

Sarah Albano, P.E.

Senior Consultant



Education and Credentials

M.S., Geological Sciences,
University of Washington,
Seattle, Washington, 2002

B.S.E., Civil Engineering (with
certificates in Geological
Engineering and Italian),
Princeton University, Princeton,
New Jersey, 1998

Professional Engineer,
Washington (License No. 44409),
Utah (License No. 7501016-
2202), Minnesota (License
No. 55316), Mississippi (License
No. 28766)

Continuing Education and Training

Hazardous Waste Operations and
Emergency Response 40-Hour
Certification (2003; refresher
2019)

Hazardous Waste Operations
Management and Supervisor
8-Hour Certification (2004)

Professional Affiliations

Member of American Society of
Civil Engineers, President (2019–
2020) of the Wasatch Front
Branch of the American Society of
Civil Engineers

Professional Profile

Ms. Sarah Albano is a professional engineer and project manager with 18 years of experience in the environmental field. She specializes in management of upland environmental remediation sites and has prepared numerous feasibility studies, engineering design reports, construction plans and specifications, and construction completion reports. Ms. Albano's project work has included sites with PCB, petroleum hydrocarbon, pesticide, metals, dioxins and furans, and semivolatile organic compounds contamination in soil and groundwater under both Washington state and federal regulatory oversight.

Ms. Albano has served as Integral's corporate quality assurance officer since 2017, ensuring staff are trained and appropriately updated on the policies set forth in Integral's Quality Management Program. She also oversees project quality assurance assessments, pre-deployment assessments for fieldwork, and development of protocols and tools for quality assurance documentation.

Relevant Experience

State and Federal Feasibility Studies, Remedial Action Design, Construction Management, and Operations and Maintenance

Former Wood Treating CERCLA Facility, Columbus, Mississippi—
Project manager for preparation of a human health risk assessment, four feasibility studies for operable units at the site, removal action work plans for Operable Units 1 and 2, and a work plan amendment for a time-critical removal action. Environmental impacts are associated with wood treating processes including dense, nonaqueous-phase liquid (DNAPL) contamination and contaminated soil, groundwater, and off-facility stormwater ditch sediments. Responsible for coordinating client consultant team (including local consultants and contractors), managing community outreach efforts in an environmental justice neighborhood (including construction progress newsletters), managing ongoing site investigations and access, and supporting the construction quality assurance oversight team.

Served as the engineer of record for the implementation of the Operable Unit 1 removal action. The removal action (approximately



\$20 million construction) involved removal of 53,000 cubic yards of creosote-impacted surface soils in a portion of the Superfund site. The time-critical removal action (approximately \$5 million construction) involves removal of stormdrain ditch sediments in 1,200-ft offsite ditches and restoration with a concrete liner.

Former Asphalt Shingle Manufacturing CERCLA Facility, Seattle, Washington—Project manager and senior staff engineer for non-time-critical removal action design and \$5.8 million construction to address PCB-impacted soils in right-of-ways within a residential neighborhood adjacent to a Superfund site. Project included stormwater drainage design, outfall design, and landscaping by other design firms. Responsible for coordination of multidisciplinary design team, communications with EPA oversight team, and coordination between municipal departments during design and construction. Design included preparation of construction contract documents (i.e., drawings and specifications), engineer's estimate, and agency-required documentation (e.g., removal action design report, construction quality assurance plan, community health and safety plan, and removal action work plan).

Coordinated with community outreach and construction quality assurance team to ensure timely, technically accurate communications to the community. Provided office support to construction quality assurance team communicating daily with the onsite engineer of record/quality assurance manager to ensure appropriate communications with the client and oversight agency. Worked with client's project coordinator to ensure that administrative settlement order on consent obligations were met. Supported long-term monitoring and maintenance negotiations.

Former Railroad Maintenance and Fueling Facility, Skykomish, Washington—Project manager for consent decree required multiyear remediation of a former railroad maintenance and fueling facility impacted by total petroleum hydrocarbons (diesel and Bunker C) in soil and groundwater that had migrated to nearby surface water, wetlands, and offsite residential properties. Responsible for communications with regulatory agency (Washington State Department of Ecology) and stakeholder communication through third-party public outreach firm. Coordinated multidisciplinary member project design and construction oversight team from multiple offices. Supported local program manager by ensuring compliance with client contract and client account protocol. Reviewed documents to ensure compliance with consent decree governing site cleanup. Developed tracking system for client costs that allowed for easy identification of account errors. Reviewed NPDES permit applications, 401 Water Quality Certification, and Joint Aquatic Resources Permit Applications submitted to the U.S. Army Corps of Engineers and Washington State Department of Fish and Wildlife for Nationwide 38 permit and Hydraulic Project Approval.

Served as onsite project engineer overseeing field implementation of soil and sediment confirmation sampling program during 70,000-yd³ source removal interim action. Coordinated documentation of structures on the National Register of Historic Places and archaeological monitoring during construction. Managed field data and served as primary field contact with Washington State Department of Ecology. Assisted lead engineer with contractor management.



Former Pesticides Formulation Facility and Petroleum Distributor, Yakima, Washington—Project manager for groundwater monitoring of total petroleum hydrocarbons in the gasoline and diesel/motor oil ranges, benzene, tetrachloroethylene, pesticides, and arsenic as required by the consent decree. Managed groundwater sampling program and responsible for compliance monitoring plan modifications. Served as project engineer, prepared the engineering design report, and provided construction oversight. Construction scope included asbestos and lead inspection; removal of two 4,000-gallon underground storage tanks; screening of excavated materials to retain oversized materials onsite; soil excavation; excavated materials characterization, disposal and backfill; and monitoring well installation. Responsible for communication with the regulatory agency (Washington State Department of Ecology) and coordination with remedial actions on an adjacent third-party property.

Former Gasoline Service Station Site Remediation, Seattle, Washington—Onsite project engineer for construction oversight of removal of 9,000 tons of impacted material, backfilling, grading, and restoration for residential redevelopment. Project scope included Geoprobe investigation, demolition of existing structures, removal of three underground storage tanks, temporary shoring along city right-of-way to facilitate excavation, and dewatering. Was responsible for overseeing the implementation of the specifications and executing the sampling plan.

Feasibility Study for Active Railyards and Surrounding Community, Montana—Project engineer responsible for feasibility study—level cost estimates for a range of remedial actions for remediation of several railyard sites and communities contaminated with total petroleum hydrocarbons and heavy metals to assist in client negotiations. Analyzed site data, estimated excavation volumes, and contacted local contractors to determine unit costs.

Former Wood Treatment Site Remediation, North Plains, Oregon—Served as project manager for monitoring at a former wood treatment site as required in the record of decision. Conducted long-term monitoring for natural attenuation of a DNAPL plume, monitoring of a land treatment facility cap (inspections and groundwater monitoring), data management, and annual reporting to the Oregon Department of Environmental Quality. Contaminants of concern at the site included naphthalene, pentachlorophenol, arsenic, copper, and chromium.

Quality Assurance Review

Upland Source Control at Electric Power Generating Station, Hawaii—Quality assurance reviewer of engineering deliverables for upland source control in association with the U.S. Navy's planned Superfund cleanup of PCB-impacted sediments in Pearl Harbor. Ensured consistency across multiple design basis documents and work plans, engineering plans, and specifications.

Project Management

Former Wood Treating RCRA Facility, Meridian, Mississippi—Project manager during preparation of the Phase II RCRA investigation report for a former wood treating facility. Environmental impacts are associated with wood treating processes including DNAPL. Coordinated with client consultant team including local consultants and contractors. Maintained project schedule and milestones.



Watershed-Based Superfund Site, New Jersey—Deputy project manager for the remedial investigation of a site encompassing six boroughs in New Jersey. Provided administrative support to project manager by preparing, revising, and tracking contract change order requests; tracking authorizations and budgets; preparing invoices in compliance with the contract; and conducting routine communications.

Superfund Site, Portland, Oregon—Project manager for multi-parcel owner within the Portland Harbor Superfund Site. Supporting legal team in review and preparation of documents for allocation, including preliminary party site summaries, responses to third-party allegations of historical practices resulting in contamination of downgradient properties, and expert opinions. Responsible for financial reporting to client, estimates of liability, and compliance with client company protocols.

Publications

Albano, S., and A. Luz. 2019. What are per- and polyfluoroalkyl substances (PFAS), why is there concern about them, and how can civil engineering help? Technical article in October 2019 newsletter. Available at: <https://asceutah.com/news.php?id=33#>. American Society of Civil Engineers, Utah Section.

