

# Katelynn Shields

## Project Scientist



### Education and Credentials

B.S., Environmental Science  
(Concentration in Earth Science),  
Drexel University, Philadelphia,  
Pennsylvania, 2015

### Continuing Education and Training

Hazardous Waste Operations and  
Emergency Response 40-Hour  
Certification (2013; refreshers  
2014–2019)

OSHA 10-Hour Construction  
Training (2017)

Transportation Worker  
Identification Credential (TWIC)

First Aid and CPR certified (2017)

### Professional Affiliations

Co-Secretary of New Jersey  
Society of Women Environmental  
Professionals (2019)

Member of New Jersey Licensed  
Site Remediation Professionals  
Association (2018)

## Professional Profile

Ms. Katelynn Shields is a scientist with 6 years of experience in the environmental consulting industry on both state- and federal-led projects. Her primary focus is on soil and groundwater investigations and remediation in New Jersey and Pennsylvania, as well as litigation support. Ms. Shields' responsibilities encompass conducting remedial investigations and actions, writing technical reports, providing litigation support, reviewing historical documents, conducting due diligence reviews, and performing fieldwork, including sampling (soil, groundwater, surface water, vapor, concrete) and contractor oversight. In addition, she uses ArcGIS software to complete data analysis and prepare environmental drawings for technical reports.

## Relevant Experience

### Site Investigation and Remediation

*PFAS Remedial Investigation, New Jersey*—Task manager for investigation of per- and polyfluoroalkyl substances (PFAS) in groundwater, drinking water, surface water, soil, sediment, and sediment porewater. Assists project manager with managing immediate environmental concern (IEC) conditions involving potable water and mitigation. Coordinates groundwater and soil sampling and prepares technical documents. Assists with investigation of potential third-party source contributions and provides litigation support.

*ISRA Investigation, Active Industrial Facility, Northern New Jersey*—Served in a technical advisory role for a remedial investigation and remedial actions under the New Jersey Industrial Site Recovery Act (ISRA) program. Compiled investigation information provided by the property's Licensed Site Remediation Professional (LSRP) to determine the remedial status of compounds in soil and groundwater by area of concern. Provided recommendations to the LSRP for additional investigation and remedial actions to address volatile organic compounds in soil and groundwater as well as historical fill contaminants in soil.

*Hydrocarbon Remedial Investigation, Newark, New Jersey*—Project manager for remedial investigation of hydrocarbon impacts in groundwater at the Newark International Airport. Responsibilities



include budget management, development of work plans, data review, and preparation of technical reports for the New Jersey Department of Environmental Protection (NJDEP).

***Hydrocarbon Remedial Investigation and Action, Bridgeton, New Jersey***—Task manager for remedial investigation of hydrocarbon impacts in soil groundwater at a site in Bridgeton, New Jersey. Responsibilities include coordination and completion of investigation activities, development of work plans related to *in situ* chemical oxidation remediation, data review and analysis, and preparation of technical reports for NJDEP.

***New Jersey Laboratory QA Officer and Supervisor***—Responsible for maintaining New Jersey Laboratory Certification for Analyze-Immediately Parameters. Includes assisting laboratory manager with the completion of proficiency testing, organizing field data collection documents, and training laboratory personnel in low flow procedures. Also, involves performing quality assurance review of data collected during groundwater sampling conducted under certification using low-flow methodologies.

***Multiple Investigations, New Jersey***—Completed receptor evaluations and initial ecological evaluations on multiple sites throughout New Jersey. Tasks included identifying and mapping environmentally sensitive natural resources, assessing the presence of contaminants of potential ecological concern, and assessing potential contamination migration pathways.

***Remedial Investigation, Chemical Manufacturing Facility, Union Beach, New Jersey***—Created and conducted scope of work to complete site and remedial investigation related to PCB and volatile organic compound contamination at a confidential manufacturing facility. Responsibilities included development and successful implementation of a soil and groundwater investigation in accordance with NJDEP guidelines; client communication; development, management, and implementation of project budgets; field staff coordination; and subcontractor management. Following completion of investigation activities, prepared a report for the NJDEP documenting site conditions.

***EPA Region 2 Remedial Investigation, Newark, New Jersey***—Conducted scope of work to complete remedial investigation activities at a Superfund site in Newark, New Jersey. Implemented a soil and groundwater investigation in accordance with EPA guidelines, managed subcontractors, and assisted database manager with QA/QC. Field activities included subsurface investigation, soil sampling program implementation, monitoring well installation, groundwater sampling using low-flow methodologies, and subcontractor oversight.

***Former Agricultural Property Investigation, Harrison Township, New Jersey***—Scientist for investigation and remediation of a property related to arsenic contamination due to historically applied pesticides. Completed a comprehensive soil investigation targeting areas of concern related to historical site operations. Oversaw excavation activities to remove hot spots as well as linear construction activities. Wrote remedial investigation report for submittal to NJDEP and remedial action report.



***NAPL Investigation and Remediation, Metals Manufacturing Facility, Union, New Jersey***—Scientist for investigation and remediation of a property related to hydrocarbon-impacted areas. Completed a comprehensive soil investigation targeting areas of concern. Performed pilot-test injection activities to remediate impacted groundwater. Prepared technical report submittals for NJDEP and client, and created figures using ArcGIS. Oversaw excavation activities.

***Chlorinated Solvents in Groundwater, Multiple Sites, New Jersey***—Scientist for multiple remedial investigation programs within a shopping center regarding chlorinated solvent impacts related to former dry-cleaning activities onsite. Coordinated and completed quarterly groundwater monitoring events, indoor air sampling, and soil vapor investigation related to IEC. Performed operations and maintenance inspections of groundwater remediation systems and sub-slab depressurization systems present onsite. Prepared annual reports for submittal to the client and NJDEP documenting site conditions.

***Chlorinated Solvent Impact, Clifton, New Jersey***—Scientist for remedial investigation program within a shopping center related to formal dry cleaning activities onsite. Coordinated and completed quarterly indoor air and soil vapor investigation activities related to indoor air IEC conditions. Installed permanent vapor points for sub-slab depressurization system monitoring. Prepared tenant notification related to results of indoor air monitoring. Completed annual reports for submittal to NJDEP documenting site conditions and recommendations in an effort to alleviate indoor air conditions.

***Phytoremediation Pilot Test, Gibbstown, New Jersey***—Scientist for the completion of a phytoremediation pilot test related to degradation of volatile organic compound along plant rhizosphere. Creek sediment was dewatered using Geotube® technology and plant species comparisons were made to determine possibility of use in remediation rather than traditional methods. Duties included plant species selection, establishment and monitoring of plots, data collection of sediments related to contaminant monitoring, subcontractor management, and data evaluation of contaminant levels to determine effectiveness of species.

## **Due Diligence and Compliance**

***PFAS Site Assessments, Multiple Sites, U.S.***—Assisted in the completion of facility PFAS site assessments for the oil and gas industry at midstream and downstream operations and petrochemical operations. Responsibilities included preparation of site assessments to evaluate potential receptor impacts at and around the facilities as well as potential areas of concern for further actions related to the use of aqueous film forming foam.

***Remedial Action and Due Diligence, Livingston, New Jersey***—Field lead for remedial activities at an industrial facility with light, nonaqueous-phase liquid and chlorinated solvent impacts due to historical operations. Responsibilities included client communication, field staff coordination, subcontractor management, monitoring well installation, excavation oversight, and injection oversight. Following completion of remedial activities, prepared a report for NJDEP documenting remedial action and prepared remedial action permits for ongoing monitoring. Completed due



diligence activities and prepared an NJDEP report under the ISRA following cessation of operations.

***EPA Region 4 Site Document Review, Alabama***—Completed examination of documents related to ecological investigation and remediation for a large Superfund site in Alabama. Responsibilities included collection and review of applicable publicly available documentation to provide summaries to be used for assessing ecological risk related to pesticide impacts in surface water and sediments.

***Assessments, Various Locations, New Jersey, Pennsylvania, and Maryland***—Conducted preliminary assessments for clients in New Jersey and Phase I environmental site assessments for clients in Pennsylvania and Maryland. Responsibilities included collection of historical and public data, document review, site inspection, and report writing.

***Compliance Support, Virginia***—Scientist for the completion of inspections and data collection related to power substations for a public client in Virginia. Carried out inspections with representatives from client and data collection related to spill prevention, control, and countermeasures plans. Following field activities, worked to identify and resolve any data gaps to increase efficiency and accuracy of emergency response in case of oil spill within substations.

