

Stephen Sherman, P.G.

Senior Scientist



Education and Credentials

B.S., Earth and Planetary Science, University of California Santa Cruz, Santa Cruz, California, 2008

Professional Geologist, California (License No. 9240)

Continuing Education and Training

Hazardous Waste Operations and Emergency Response 40-Hour Certification (2008 with annual refreshers)

Hazardous Waste Operations Management and Supervisor 8-Hour Certification (2013)

Trenching and Excavation, NES, Inc. (2011)

Radiation Safety and Use of Nuclear Gauges, InstroTek, Inc. (2013)

Transportation Worker Identification Credential (2008, 2013)

First Aid and CPR Certified (2008 with biennial refreshers)

Professional Affiliations

Association of Environmental & Engineering Geologists

Groundwater Resources Association of California

Professional Profile

Mr. Stephen Sherman is a licensed professional geologist with 9 years of experience in soil, soil vapor, and groundwater investigation; soil and groundwater remediation; and Phase I environmental site assessments (ESAs). His experience includes managing and leading air, soil, and groundwater site investigations; managing monitoring and sampling programs; implementing various drilling and push technologies; and overseeing the installation and sampling of soil vapor, groundwater monitoring, and extraction wells. Mr. Sherman also has experience in construction management for soil remediation projects and production water supply well construction, remedial performance evaluations, and stormwater pollution prevention plan (SWPPP) inspections and recommendations.

Relevant Experience

Remedial Predesign Investigation at a Chlorinated Solvent Cleanup Site, South San Francisco, California—Managed and led the field effort for a predesign investigation at a site containing a dissolved-phase chlorinated solvent plume underlying multiple properties. The results of the investigation filled delineation and hydrogeologic data gaps and refined the site conceptual model in support of remedial design for enhanced reductive dechlorination, which was combined into a remedial action plan for the site. The investigation field activities included cone penetrometer, membrane interface probe, and hydraulic profiling tool advancement; grab groundwater sampling; monitoring well installation and sampling; and soil vapor sampling.

Soil and Soil Vapor Investigations at Former Fillmore and North Beach Manufactured Gas Plants, San Francisco, California—Acted as the field team lead and project geologist for soil and soil vapor intrusion investigations at residential properties in San Francisco's Marina District. The properties were in the footprint of historical manufactured gas plant operations, and primary chemicals of concern were volatile organic compounds, PAHs, and metals. The investigations typically involved installing soil vapor wells beneath, or adjacent to, the concrete slab foundations for the evaluation of air quality and assessment of potential exposure pathways.



Soil, Groundwater, and Light, Nonaqueous-Phase Liquid Investigations and Remediation for Multiple Release Sites at Golden Eagle Refinery, Martinez, California— Acted as the field lead and project geologist for soil and groundwater investigations at refinery pipeline release sites. Managed groundwater monitoring and sampling programs, performed remediation system tracking, and reported on performance. Evaluated the effectiveness of remedial systems, made recommendations for augmentation or decommissioning based on assessment of light, nonaqueous-phase liquid (LNAPL) mobility using decline curve analysis, and calculated LNAPL transmissivity values from pump data and testing.

Soil and Groundwater Investigation at Former Allied Engineering Facility, Alameda, California— Oversaw the installation and sampling of groundwater monitoring wells and hydropunch locations to further delineate the vertical and horizontal extent of chlorinated solvent dissolved-phase plumes at a former metal working facility.

Phase I and Phase II Environmental Site Assessments at Multiple Car Rental Locations in California, Illinois, New York, and Indiana— Assisted in multiple Phase I ESAs following ASTM International (ASTM) Standard E1527-13 and performed follow-up Phase II soil, soil vapor, and groundwater investigations to further assess identified recognized environmental conditions (RECs) at active and inactive car rental and maintenance facilities in California, Illinois, New York, and Indiana.

Phase I and Phase II ESAs at Rural Ranch-Style Property in Sonoma, California— Performed Phase I ESAs following ASTM Standard E1527-13 supplemented by E2247-08 for two adjacent rural properties with a combined area of 360 acres. Oversaw a follow-up Phase II ESA to further assess RECs identified during Phase I, which included digging test pits to delineate the lateral and vertical extent of a historical burn pit.

Soil Investigation at Former Aggregate Processing Facility, Pleasanton, California— Led the direct-push soil sampling effort involving more than 50 soil borings as part of a Phase II ESA in the footprint of processing buildings and machinery at a former aggregate facility.

Soil, Groundwater, and Soil Gas Investigation at Former Gas Station and Paint Factory, Brunswick, Georgia— Led the field investigation for a Phase II ESA that included more than 100 surface and subsurface soil samples, roto-sonic soil borings, grab groundwater samples, and 70 passive soil gas samplers. The primary chemicals of concern for the site were benzene, PAHs, PCBs, and metals.

Soil Investigation and Remediation at Former Veneer Plant Maintenance Facility, Weed, California— Performed site investigation and excavation oversight activities in the footprint of a demolished maintenance facility. The investigation activities included identification of historical features and soil sampling, digging test pits, and field screening using X-ray fluorescence and hydrocarbon testing tools. Remediation involved the removal of more than 2,100 yd³ of primarily metals-contaminated soil and the collection of confirmation soil samples.



Aquifer Testing at Chlorinated Solvent Cleanup Site, Macon, Missouri—Performed aquifer testing on groundwater wells using submersible pumps to acquire site-specific hydraulic conductivity and transmissivity for groundwater transport modeling.

Construction Management for Soil Remediation at Former Metal Salvage Facility, North Kona, Hawaii—Assisted with construction management for a 7-acre soil remediation project involving removal of more than 22,000 yd³ of lead-impacted soil.

Construction Oversight for Water Supply Production Well, Eureka, California—Conducted oversight for construction of a new 475-ft-deep water supply production well and demolition of retired production wells.

Dense, Nonaqueous-Phase Liquid Subsurface Delineation at Potrero Power Plant, San Francisco, California—Performed extensive subsurface delineation of dense, nonaqueous-phase liquid (DNAPL) at a diesel and natural gas power plant built over a historical manufactured gas plant site. Oversaw the advancement of more than 60 soil borings using roto-sonic drilling through sandy artificial fill and landfill debris overlaying lean Bay Mud clay. Soil samples were collected for chemical and geotechnical properties, including composited soils in the DNAPL saturation zone for reagent batch testing as part of a predesign soil stabilization study.

Soil Investigations at San Francisco Refinery, Rodeo, California—Performed an impacted soil and waste delineation study using direct-push sampling in a multi-acre, artificially filled valley overlaying sandstone bedrock. Used an X-ray fluorescence tool to identify heavy metals in the soil along with traditional environmental field screening methods and observations to map waste layers and create comprehensive cross sections of the valley.

Construction Management for In Situ Soil Stabilization at Golden Eagle Refinery, Martinez, California—Assisted in construction management for a soil stabilization and capping project at a 6-acre historical waste management unit acid-sludge landfill. The yearlong project involved clearing the waste management unit of obstacles using excavators and then injecting and mixing cement grout into the soil using a 10-ft-diameter hollow auger. The auger was advanced in overlapping columns to approximately 15 ft and into the underlying Bay Mud. Duties involved assisting project designers to communicate with the environmental contractor and track their daily progress in the field.

Stormwater Pollution Prevention Plan Inspection and Implementation at Santa Susana Field Laboratory, Simi Valley, California—Performed SWPPP best management practices field inspections and made recommendations based on existing SWPPP requirements developed for the site, which was a 2,668-acre former rocket and nuclear reactor testing facility. Performed surface water runoff sampling, rain gauge maintenance and data collection, and surveying and mapping tasks.



Soil Vapor Investigation at Former Orchard, Mountain View, California—Led the soil and air sampling effort for a residential development site potentially impacted by pesticides. Oversaw the advancement of shallow soil borings and installed and sampled soil vapor wells.

Injection of Calcium Polysulphide at Former Wood Treatment Facility, Windsor, California—Performed groundwater sampling and oversaw the injection of calcium polysulphide to address hexavalent chromium contamination in the footprint of a former wood treatment facility.

Mud Logging for Natural Gas Production Wells at Multiple Central Valley Drilling Locations, California—Created boring log reports using sample cuttings, gas monitoring, and depth projection techniques during mud rotary drilling for exploratory gas production wells drilled to depths ranging from 3,000 to 6,000 ft at various locations within California’s Central Valley.

Presentations/Posters

Livermore, D., B. Starr, S. Sherman, and D. Hull. 2019. Humboldt Community Services District well evaluation and replacement. Platform presentation at AEHS 29th Annual International Conference on Soil, Water, Energy, and Air. San Diego, CA. March 18–21.

Sherman, S.R., and M.A. Kreslavsky. 2008. Slope streak formation rate on Mars: Investigation using overlapping THEMIS images. 39th Lunar and Planetary Science Conference, League City, TX.

