

Principal Consultant

Fields of Competence

Mr. Cinelli has over 30 years of experience in environmental consulting for the real estate community with an emphasis in the areas of environmental site assessments, soil & groundwater remediation, remediation system design, brownfield redevelopment, and storage tank management. He is also highly regarded for his work on spill prevention and response plans; stormwater and wastewater systems design, permitting and construction; erosion control plans; stream encroachment and earth disturbance permitting; and waste management. Known for his business-minded approach to environmental concerns, he has written and lectured on numerous site assessment and remediation issues and other environmental compliance matters. He is a qualified expert witness.

Employment

2004 to Present: President, Liberty Environmental, Inc., Reading, Pennsylvania

2000 to 2004: Vice President, UAI Environmental, Inc., Reading, Pennsylvania

1998 to 2000: Engineering Group Manager, RT Environmental Services, Inc., King of Prussia, PA

1990 to 1998: Civil/Environmental Engineer, Environmental Research, Inc., Reading, Pennsylvania

Credentials

M. Eng, Environmental Engineering, Pennsylvania State University (2000)

MBA, Business Administration, St. Joseph's University (1995)

B.S., Civil Engineering, Lehigh University (1990)

Professional Engineer registered in Pennsylvania, Delaware, New Jersey, Maryland, Ohio, and New York

Professional Geologist in New York

Board Certified Environmental Engineer, American Academy of Environmental Engineers

New Jersey UST Closure and Subsurface Investigation certifications

New York City Office of Environmental Remediation Gold Certified Brownfield Professional

Peer reviewer for manuscripts on soil remediation, *International Journal of Soil, Sediment and Water*

Contributing author, "Guidebook on Complying with Pennsylvania Environmental Laws and Regulations: Seventh Edition", Pennsylvania Chamber of Business and Industry

Training and Associations

40-Hour Hazwoper and 8-Hour Hazwoper Supervisor Training

Environmental Forensics, NGWA, 2006

SPCC Workshop, WEF, 2006

Natural Attenuation Potential of MTBE and Alternative Oxygenates, Battelle, 2002

MTBE Treatment and Technology: Design and Implementation, NGWA, 2001

Advanced Hazardous Waste Management, ERC, 2000

Member of American Society of Civil Engineers

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Member of National Society of Professional Engineers
Member of Environmental & Water Resources Institute

Key Projects

Warehouse Development Site, Philadelphia, PA: Prepared an Erosion & Sediment Pollution Control Plan for regrading of a golf course that is planned for redevelopment as a warehouse. The project included obtaining an NPDES permit for construction activities from the Pennsylvania Department of Environmental Protection, and obtaining stormwater management approval from the Philadelphia Water Department.

DAP Corporation, Baltimore, MD: Designed a stormwater detention basin retrofit in accordance with current Maryland design standards, in order to comply with the Maryland NPDES Industrial Stormwater Permit requirements. The design included a flow diversion berm, micropools, outlet structure, and native vegetation planting specifications.

Tilley Chemical Company, Baltimore, MD: Designed a stormwater detention basin retrofit in accordance with current Maryland design standards, in order to comply with the Maryland NPDES Industrial Stormwater Permit requirements. The design included a flow diversion baffle, sediment forebay, outlet structure, and grading for volume expansion.

Mars Wrigley, Elizabethtown, PA: Prepared an Erosion & Sediment Pollution Control Plan for a food manufacturing plant expansion. The project included obtaining an NPDES permit for construction activities from the Pennsylvania Department of Environmental Protection, and designing Post-Construction Stormwater Management facilities.

Crystal Lake, Mount Penn, Berks County, PA: Managed a pond evaluation and rehabilitation project for a recreational lake located in Carsonia Park. The recreational lake is at the center of a community park redevelopment project. The project began with an evaluation of water quality, including sampling and monitoring of water quality parameters for a six-month period. Based on the results of the evaluation, the pond was redesigned to include a wetland to treat urban stormwater, perimeter plantings, and dredging. Work included preparation of an Erosion and Sediment Pollution Control Plan, and obtaining a water encroachment permit from the Pennsylvania Department of Environmental Protection and a Section 404 permit from the U.S. Army Corps of Engineers.

Truck Stop, Shartlesville, PA: Under a Consent Order from the PADEP Bureau of Dams and Waterways, designed a culvert, riprap-lined channel and energy dissipation device where an unpermitted filling of a stream channel had taken place. Work included a hydrological study of the upstream watershed, preparation of an erosion control plan, and construction costing.

Cambridge-Lee Industries, Reading, PA: Designed a constructed wetland for removal of copper from industrial stormwater and cooling water discharge, and prepared an erosion control plan for same. Work included design of a custom concrete intake structure for diversion of low stream flows to the wetland while bypassing high storm flows, design of a submerged outfall structure, and design of an impermeable polyethylene liner due to the site's location in karst topography. The constructed wetland reduced copper concentrations by 90%, below the facility's NPDES permit limits.

Beech Island Deck Construction, Londonderry Township, Dauphin County, PA: Managed a watercourse permitting project for a residential property owner who had constructed a 5,000 square-

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foot deck in the floodway of the Susquehanna River without obtaining the proper permits. Prepared a floodplain permit application for the Township, and prepared a Pennsylvania DEP Joint Permit application. Oversaw floodplain modeling to determine the pre- and post-construction water elevations during the 100-year storm event.

Berks Hollow Natural Gas Power Plant, Ontelaunee, PA: Managed a watercourse permitting project for a proposed natural gas power plant on a 36-acre former industrial site that included a 3,000-foot power line corridor and a 2,000-foot utility corridor. Project activities included delineation of wetlands and regulated waters, a U.S. Army Corps of Engineers Jurisdictional Determination, a Phase I bog turtle habitat assessment, and Pennsylvania DEP/U.S. Army Corps of Engineers Joint Permit application.

Garden State Growers, Flemington, NJ: Prepared stormwater management facilities, including five stormwater detention/sediment basins. Prepared stream encroachment permit applications for three stream crossings and five detention basin outfalls.

Cataldi Waste Disposal, Inc., Reading, PA: Served as design engineer and project manager on 10-acre land development project for a recyclable materials transfer station. Responsibilities included site grading, vertical and horizontal alignment of industrial access driveway, design of stormwater management facilities, and preparation of an erosion control plan.

Central Catholic High School, St. Lawrence, PA: Designed grading, stormwater conveyance facilities, and erosion control plan for the expansion of practice fields at a high school athletic center.

United States Postal Service, Bellmawr, NJ and Wilmington, DE: Designed/specified wastewater recycling systems for USPS vehicle maintenance facilities. Work included reviewing building drawings, surveying drain sizes and depths, designing collection trenching and piping, and preparing performance specifications for wastewater recycling equipment. Performed construction inspections.

Limestone Quarry, Bechtelsville, PA: Designed/specified a wastewater recycling system for truck maintenance and washing operations. Work included reviewing building drawings, surveying drain sizes and depths, and wash pad and collection sump design.

C.S. Garber & Sons, Boyertown, PA: Designed/specified a wastewater recycling system for drill rig washing operations. Work included surveying building dimensions, design of a dual gate-controlled wash pad and a 5,000-gallon sediment settling tank, specification of ultrafiltration water recycle equipment, and construction management.

Sun Drilling Products, Belle Chase, LA: Designed a vehicle washwater treatment system and performed NPDES permitting for a drilling products manufacturer. Washwater treatment system design included a topographic survey, settling tank design, vehicle entry/exit ramp design, and oil/water separator specification. An NPDES permit was secured for the washwater discharge and a new Styrene Divinyl-Benzene Copolymer manufacturing plant.

Convenience Store, Coatesville, PA: Performed an evaluation of a malfunctioning small flow sewage treatment system. Established improved system operating procedures and retrofitted the system with a second aerator to ensure compliance with NPDES permit limits. Performed monthly maintenance and prepared discharge monitoring reports.

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Oley Valley Elementary Center, Oley, PA: Designed stormwater management facilities and prepared erosion control plan, and prepared a stream crossing general permit application for a proposed elementary education facility. Due to the extensive area of soil disturbance, an Earth Disturbance Permit was secured from the Pennsylvania Department of Environmental Protection.

Golden Oaks Golf Club, Pricetown, PA: Designed stormwater management facilities and prepared erosion control plan for a 280-acre championship golf course. Due to the extensive area of soil disturbance, an Earth Disturbance Permit was secured from the Pennsylvania Department of Environmental Protection. The design included five sediment/stormwater detention basins, and several diversion swales and sediment traps.

Industrial Overall PCE Site, New Rochelle, NY: On behalf of the purchaser of the property, conducted a vapor intrusion investigation at a New York State superfund site. Following the completion of the investigation, a vapor mitigation system was designed and installed. By installing the sub-slab depressurization system and sealing floor penetrations, contaminant concentrations in indoor air were reduced below New York Department of Health action levels.

Ingersoll Development Project, Brooklyn, NY: Served as engineer-in-charge on a development project on a New York City Housing Authority property. Site investigation activities identified historical fill with elevated concentrations of metals and organic compounds, and separate phase liquid on groundwater from a leaking heating oil tank. The project involved design and installation oversight for an engineered vapor barrier system, as well as screening and tracking of contaminated material being excavated from the site.

Ainslee Street Redevelopment Project, Brooklyn, NY: Served as engineer-in-charge on a redevelopment project on a former industrial property that was being redeveloped as a restaurant. Work was performed under New York City's Voluntary Cleanup Program at an E-Designation program. Site investigation activities identified historical fill with elevated concentrations of metals and organic compounds, and volatile organic compounds in groundwater. The project involved design and installation oversight for an engineered vapor barrier system and a sub-slab depressurization system, as well as screening and tracking of contaminated material being excavated from the site.

Hillside Avenue Redevelopment Project, Queens, NY: Managed a Remedial Investigation conducted under New York City's Voluntary Cleanup Program at an E-Designated site planned for redevelopment. The site was historically used for manufacturing and was recently used as a parking lot. Soil and soil vapor sampling was performed under a NYC OER-approved work plan. The development of the site will include construction of an 8-story mixed use building.

Queens Boulevard Redevelopment Project, Queens, NY: Managed a Remedial Investigation conducted under New York City's Voluntary Cleanup Program at an E-Designated site planned for redevelopment. The site included two adjoining properties with several tenants, including light manufacturing and automotive uses. Soil, groundwater and soil vapor sampling was performed under a NYC OER-approved work plan. The work included installation and sampling six sub-slab vapor points, 13 Geoprobe soil borings, and five temporary well points. The development of the site will include demolition of the existing commercial buildings and construction of a 10-story mixed use building.

Carroll Gardens Redevelopment Project, Brooklyn, NY: Managed a Remedial Investigation

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conducted under New York City's Voluntary Cleanup Program at an E-Designated site planned for redevelopment. The site was occupied by an automotive garage. Soil, groundwater and soil vapor sampling was performed under a NYC OER-approved work plan. The work included advancing six Geoprobe soil borings, installation and sampling four sub-slab vapor points, and three temporary well points. The site will be redeveloped as townhomes.

Laurel Center II, Reading, PA: Managed environmental assessment and remediation activities at a 19-acre brownfield site with a 150-year history of industrial operations. As early as the 1860's, Reading Tube Plant #1 was the site of heavy industrial activities. A total of 31 areas of concern were identified at the site during the first phase of investigations. Site characterization and remediation activities were coordinated with the Pennsylvania Department of Environmental Protection, and agency reviews were expedited as a result of the site's acceptance into the state's Brownfield Action Team program. Following thorough investigation of soil, groundwater and waste materials at the site, three areas were targeted for remediation, including remediation of soil impacted by PCB's and heavy metals, the removal of petroleum storage tanks and removal of hazardous waste from the former chrome-plating operation. Groundwater impacts at the site were addressed through a detailed analysis of containment fate-and-transport using both groundwater and surface water computer models. These modeling efforts demonstrated the elimination of the groundwater and surface water exposure pathways, eliminating the need for costly groundwater remediation. An Act 2 Release of Liability was granted by PADEP using both Statewide Health Standards and Site-Specific Standards. The site is currently planned for industrial reuse, including a waste-to-energy power generation facility.

The Goggle Works, Reading, PA: Managed the environmental assessment of an 11-acre brownfield site under Pennsylvania's Land Recycling Program ("Act 2"). The site covered several former industrial properties, including Willson Safety Products (a safety goggle manufacturer), Stelwagon Lumber, an iron foundry, and a hosiery mill. A Phase I Environmental Site Assessment was performed and a Baseline Environmental Investigation Workplan was submitted for Pennsylvania Department of Environmental Protection (DEP) approval. Site assessment activities were then performed in the seven areas of concern that were identified on the site. The site assessment activities included a geophysical investigation utilizing electromagnetic and ground penetrating radar methods, installation of nine groundwater monitoring wells, groundwater sampling and groundwater contour mapping, advancement of numerous soil borings and collection of soil samples. Also, an asbestos survey was performed on all buildings, and PCB-containing equipment was sampled and quantified. Due to shallow bedrock and the discovery of free product on groundwater, a soil vapor investigation was performed in two of the areas of concern to determine if vapor intrusion into buildings presented a health threat to building occupants. An Act 2 Final Report was submitted to PADEP proposing Site-Specific standards for petroleum constituents and chlorinated solvents in groundwater. On August 21, 2004, Governor Ed Rendell announced that the Goggle Works project was approved for \$3 million in state funds to convert the site into an arts center. "The Goggle Works Center for the Arts" was built and includes a cafe, 40 artist studios, a film and performance theater, five galleries and a glass blowing center.

18th & Callowhill Streets Site, Philadelphia, PA: Managed site remediation project at a former transformer manufacturing facility. Site work included reconstruction of a concrete retaining wall, installation of temporary shoring to enable excavation to the property boundary while protecting the adjacent streets and utilities, excavation and disposal of approximately 1,000 tons PCB-contaminated

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soil, and installation of HDPE cap. Managed health and safety concerns through an active public participation program, and secured a Release of Liability through Pennsylvania's Land Recycling Program.

Baldwin Locomotive Works, Eddystone, PA: Conducted site assessment activities under Pennsylvania's Land Recycling Program. Work included groundwater monitoring well installation, soil borings, a test pit investigation and preparation of a Remedial Operation & Maintenance Plan to address impacted soils encountered during redevelopment of the site. Conducted PCB testing in an electric substation containing 30 transformers and capacitors.

Scattered Sites, North and South Carolina: Managed the decommissioning of five bleach and dye facilities, including asbestos inspections and abatement, characterization and disposal of drummed waste materials, assessment and remediation of contaminated soil and groundwater (petroleum products and chlorinated solvents), and aboveground and underground storage tank removals.

Jefferies Knitting Mill, Albemarle, NC: Managed the decommissioning of a former bleach and dye facility. Provided management of approximately 200 drums of waste, including drum inventory, material characterization, consolidation, transportation and disposal. Conducted site assessment activities to delineate the extent of PCE in groundwater from former dry cleaning operation. Performed the removal of two 50,000 gallon #6 fuel oil USTs and off-site bioremediation of 600 tons of impacted soil. Conducted an asbestos inspection in preparation for future building demolition.

Pennsylvania Steel, Hamburg, PA: Managed environmental assessment activities at this site in pursuit of a Release of Liability under Pennsylvania's Land Recycling ("Act 2") Program. Historic industrial activities at the site included steel and stainless steel foundry operations, as well as truck body manufacturing. Investigated numerous areas of concern, including nine (9) underground storage tanks, an oil-water separator, and two (2) areas where foundry sand and slag were buried. Groundwater investigation activities, including installation of five (5) groundwater monitoring wells, aquifer testing, and fate-and-transport modeling were also performed. A Release of Liability was obtained under Statewide Health Standards for soil, and a Site-Specific Standard was established for naphthalene in groundwater utilizing the results of the Bioscreen fate-and-transport modeling that was performed. Other environmental investigation activities performed at the site included a comprehensive asbestos inspection, a radiological survey at a former non-destructive metal testing facility, and Johnson & Ettinger vapor intrusion modeling.

Limestone Quarry, Perkiomenville, PA: Prepared an application for a modification of an existing mining permit, for deepening of the quarry by 100 feet. Performed a topographic survey of a sedimentation basin to demonstrate compliance with NPDES permit requirements.

Convenience Store, Lancaster County, PA: Removed 8,000 gallon gasoline UST and conducted a site characterization to delineate the extent of soil groundwater impact. Designed and installed a granular activated carbon pump-and-treat system, and secured NPDES permit for surface discharge of treated effluent. Conducted a fate-and-transport study to demonstrate attainment of Statewide Health Standards, and secured a release of liability through Pennsylvania's Land Recycling Program.

Woodruff Oil, Bridgeton, NJ: Managed the design and installation of a secondary containment upgrade at a bulk fuel storage facility, in order to comply with recent changes to aboveground storage tank regulations. The secondary containment upgrade included a high-density polyethylene (HDPE)

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liner. The project required the design of a special perimeter anchoring system due to the proximity of adjoining structures. Site-specific designs for liner penetrations were necessary, due to the size, number and type of obstructions that were present (tanks, pipe supports, pump house, etc.).

Poultry Processing Facility, Lebanon County, PA: An emergency response firm responded to a release of sulfuric acid from an aboveground storage tank at a poultry processing facility (location confidential). After the emergency response firm completed the excavation of heavily impacted soil, a site assessment and risk assessment were performed under Pennsylvania's Act 2 guidance. Systematic random grid sampling was conducted, and a risk assessment was performed, which indicated that residual contaminants remaining in the soil were protective to human health and the environment. An Act 2 Release of Liability was granted by PADEP using a Site-Specific Standard.

Convenience Store, Downingtown, PA: Performed a site characterization in response to a release of gasoline from an underground storage tank system. Designed and managed soil vapor extraction and bioventing feasibility studies to evaluate the effectiveness of these technologies for remediation of gasoline-impacted soil. Prepared a Remedial Action Plan which was approved by the Pennsylvania Department of Environmental Protection, and designed a bioventing remediation system. Managed construction and operation of the remediation system.

Convenience Store, Lancaster County, PA: Performed a site characterization in response to a release of gasoline from an underground storage tank system. Designed and managed a soil vapor extraction feasibility study to evaluate the effectiveness of this technology for remediation of gasoline-impacted soil. Prepared a Remedial Action Plan which was approved by the Pennsylvania Department of Environmental Protection, and designed a dual-phase extraction remediation system, utilizing a liquid ring pump, an air stripper, and vapor phase carbon, to simultaneously remediate soil and groundwater. Managed construction and operation of the remediation system.

Convenience Store, Coatesville, PA: Performed a remedial alternatives analysis for treatment of gasoline-contaminated groundwater. Selected an innovative design – a Trickling Filter Bioreactor – over more traditional technologies such as granular activated carbon and air strippers. Designed and installed the remediation system, and secured NPDES permit for the system's discharge. Performed monthly system maintenance, discharge monitoring and reporting. Operational cost savings of \$80,000 to \$100,000 per year was realized.

Berks Landfill Superfund Site, Spring Township, Berks County, PA: Performed a waste volume analysis for a PRP group. Historical aerial photographs and topographic mappings of the landfill site were reviewed in order to determine the method of landfill construction, and to estimate the depth of buried waste. A grid was overlaid on the waste disposal areas, and the total volume of waste was calculated based on estimated depth of waste at each grid point. A summary report was submitted to the PRPs' attorneys for Superfund litigation defense.

Cambridge-Lee Industries, Reading, PA: Obtained discharge approvals from Pennsylvania DEP and Delaware River Basin Commission (DRBC) for a proposed copper tube manufacturing facility. The project involved revisions to an existing NPDES permit and submitting a TDS Waiver Request to DRBC in order to discharge high concentrations of total dissolved solids from a water pre-treatment facility. The TDS Waiver Request included a stream assimilation study that demonstrated that the proposed high-TDS discharge would not result in unacceptable TDS background concentrations in the receiving stream under low-flow (Q7-10) conditions.

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Cougle’s Recycling, Hamburg, PA: Served as an expert witness for the defense (Cougle’s Recycling). The Pennsylvania Department of Environmental Protection alleged that the facility was in violation of waste management regulations by storing municipal waste longer than permitted. Defendant successfully demonstrated to the Environmental Hearing Board that the stored recyclable materials were in fact not waste under Pennsylvania waste management regulations that the charges were dismissed.

Publications and Presentations

Cinelli, J.P., “Applied Storm Water Management for Small Watersheds,” presented at Penn State Great Valley, Fall 1999.

Cinelli, J.P., “Ask a Lawyer,” Served as a panel member for Berks County Bar Association’s television program covering underground storage tank and water quality regulations, 1997 and 2007.

Cinelli, J.P., “Environmental Assessment and Pennsylvania’s Land Recycling Program” presented at lending institutions, bench-bar association conferences, and realtor training seminars.

Cinelli, J.P., “Understanding Environmental Regulations,” presented at Berks Chamber of Commerce, 2000.

Cinelli, J.P., “Ex-Situ Remediation of MTBE-Contaminated Groundwater Using a Trickling Filter Bioreactor”, 2004.

Cinelli, J.P., “Spill Prevention, Control and Countermeasure Regulations,” presented at the Pennsylvania Chamber of Business and Industry’s Environmental Laws & Regulations Conference, 2006, 2007, and 2011 and National Society of Professional Engineer’s Annual Conference, 2007.

Cinelli, J.P., “Stormwater Pollution Prevention Plans and Best Management Practices”, Audio Conference provided through Progressive Business Conferences, 2006, 2007, 2012, 2013, 2014, 2015 and 2016.

Cinelli, J.P., “Pennsylvania Industrial Stormwater Permitting and Recent Regulatory Changes,” presented at the Pennsylvania Chamber Environmental Conference Series, 2016.

Contributing author, “2008/2009 Guidebook on Complying with Pennsylvania Environmental Laws and Regulations”, Pennsylvania Chamber of Business and Industry.