



## PROFESSIONAL SUMMARY

Mr. McCown is a founding member of PPM, and has 28 years of experience in the environmental field. Mr. McCown's expertise includes environmental studies, soil and groundwater contamination assessment and remediation, due diligence associated with real estate transactions, brownfields redevelopment, regulatory compliance, and aquifer studies. Mr.

McCown has a wide range of experience in the environmental field throughout the southeastern U.S., and is responsible for client and regulatory agency communication, contract and regulatory negotiations, project management, quality assurance/quality control, technical review of documents, work plan preparation, training and managing technical staff, management of day-to-day company affairs, and development of long term business strategies. Mr. McCown authored many of the technical standards and QA/QC procedures used by PPM. Mr. McCown serves as the client and regulatory liaison on complex projects throughout the firm.

## Qualifications Summary

### Areas of Expertise:

- Project Management
- Hydrogeologic Investigations
- Client and Regulatory Liaison
- Groundwater Remediation
- Data Analysis/QA/QC
- ADEM regulations and procedures
- Environmental Due Diligence
- Brownfields Redevelopment

### Experience:

- 28 years of experience in environmental consulting

### Education:

- B.S. in Geology, 1982
- Professional Geologist (AL, MS, TN)

## RELEVANT EXPERIENCE:

- **Expert Witness** for a law firm representing the owner of a bulk petroleum terminal impacted by gasoline released from an adjacent terminal. Tasks completed included review of historical data back to 1955; evaluation of the fate, transport, and magnitude of petroleum impact to soil and groundwater; evaluation of the effectiveness of current remedial efforts and recommendations for improvements; preparation of a regression analysis model to predict the time frame for dissolved hydrocarbons in groundwater to decrease below target remediation goals; preparation of a financial analysis to generate a present value equivalent to the future stream of expected remediation costs; evaluation of alternative risk-based, engineering controls, and institutional controls to reduce remediation costs.
- **Project Manager/Senior Geologist** on a data evaluation project for the largest gasoline plume in the state of Alabama. PPM was retained by a law firm to evaluate investigation and remediation progress of a release from an UST at a north former gas station now owned by a bank. PPM reviewed 15 years of historical data, and provided a summary of hydrogeologic conditions, completeness of previous investigation events, and feasibility of proposed remedial actions. Cost estimates were provided to take the site to closure and to quantify potential costs associated with achieving no further action status. The data was presented to all parties to the transaction through an on-line webinar.
- **Project Manager/Senior Geologist** for a law firm representing a corporation who owns property impacted by a large release of petroleum from an adjacent pipeline. Tasks completed included review of historical assessment data; evaluation of the fate, transport, and magnitude of petroleum impact to

soil and groundwater; evaluation of the effectiveness of current remedial efforts and recommendations for improvements, and client representation of findings and recommendations for future actions.

- **Program Manager/Client and Regulatory Liaison** at an emergency response assessment and remediation site in Madison, Alabama where an 8,000 gallon gasoline release from a UST had migrated over 1 mile and impacted one of the largest municipal supply wells in the state. Tasks completed included coordination with emergency responders, EPA, ADEM, and the media; tank removal and excavation; installation of 22 soil borings/monitoring wells to determine fate and transport through three different saturated zones (including fractured bedrock); sinkhole evaluation; electromagnetic resistivity surveys to map the top of bedrock; free product recovery using mobile enhanced multi-phase extraction; and design/installation of a Dual Phase Vacuum Extraction System as the long term remedy. All work was conducted on an emergency basis.
- **Program Manager/Client-Regulatory Liaison** at a bulk petroleum terminal in Montgomery, Alabama that experienced a release of an estimated 120,000 gallons of gasoline to groundwater in the vicinity of a city well field. Managed the emergency investigation and remediation efforts that included installation of 35 monitoring and recovery wells, and five remediation systems within 41 days of release discovery. Project required close coordination with client, ADEM Groundwater Branch, ADEM Air Division, and the City of Montgomery. To date the remediation program has recovered over 98.9 percent of the release. Assisted with extensive file review for the other bulk terminals in the area and by groundwater modeling determined the likely source of all MTBE was from a 1984 gasoline release at another terminal located over 1,200 feet to the south. Assisted with preparation and delivery of complex presentations to a Fortune 500 client and ADEM to discuss the progress of the project and the MTBE issue. A risk assessment was completed and no further action status is anticipated in the near future.
- **Project Manager/Senior Geologist** on a data evaluation project associated with a release of odorant from a natural gas transmission facility. PPM reviewed all available historical information related to the release, conducted interviews with responsible regulatory agency personnel, and utilized our existing knowledge regarding the release from prior reviews to form an opinion on the adequacy of the previous investigations, the effectiveness of the current remedial efforts, and potential short-term and long-term costs to bring the site to regulatory closure. Assisted in development of a site conceptual model to gain a full understanding of the hydrogeologic, chemical, and fate and transport mechanisms at the site; review of the effectiveness of the remedial efforts, and development of a financial model to analyze the potential short and long term costs associated with gaining regulatory closure.
- **Project Manager/Senior Hydrogeologist** for a hydrogeological investigation at a 100 year old port and materials storage facility in Decatur, Alabama. Soil and groundwater impact was found during a Phase II Environmental Site Assessment. Assisted with entry of the site into the ADEM Voluntary Cleanup Program; prepared work plan for subsurface investigation; provided oversight of field personnel during the delineation phase; developed remedial alternatives; oversaw risk assessment, and provided all client/regulatory liaison. The site is in the monitoring phase now and nearing receipt of an ADEM Concurrence Letter.
- **Project Manager/Technical Lead** responsible for conducting and/or managing over 130 environmental investigations to delineate the horizontal and vertical extent of petroleum hydrocarbons in soil and groundwater as a result of releases of motor fuels from USTs across a five state area. Assessments included installation of soil borings and monitoring wells, soil classification, geologic/hydrogeologic characterization, and development of assessment reports.
- **Senior Reviewer:** Served in senior review role for PPM's Birmingham, Alabama, Monroe, Louisiana, and Jackson, Mississippi offices for an approximate 12-year period. Documents included Site

Characterization and Contamination Assessment Reports, Risk Assessment Reports, Work Plans, Pilot Test Plans and Reports, Remedial Alternative Investigation Reports, Remedial Action Plans, Corrective Action Reports, Operations & Maintenance Reports, and Groundwater Monitoring Reports.

- **Technical Lead:** Assisted with the preparation of work plans, scoping documents, and cost estimates for the \$8 million remediation of a mixed waste site (halogenated DNAPL and petroleum hydrocarbons) at a Department of Energy Young Rainey Star facility in Largo, Florida. Assisted with preparation of documents associated with in-situ electrical heating, steam injection, and vacuum extraction of mixed-waste contaminants at the facility. Cleanup of the site was accomplished in 7 months under a fixed-price remediation contract.
- **Program Manager/Senior Hydrogeologist:** Conducted field investigation at a Mississippi industrial brownfields site (MECO property) where chlorinated hydrocarbon constituents present in soil and groundwater were impacting the sale of property. Assisted with preparation of project QAPP and HASP, developed work plan and cost estimate for client, conducted hydrogeologic study and prepared final report. Developed remedial alternatives and provided senior review of Remedial Action Plan that included source remediation, engineering and institutional controls.
- **QA/QC Manager** for MDEQ Brownfields Contract (direct contract with the State) responsible for preparation of QAPPS and review of technical documents.
- **QA/QC Manager** for City of Jackson, Mississippi EPA Brownfields Assessment Grant contract responsible for data review and technical quality on environmental due diligence projects.
- **Senior Technical Advisor:** Prepared workplan, conducted fieldwork, and prepared report for brownfields project at the proposed LeFleur's Bluff Festival grounds at site of former city landfill and an EPA Brownfields site. Conducted historical research, identified presence of former USTs, delineated the extent of hydrocarbon and lead impact in soil and groundwater using expedited site assessment techniques. Developed Analysis of Brownfields Cleanup Alternatives (ABCA) for addressing impacted media and provided senior management during remediation and client/regulatory interface.
- **Project Manager/Senior Reviewer** on over 100 Phase I environmental Site Assessments at industrial and commercial facilities throughout the Southeast to determine if recognized environmental conditions were present and to determine if soil and groundwater had been impacted by previous operations. Properties assessed have included manufacturing plants, chemical facilities, quarries/mining sites, automotive repair shops, gas stations, commercial buildings, cell tower sites, and large agricultural properties.
- **Program Manager** for the City of Decatur, Alabama EPA Brownfields Assessment Grant. Assisted with preparation of award-winning grant application; assisted City with identification and prioritization of sites; conducted community outreach; promoted program to area lending institutions and real estate professionals; managed all aspects of grant, including technical lead navigating environmental issues on numerous environmental due diligences projects.
- **Program Manager** for large company-wide projects involving Phase I and II ESAs conducted for major petroleum marketer and real estate investment clients at multiple sites spread over a 15-state area.
- **Senior Technical Advisor:** Provided technical assistance and QA/QC for PPM's brownfields technical support role with the HOPE Enterprise Corporation's \$1.3 million Technical Assistance to Brownfields Program (TAB) grant at cities throughout MS and EPA Region 4 and 6.
- **Project Manager/Technical Lead** responsible for the removal of USTs at 22 facilities owned by a major telecommunications company. Responsibilities included the development of specifications and bid

documents, bid evaluation and selection of contractors, contractor oversight, soil and groundwater sampling, report preparation, client management, and regulatory agency negotiations.

- **Project Manager/Technical Lead** for the assessment and remediation of gasoline constituents in the vicinity of the City of Rayville, Louisiana municipal supply well. Benzene was detected in the drinking water, and a combination of source material excavation, Dual Phase Vacuum Extraction, and ORC was used to remediate the site.
- **Developed and implemented Corrective Action Plans** at multiple impacted sites throughout the Southeast. Technologies have included air sparging, ozone sparging, vacuum extraction, mobile enhanced multi-phase extraction, Oxygen Release Compounds, Dual-Phase Vacuum Extraction, and pump and treat.
- **Project Manager** for RCRA Investigation and Closure Plan at an industrial facility in central Alabama. Project included installation of soil borings in the vicinity of a former chemical storage area and landfill; soil sampling and analysis; preparation of report; and Closure Plan.
- **Project Manager and Technical Lead** for a remedial evaluation at a former bulk storage facility near Birmingham, Alabama. Tasks completed include preparation of work plans, additional subsurface investigation, free product recovery, product identification, quarterly groundwater monitoring, completion of a Dual-Phase Vacuum Extraction Pilot Test, preparation of a Corrective Action Plan, and implementation of corrective action.
- **Coordinated emergency response efforts** in the vicinity of a former bulk terminal where a release had impacted property in an adjacent residential neighborhood. Provided design and technical assistance for the installation of an interceptor trench and pumping system; delineation of the horizontal and vertical extent of impact, and pilot testing to evaluate remedial alternatives.
- **Senior Geologist/Principal in Charge** responsible for technical oversight of initial investigation and limited property assessment at an active dry cleaner facility in Birmingham, AL that an out of state developer was seeking to purchase for redevelopment as a strip shopping center. Evaluated findings from a preliminary assessment conducted by another firm, served as client contact with the legal counsel and developer, assisted in work plan development, oversaw a portion of the field operations which included drilling inside of an adjacent building, review of geological data to estimate degree of fracturing and potential to transmit groundwater, determination of depth to bedrock, well installation, soil and groundwater sampling, and determination of groundwater flow direction. Evaluated options for entrance of site into the Voluntary Cleanup program, developed preliminary screening of remedial alternatives, provided advice to client.
- **Senior Geologist** on an initial investigation, property assessment, and remediation plan at a site impacted by coal tar (DNAPL) and other petroleum hydrocarbon constituents at an industrial facility in Riverside, AL. Tasks completed included in-place closure of three underground storage tanks, installation of groundwater monitoring and recovery wells, free product recovery using Mobile-Enhanced Multi-Phase Extraction pilot testing to determine the feasibility of using Dual-Phase Vacuum Extraction to remediate the site, and preparation of a remedial action plan.
- **Project Manager/Lead Geologist** for 19 Wellhead Protection/Source Water Assessments in Alabama with the objective of determining the source and flow pattern of groundwater in the vicinity of municipal wells. The studies included geologic and hydrogeologic mapping across large areas, design and implementation of dye trace studies, identification of potential and known sources of groundwater contamination, and report preparation.

- **Senior Geologist** responsible for review of work product associated with numerous Surface Water Source Water Assessment studies in Alabama with the objective of detailed hydrologic and geologic description of watershed and Source Water Protection Area (SWPA) of the water system intake. The studies included contaminant inventory and GIS map production of contaminants in the SWPA, susceptibility analysis of the contaminants in the SWPA, and contingency plans in the event of a contamination event.
- **Project Manager** assisting in preparation of work plans and cost estimates for municipal well siting studies to evaluate locations most likely to yield reliable groundwater supplies in north Alabama. Studies included geologic mapping, lineament analysis, and use of Electrical Resistivity Imaging (ERI) to identify zone of potential high porosity.
- **Project Manager/Lead Geologist** for groundwater quality monitoring at two industrial waste landfills at paper mills in Texas.

#### EDUCATION/AFFILIATIONS:

- B.S. Geology – University of South Alabama - 1983
- Registered Professional Geologist
  - Alabama (207)
  - Mississippi (158)
  - Tennessee (3453)

#### TRAINING/PUBLICATIONS/AFFILIATIONS

- Technical Presenter at Alabama State Bar-Environmental Section on regular basis.
- Technical Presenter at numerous EPA Brownfields Conferences
- Technical Presenter at Alabama Water Federation and Alabama Environmental Conferences
- Hazardous Waste Worker Training Seminar 29 CFR 1910.120, and Refreshers: 1989 through 2015.
- Alabama Risk-based Corrective Action Course, The RAM Group, Birmingham/Montgomery, Alabama
- 5<sup>th</sup> International Conference on Remediation of Chlorinated and Recalcitrant Compounds, Battelle Memorial Institute, Monterey, California
- National Groundwater Association