# CHRISTINA M. HELMS, P.G., LSRP

Education BS - Geology - Lafayette College, 2006

# **Professional Licenses**

Professional Geologist - Pennsylvania (PG005006) Licensed Site Remediation Professional – New Jersey (#668285)

# Specialty Certifications

OSHA 40-hour HAZWOPER

## Professional Affiliations

NJ Licensed Site Remediation Professionals Association (LSRPA)

# Professional Experience

As a Project Manager, Christina Helms is responsible for leading, growing, and managing SCS's environmental services practice in the greater Pennsylvania, New Jersey, and Maryland area. Ms. Christina Helms has 17 years of technical and environmental consulting experience as a geologist, often serving as a project manager, senior technical advisor, and/or Licensed Site Remediation Professional (LSRP) on various national, regional, and local environmental projects for private sector clients in various markets including commercial real estate, residential housing, industrial/manufacturing, mining, and energy utilities.

Her project experience ranges from fast-paced due diligence for property transactions to long-term, multi-year projects with ongoing monitoring and reporting needs and requirements for sites with soil, groundwater, and air impacts. Ms. Helms has handled the day-to-day field staffing, office coordination, and contract management for these projects that ranged from tens of thousands to multi-million-dollar environmental remediation projects in PA and NJ. Notable projects that Ms. Helms has been involved in are described below.

#### **Due Diligence**

**Southeastern PA, Confidential Client, Due Diligence in North Penn Area 7 Superfund Site.** Ms. Helms was the senior reviewer and provided client management services for an ASTM E1527-21 Phase I Environmental Site Assessment (Phase I ESA) and subsequent Phase II activities for a site located within the North Penn Area 7 Superfund Site. The project involved coordination with the client and their attorney to develop multiple warehouses at a former industrial facility whose historical operations contributed to contaminating groundwater, primarily with volatile organic compounds. Because the project was located within a Superfund site, with ongoing groundwater monitoring and active soil remediation being conducted by the responsible party, Ms. Helms and her project team also assisted with US EPA coordination in seeking a Comfort Letter from the US EPA for the planned development.

New Castle, Delaware, Confidential Client, Airport Hangar Lease, Due Diligence. Ms. Helms was the senior reviewer and provided client management services for an ASTM E1527-21 Phase I



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Environmental Site Assessment (Phase I ESA) and subsequent Phase II activities for a site located within the New Castle County Airport. At the time of the initial investigation, the airport had not yet become part of the East Basin Road Groundwater Superfund site (widespread PFAS and VOC impacts to groundwater), but based on correspondence and research at the time, Ms. Helms and her team were able to advise the client of that impending Superfund allocation. The client desired to lease the hangar and associated office space, therefore Phase II activities included a subsurface investigation of an oil water separator within the airplane hangar, as well as the recommendation for a vapor intrusion investigation, based on the known impacts to groundwater. Ms. Helms and her project team also assisted coordinating with the US EPA in seeking a Comfort Letter in this situation.

**Berks County, Pennsylvania, Confidential Client, Due Diligence for Substation Expansion.** Ms. Helms was the senior reviewer and technical advisor for an ASTM E1527-21 Phase I Environmental Site Assessment (Phase I ESA) and subsequent Phase II activities for a project that involved the planned expansion of an electrical substation. The Phase I ESA identified potential impacts both visually in the field and based on documents found during local and state file reviews. Phase II activities were conducted in a phased approach, based on the desire of the client, and included additional local and state file reviews, a geophysical survey, soil test pits, and soil sampling.

Philadelphia, Pennsylvania, Confidential Client, Due Diligence for Planned Mixed Use Building. Ms. Helms was the senior reviewer, technical advisor, and client manager for an ASTM E1527-21 Phase I Environmental Site Assessment (Phase I ESA) and subsequent Phase II activities for a planned mixed use (residential and commercial) redevelopment project. A Phase II subsurface investigation was conducted for underground copper lines associated with heating oil tanks that were found. The client also needed lead based paint (LBP) and asbestos containing materials (ACM) surveys which Ms. Helms and her team coordinated. Ultimately the client was provided with a budgetary estimate for potential remediation that would be required based on the findings of the Phase I/II activities.

#### Site Investigations & Remediation

**New Jersey, Confidential Client, LSRP Services for ISRA Site.** Ms. Helms served as the Licensed Site Remediation Professional (LSRP), client manager, and technical lead for a site whose operations were NJDEP Industrial Site Recovery Act (ISRA) applicable. The site was a former adhesives manufacturer from approximately the 1940's through 2019, situated adjacent to a water body and among a residential community and a wastewater treatment plant. LSRP services provided included all aspects of ISRA requirements from GIN submittal and correspondence with the NJDEP, to a Preliminary Assessment (PA) and Site Investigation (SI). The PA identified 40 Areas of Concern (AOC) of which 25 were investigated during the SI and a combined PA/SI report was submitted to the NJDEP within the required timeframe. The client requested a budgetary estimate and scope of work to bring the site to closure which was then used to find a buyer for the property who would take over the remainder of the remediation.

New Jersey, Confidential Client, LSRP Services for Historic UST at Shopping Center. Ms. Helms served as the LSRP, client manager, and technical lead when the client identified a historic underground storage tank (UST) during site redevelopment activities at one of their shopping center assets. Correspondence with the client and NJDEP was required to address the historic nature of the AOC and associated NJDEP fees. Ultimately, the UST was removed, SI activities were conducted and reported, and Ms. Helms issued an unrestricted use Response Action Outcome (RAO) for the AOC.

New Jersey, Confidential Client, LSRP Services for CVOC Impacts to Soil and Groundwater at Metal Recycling Facility. Ms. Helms served as the LSRP, client manager, and technical lead for this historic case involving chlorinated solvents in soil and groundwater from an unknown source. A Preliminary

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Assessment was conducted to evaluate whether an off-site source of impacts was likely or not based on the historic, highly industrial location. Also, being located along the Delaware River, considerations for tidal influence was being evaluated related to the areas of impacts. Ongoing delineation of both soil and groundwater would be required, as well as an evaluation of the on-site scale house for vapor intrusion concerns.

**New Jersey, Confidential Client, LSRP Services for Historic Fill.** Ms. Helms worked with another LSRP on the reporting and permitting for a site with mapped Historic Fill. Site operations required a thick concrete cap that would also serve as the engineering control for the presence of Historic Fill and a Deed Notice would serve as the required institutional control.

Northern New Jersey, Confidential Client, Investigation & Remediation of PCBs at Former Paper Manufacturing Facility. For several years Ms. Helms was the project manager for this site that entailed ongoing delineation and remediation of PCB impacted soil and groundwater at a former paper product manufacturing facility located along the Overpeck Creek that was planned to be redeveloped. Historic Fill was also a concern and redevelopment required raising the elevation of the entire site out of the floodplain. PCB impacted soil excavation was required, and clean or like-onlike soil import was needed. This large multi-year project involved coordination among multiple parties including LSRPs, attorneys for the property owner, interested buyers and their attorneys, the municipality, and state and federal regulators.

Southeast Pennsylvania, Confidential Client, Chlorinated Solvent Impacts to Groundwater in Fractured Bedrock. For several years Ms. Helms served as the project manager and a technical lead for a historic, former stainless steel tube manufacturing facility with on and off-site impacts to groundwater and surface water. The site was part of PADEP and US EPA's One Cleanup Program and investigation and monitoring was ongoing of surface water points, a shallow and deep bedrock monitoring well network, residences that required on-site treatment units for their drinking water, and vapor intrusion investigations. The site also operated an active groundwater treatment system. Ongoing coordination with the client, state, and federal regulators was required to determine whether the site would reach site-specific or statewide health standards. Redevelopment of the site was also being considered and alternatives for remediation and development were also part of Ms. Helms' involvement with this project.

**Prior Experience** 

## **Aggregate Mining Projects**

**PADEP Mine Permit Applications for Large and Small Coal and Non-coal Surface Mining Operations.** Experience included drafting in AutoCAD; developing, installing, and monitoring a surface and groundwater monitoring network; assisting with wetland delineation; responding to residential well and noise complaints and concerns; and eventually managing the overall submittal of the permit to the PADEP.

**Mineral exploration projects.** Field work included geologic exploration of sand and limestone for specific markets, including geologic field measurements, test hole drilling/cuttings sample collection, lab analysis of the sample material, data analysis, mineral processing design diagrams, and assisting with final presentation to client.

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#### Hydrogeologic Investigations and Aquifer Characterization

**Projects conducted for quarries (expansions and greenfield), commercial properties, and spring water source sites.** Field activities included coordination and oversight of shallow and bedrock well installation along with logging geology for water source (production) wells, and aquifer testing (slug and pumping tests). Assisted with the analysis and presentation of the data for use in groundwater modeling and regulatory submittal.

## **Publications**

Germanoski, D. and Enea {Helms}, C. 2006. *Lithologic Control on Topography in East-central Pennsylvania Implications for Appalachian Landscape Evolution*. Geological Society of America Abstracts with Programs Vol. 38, No. 2.