

ERIN ABEL, RG

## Education

MS – Environmental Science, University of Arizona, 2016

BS – Geosciences, University of Arizona, 2011

## Professional Licenses

Registered Professional Geologist – Arizona (No. 80148)



## Specialty Certifications

OSHA 40-hour HAZWOPER Certification

OSHA 8-hour HAZWOPER Annual Refresher

Certified Environmental Scientist

ESRI Basics of Mapping Certificate

CPR/First Aid/AED

## Professional Affiliations

Environmental Information Association

Society of American Military Engineers

Southern Arizona Environmental Management Society

National Groundwater Association

## Professional Experience

As a Hydrogeologist, Ms. Abel has strong field work skills coupled with data analysis experience leveraged to manage multiple projects while maintaining important deadlines, budgets, and production schedules for professional reports. With a Master's degree in Environmental Science and a strong technical background in state and Federal regulations, including the Safe Water Drinking Act (SDWA), Clean Air Act (CAA), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), National Environmental Policy Act (NEPA), Clean Water Act (CWA), and Resource Conservation and Recovery Act (RCRA), Ms. Abel is equipped to complete hands-on remediation studies and projects. Equally confident working independently or as part of a dynamic team, she is focused on collaboration in driving project goals and initiatives.

As a Project Manager in SCS's Tucson, AZ, office, Ms. Abel engages with clients, regulators and stakeholders, prepares project proposals, leads project teams, and manages project schedules and budgets. She conducts Phase I and Phase II investigations and provides remediation and environmental compliance services. She prepares Spill Prevention Control and Countermeasure Plans (SPCCPs) and is a risk assessor for Leaking Underground Storage Tank (LUST) case closure. She also reviews mine reclamation plans, performs reclaimed mine inspections, and conducts industrial wastewater monitoring and interpretation of laboratory analytical results and data verification.

Prior to joining SCS, her work included a range of responsibilities, as noted below.

**Arizona Department of Environmental Quality (ADEQ), Phoenix, AZ.** As a Hydrogeologist III, Project Manager, and Junior Risk Assessor, Ms. Abel worked alongside environmental consultants to characterize, remediate, and risk assess LUST sites. She managed projects in the State Lead and Preapproval programs that included leading meetings, managing budgets and invoices, approving scopes of work, gaining site access, and closure activities. She managed complex agency priority sites in conjunction with the ADEQ's Principle Hydrogeologist and Principle Environmental Engineer, including interpreting data trends and constructing conceptual site models. She was trained in risk assessment and completed Tier 3 soil-only closures. She worked alongside ADEQ's Senior Risk Assessor as a Junior Risk Assessor to evaluate and close LUST sites via A.A.C. R18-12-263.04. She mentored staff and environmental consultants regarding risk assessment requirements, soil vapor surveys, and modeling. She worked to activate 12 stalled LUST projects, resulting in 4 closures, and successfully closed 51 LUST sites, starting in 2019. Seventeen of these sites were more than 20 years old.

**ADEQ, Phoenix, AZ.** As an Environmental Scientist II, Compliance Assistance Coordinator, Ms. Abel utilized 40 CFR 141 and 142, as well as Arizona State statutes, to determine Public Water System compliance. She assisted Public Water Systems through outreach, training events, and guidance on compliance with the SDWA. She standardized daily, monthly, and yearly activities, and analyzed drinking water contaminant results in assisting systems to return to compliance after exceeding Maximum Contaminant Levels (MCLs). She worked to radically simplify and improve processes, templates, reports, and outreach in assisting Public Water Systems with compliance. She worked on a project to prevent future Arsenic MCL exceedances, and created and submitted a Primacy Package for the Arsenic Rule to the U.S. EPA.

**Geosystems Analysis, Inc., Tucson, AZ.** Ms. Abel worked as a subcontractor GIS Specialist who employed ArcGIS and AutoCAD programs to create and edit spatial data for use in environmental technical reports. She created maps modeling topographic, geologic, and hydrologic features. She collected and validated attribute data, as well as maintained geodatabases for project site areas. She also analyzed geologic, hydrogeologic, and geochemical data in order to create groundwater elevation and water quality maps and cross sections.

**Knight Federal Solutions, Fort Huachuca, AZ.** Ms. Abel was the Range and Training Land Management (RTLTM) and GIS Coordinator for the U.S. Army's Sustainable Range Program. She used ESRI's ArcGIS to create, maintain, and analyze GIS data for the Integrated Training Area Management (ITAM) and RTLTM agendas through the U.S. Army's Sustainable Range Program. She performed geospatial analyses to build surface danger safety zones for new U.S. Army training ranges and artillery zones, and to assess and plan land repair. The position required knowledge of endangered and threatened species in the Fort Huachuca, AZ, area, in order to plan land training and remediation. Maps were used by U.S. Army departments and soldiers in planning training and land use operations.

**University of Arizona, Department of Geosciences, Tucson, AZ.** Ms. Abel was the Assistant Lab Manager for the AZ Radiogenic Helium Dating Lab. Peter Reiners, PhD, was the Lab Director who managed numerous laboratory functions, including budget development and implementation, billing, customer relations, sample handling, sample processing, and data collection, management, and analysis. Ms. Abel collaborated with a colleague in supervising and directing staff, in addition to providing comprehensive training. She conducted technical sampling, including preparing and running samples for thermochronologic and geochronologic dating. She contributed to industry practice through preparing and editing technical reports, journal articles, and manuscripts, in addition to significant contributions to the text, *Thermochronology & Geochronology*, published in

October 2017, she maintained top safety standards in managing radioactive and hazardous materials, per OSHA and state regulations.

**University of Arizona, Department of Soil and Environmental Science, Tucson, AZ.** Ms. Abel was a Field Technician with the Contaminant Transport Group, whose lab was directed by Mark Brusseau, PhD. Ms. Abel orchestrated sample collection of groundwater from existing wells, following EPA standard operating procedures, using compressed air-driven bladder pumps, mechanic bladder pumps, and peristaltic bladder pumps. She rotated 24-hour shifts to measure groundwater levels and collect sediment samples, using a sediment sleeve from a direct-push Geoprobe. She observed the initial installation of new groundwater wells and conducted field testing using a portable VIS spectrophotometer to measure sulfate, sulfide, and nitrate concentrations. In addition to preparing groundwater and soil samples for processing in the lab, she compiled and analyzed geochemical data from lab results. Findings were presented in technical documents to the Department of Energy (DOE) for inspection and publication.

**PIMA Community College, Department of Sciences, Tucson, AZ.** Ms. Abel was a Lab Specialist in the Chemistry Department, working under the supervision of Yuwen Ding, PhD., the Lab Supervisor who coordinated experiments across numerous disciplines, including biology, chemistry, and physics. These experiments were conducted for lead professor(s) to understand and implement primary objectives for the lab activities. She managed appropriate safety procedures in line with OSHA and facility regulations and assisted with the professional development of staff by offering training to lab technicians and student employees.

**University of Arizona, Department of Geosciences, Tucson, AZ.** Ms. Abel was a Paleoclimate Technician in the Lab of Paleolimnology under Lab Director Andrew Cohen, PhD, who prepared samples for field oxygen and carbon isotope data collection. She interpreted data to inform paleoenvironmental interpretations and conducted petrographic analyses on sedimentary thin sections. She completed a significant microscopic sediment analysis on 132cm long wet lake core at 2-centimeter intervals in 6 months.