrock.
- **EPA Region II NPL Site, Bridgeport, NJ.** Responsible for Record of Decision implementation for three operable units at the site. Activities included: wetland monitoring, sediment and surface water sampling, low-flow purging and sampling, start-up and optimization of a groundwater pump and treat system and implementation of a thermal remediation remedy for source reduction.



## Key Projects (continued)

- **Quarry Best Practices, Beach Bottom, PA.** Developed a hazard communication plan for the excavation and transportation of materials containing silica and asbestos-containing material (ACM).
- **Potable Drinking Water Treatment, Northeast, MD.** Successfully completed a treatability study to address TBA impacts in a drinking water source using advanced oxidation techniques. Results provided the parameters for a full-scale treatment system.
- **Truck Washing Facility, Bridgeport, NJ.** Designed an industrial pretreatment system to reduce chemical tanker wash water to acceptable levels for disposal. Treatment techniques included oil/water separation followed by pH adjustment.
- **Chemical Manufacturing Facility, Cincinnati, OH.** Managed the permitting and implementation of an ex-situ advanced oxidation groundwater treatment system to address 1,4-dioxane.
- **Chemical Manufacturing Facility, Hoboken, NJ.** Conducted a long-term ozone/hydrogen peroxide injection feasibility study to address groundwater impacts of fuel oils, chlorinated solvents and BCEE. Pilot testing results indicated successful reduction of chemicals of concern.
- **Former Automotive Manufacturing Facility, Newark, DE.** Designed and implemented a large-scale remediation project to address residual soil and groundwater impacts from former paint operations. Chemicals of concern included petroleum compounds, chlorinated solvents and xylenes. The system consisted of 32 vertical soil vapor extraction points, 16 horizontal soil vapor extraction points and 32 air injection points. Also performed bench-scale treatability studies for in-situ chemical oxidation techniques.
- **Former Retail Petroleum Station, Clarksville, DE.** Designed and implemented a multi-phase extraction system to remove over 28,000 pounds of contaminants.
- **Chemical Manufacturing Facility, Ambler, PA.** Performed bench-scale treatability studies and designed and implemented an ex-situ advanced oxidation groundwater treatment system utilizing a combination of ozone and hydrogen peroxide to address elevated concentrations of 1,2-DCA in fractured bedrock.
- **Electric Generating Facility, Ocean City, NJ.** Performed feasibility studies to address residual NAPL. Studies resulted in the design and implementation of a dual phase extraction system to successfully achieve site closure.
- **Publishing Company, Easton, MD.** Optimized an underperforming NAPL recovery system to achieve site closure within two years of taking over the project.
- **Bulk Fuel Storage Facility, Boothwyn, PA.** Redesignated an under-performing remediation system to achieve site closure. Prior remediation equipment was repurposed on-site to minimize cost to closure.
- **Electric Generating Facility, Millsboro, DE.** Project Manager / Principal Operator of a large-scale, multi-technology remediation system addressing a 500K gallon NAPL plume. Remedial technologies include: NAPL recovery enhanced with groundwater depression, total phase extraction and in-situ chemical oxidation.

## Guidance and Research Committees

- Member of Interstate Technology Regulatory Council (ITRC) PFAS Team to produce a technical-regulatory guidance document and internet-based training course.
- Member of the ITRC Optimizing In-Situ Remediation Performance & Injection Strategies Team to produce a technical-regulatory guidance document and internet-based training course.



## Guidance and Research Committees (continued)

- Co-author of the ITRC web-based fact sheets; PFAS Fact Sheets (2018).
- Co-author of the ITRC web-based document; Remediation Management of Complex Sites (2017)
- Assisted the Pennsylvania Department of Environmental Protection in a bio-essay study to monitor the reclamation of streams contaminated from acid mine drainage.

## Peer Reviewed Publications

Interstate Technology & Regulatory Council (ITRC). 2018. *PFAS Fact Sheets PFAS-1*. <https://pfas-1.itrcweb.org/fact-sheets>

Interstate Technology & Regulatory Council (ITRC). 2017. *Remediation Management of Complex Sites RMCS-1*. <https://rmcs-1.itrcweb.org/>