

Kevin Draganchuk, P.E.

President, CEA Engineers P.C.

<https://ceaengineerspc.com/>

Email: KDraganchuk@ceaengineerspc.com

Phone: 845-372-9674

25 Dogwood Drive, Bloomingburg, NY 12721

Professional Profile:

Kevin Draganchuk, P.E., is an Environmental Engineer with over 13 years of experience in stormwater management design and permitting, wastewater collection and treatment, pollution prevention, water quality protection, site remediation, and litigation support.

He is a regular expert witness in Clean Water Act and flooding cases for settlement negotiations, deposition, and trial in local, State, and Federal courts.

He is President and Principal Engineer of CEA Engineers, P.C., a New York Professional Corporation.

Areas of Expertise:

Construction and industrial stormwater management evaluation, design, and permitting

Wastewater collection and treatment evaluation, design, and operations and maintenance

Sanitary Sewer Overflow (SSO) cause analysis and remediation

Pollutant discharge quantification and environmental impacts

Litigation support

Environmental advocacy support

Site remediation, including testing, monitoring, and maintenance and oversight

Watershed protection and flooding

Qualifications:

Education:

Rensselaer Polytechnic Institute Bachelor of Science, Magna Cum Laude, 2004, Chemical Engineering

Professional Licenses, Certifications and Organizations

Registered Professional Engineer

- New York
- New Jersey
- Florida

Water Environment Federation – Collection Systems Committee Member

New York Water Environment Association - Member

National Association of Sewer Service Companies (NASSCO) Pipeline/Manhole/Lateral Assessment Certification Program (PACP/MACP/LACP)

24-Hour HAZWOPER Certified



RELEVANT EXPERIENCE & REPRESENTATIVE PROJECTS

Wastewater Treatment and Collection Systems:

Litigation Support, Suncoast Waterkeeper, et al., v. City of Gulfport

Suncoast Waterkeeper

Gulfport, Florida

Provided technical litigation support for CWA violations due to unpermitted Sanitary Sewer Overflow (SSO) discharges from Gulfport's collection system. Analyzed the collection system's Operation and Maintenance (O&M) plan, Sewer System Evaluation Survey (SSES) Report, pipe condition assessment reports, capital improvement plans, and associated documents. Prepared an Expert Report and Rebuttal Report evaluating the causes of SSOs, recommended remedies to reduce and eliminate SSOs, a cost estimate for the recommended remedy, and rebuttal responses to Defendant's Expert Reports. Prepared affidavits in support of motions for summary judgment and in opposition to Gulfport's motion to dismiss, the latter of which included analyses regarding the impact of rainfall patterns, magnitudes, and intensities on inflow and infiltration (I&I), the effect of completed rehabilitation work on reducing I&I, and the potential for sewage exfiltration into Gulfport's storm drain system. Provided testimony at deposition. Continues to evaluate reports, designs, and conduct additional analyses as required under the Stipulated Order achieved in settlement.

Litigation Support, Connecticut Fund for the Environment, Inc. v. Westchester County

Connecticut Fund for the Environment/Save the Sound

Westchester County, New York

Analyzed spill reports, Wastewater Treatment Plant (WWTP) discharge monitoring reports, daily operational data, inspection reports, and non-compliance reports to determine the influence of Rainfall Derived Inflow and Infiltration (RDI/I) on SSOs at several county owned WWTPs. Determined which wet weather SSOs impacted surface waters and which impacted Municipal Separate Storm Sewers (MS4s). Prepared a technical report in support of a citizen's suit under the CWA, which resulted in a Stipulated Order (SO) requiring SSESs and sewer system rehabilitation. Continues to provide settlement negotiation assistance, technical support, and review of SSES reports, Capacity, Management, Operation and Maintenance (CMOM) Plans, and rehabilitation plans produced under the SO.

Litigation Support, San Francisco Baykeeper and West County Toxics Coalition v. City of Richmond

San Francisco Baykeeper

Richmond, California

Provided technical support in evaluating compliance with Richmond's Consent Decree. Analyzed hydraulic capacity, operation and maintenance, and rehabilitation improvements to Richmond's collection system toward preventing SSOs. Prepared a declaration in support of a Contempt Motion against Richmond for failing to meet the obligations of the Consent Decree and provided technical settlement negotiation assistance resulting in a new Settlement Agreement. Continues to evaluate reports, designs, and conduct additional analyses as required under the Settlement Agreement.



RELEVANT EXPERIENCE & REPRESENTATIVE PROJECTS

Sarasota, Florida Water Reclamation Facility Wastewater Treatment Upgrades and Sanitary Sewer Overflows

Suncoast Waterkeeper

Sarasota, Florida

Provided technical settlement negotiation assistance evaluating options for wastewater treatment upgrades at one of Sarasota County's (County) Water Reclamation Facilities (WRF) to meet advanced wastewater treatment (AWT) standards for nitrogen removal and for reclaimed water storage and disposal options to eliminate unpermitted overflows from the WRF's effluent storage pond. Developed technical portions of a Settlement Agreement to prevent SSOs and reduce inflow and infiltration, including requirements for a SSES and CMOM Plan for the County's sanitary sewer collection system. Participated in numerous settlement negotiation meetings with the County in-person and via conference call. Collaborated with County engineers to identify solutions to technical settlement obstacles for achieving AWT at the WRF, eliminating unpermitted discharges from the storage pond, and developing the SSES and CMOM program elements and implementation schedules to prevent SSOs. Continues to evaluate reports, designs, and conduct additional analyses as required under the Stipulated Order achieved in settlement.

Bridgeport, Connecticut Combined Sewer Overflows

Connecticut Fund for the Environment/Save the Sound

Bridgeport, Connecticut

Analyzed the adequacy of Bridgeport's combined sewer overflow (CSO) Long Term Control Plan (LTCP) to prevent CSOs from a 1-year, 24-hour design storm, reduce CSO-related pollution to impaired receiving waters, and achieve compliance with EPA's CSO Control Policy and an Administrative Order from the State of Connecticut Department of Energy and Environmental Protection (CT DEEP). Analyzed the ability of capital improvements projects (IP) to provide adequate storage, reduce combined sewer flow volumes, and prevent CSOs. Evaluated projected IP completion schedules based on Bridgeport's performance completing IP to date, nearly nine years after development of the LTCP. Analyzed Bridgeport's O&M practices, I&I reduction, and receiving water quality monitoring programs recommended by the LTCP. Prepared a technical report with the results of my analysis for use at a hearing with CT DEEP.

Advocacy Technical Support – Petroleum Refining and Plastics Production Wastewater Treatment Center for Biological Diversity

United States

Evaluated the current Best Available Technology Economically Achievable (BAT) and effluent limitation guidelines (ELGs) based on existing Federal regulations for industrial wastewater generated by petroleum refineries (PR), with a specific focus on pollutants resulting from petroleum refining, hydrocarbon feedstock cracking processes, and plastic production facilities (PPF) for use in a public petition to EPA. Evaluated the effectiveness of current BAT and adequacy of ELGs based on EPA and independent studies to adequately remove identified pollutants of concern in wastewater discharges from PR and PPF and to treat wastewater generated from Light Tight Oil (LTO) refining. Drafted a technical report with recommended improvements to current BAT incorporating wastewater treatment technologies aimed specifically at removing pollutants of concern without existing ELGs and potential emerging pollutants resulting from increases in refining of LTO, which is produced by hydraulic fracturing.



RELEVANT EXPERIENCE & REPRESENTATIVE PROJECTS

Stormwater Management, Treatment, Permitting and Flooding:

Construction Stormwater Management System Design, Waterfront Commons, Bay Street Landing, Veterans Road West Shoprite Plaza, and Tyrellan Avenue

Multiple clients

Staten Island, New York

Designed permanent stormwater treatment systems, obtained SPDES permits, and developed Stormwater Pollution Prevention Plans (SWPPPs) for the Waterfront Commons, Tyrellan Avenue, and Shoprite Plaza developments and the Bay Street Landing redevelopment. Incorporated a green roof, porous pavement, infiltration practices, underground detention, and a sand filtration system to meet water quality standards while accommodating small footprints, increase groundwater recharge, and reduce runoff volumes.

Industrial Stormwater Permitting and Management, Staten Island Yacht Sales, Inc., Great Kills Yacht Club, Princess Bay Boatmen's Association, SOS Extreme Comfort Fuels

Multiple clients

New York State

Remedied Notice of Violations (NOVs), obtained SPDES permits, and developed Industrial SWPPPs for marinas in Staten Island, including design of boat power-washing water collection and recycle systems. Remedied a NOV and obtained an individual surface water SPDES permit for industrial discharge for SOS Extreme Comfort Fuels in Orange County, NY. Continues to provide assistance meeting SPDES permit monitoring and reporting requirements for marinas, including SWPPP modifications, annual compliance reporting, and discharge monitoring.

Litigation Support, Center for Community Action and Environmental Justice v. Friends of Riverside Airport, LLC

Lozeau Drury LLP

Riverside, California

Provided technical litigation and settlement negotiation support for Clean Water Act (CWA) violations resulting from stormwater discharges containing elevated levels of polychlorinated biphenyls (PCBs) and sediment from construction activities related to residential development and site remediation activities at a construction site containing PCB contaminated soils. Analyzed the site's implementation of erosion and sediment controls, including the design of sediment basins and management of off-site stormwater flows. Prepared an Expert Report evaluating the causes of polluted stormwater discharges and recommending remedies to reduce or eliminate polluted stormwater discharges, including design of conveyance systems to divert off-site stormwater run-on, a properly sized sediment basin, and a treatment system to remove PCB-contaminated sediments, and achieve compliance with the California Construction Stormwater General Permit. Estimated the costs for implementation of the recommended remedies.

Litigation Support, Sandra Wells v. Alpha Natural Resources, et al.

Calwell, Luce, diTrapano, PLLC

Mingo County, West Virginia

Reviewed site plans, performed a site inspection, and developed a hydrologic model to analyze the impacts of stormwater runoff and downstream flooding from access roads to oil and gas extraction sites located on steep slopes. Analyzed Erosion & Sediment Control (ES&C) plans, practices, and maintenance,



RELEVANT EXPERIENCE & REPRESENTATIVE PROJECTS

as well as pertinent West Virginia erosion and sediment control regulations. Developed expert opinions on the causes of downstream flooding and provided testimony at deposition.

Litigation Support, Plaintiffs, et al., v. Rabel Development, LLC, et al.

Calwell, Luce, diTrapano, PLLC

Charleston, West Virginia

Prepared a Preliminary Report for Settlement on the impacts of runoff from construction of a residential development and its contribution to flooding of the Plaintiffs' properties. Analyzed site plans, E&SC plans, inspection reports, and performed site inspections to evaluate the adequacy of stormwater controls, retention structures, and conveyance systems. Performed a cost estimate for improvements to downstream conveyance systems, included streambed dredging, removal of existing undersized culverts, and the installation of new culverts with adequate capacity.

Litigation Support, Tali Plaza of Nyack, LLC v. Village of Nyack and Town of Orangetown

Tali Plaza of Nyack

Nyack, New York

Analyzed the Village's stormwater collection system, runoff management practices, and the design flaws in a channel and underground culvert system that diverts the Nyack Creek and caused flooding in support of litigation. Determined the location of hydraulic bottlenecks in the culvert system and resulting flooding rates. Assisted in preparation of an affidavit and trial testimony.

Litigation Support, City of Newburgh v Mark Sarna, Sarna Enterprises, Inc., Mt. Airy/Aire Estates, Inc., New Windsor Development Co., LLC, and Drainage District #6 Mt. Airy Estates (The Reserve)

City of Newburgh

New Windsor, New York

Analyzed drainage schematics, site plans, SWPPPs, construction E&SC structure designs, post-construction stormwater control designs, and NYSDEC inspection reports for a residential development discharging sediment-laden stormwater to a pond used as a drinking water source in preparation of an Expert Report. Calculated the correct sizing, outlet structure configuration, and orientation of construction E&SC measures, including sediment basins and detention ponds on the residential development.

Water Quality Protection and Pollutant Discharge Impact Analysis

Advocacy Technical Support – New York State Environmental Quality Review (SEQR) and Planning Board Reviews

Multiple Clients

New York State

Provided technical support to environmental advocacy groups and private citizens as part of the SEQR process in Putnam, Rockland, Greene, and Ulster counties on the potential for adverse environmental impacts and flooding of downstream properties from improper stormwater collection, management, and treatment at proposed developments, including a water bottling facility, condominium complex, resort hotel, skiing resort, construction material processing facility, and apartment complex expansion. Prepared technical reports highlighting the potential adverse environmental impacts, including pollutant releases and adverse water quality impacts, resulting from development and the technical and conceptual shortcomings of proposed E&SC plans and post-construction stormwater treatment and controls.



RELEVANT EXPERIENCE & REPRESENTATIVE PROJECTS

Litigation Support – Our Children’s Earth Foundation v. Cargill, Inc.

Our Children’s Earth Foundation (OCE)

Cayuga Lake, Lansing, NY

Provided technical settlement negotiation assistance for Clean Water Act (CWA) and Resource Conservation and Recovery Act (RCRA) violations resulting from stormwater discharges and airborne deposition resulting from salt mining, processing, storage, and transport activities at Cargill Inc.’s (Cargill) facility along the banks of Cayuga Lake. Performed a site visit to inspect and analyze facility operations, stormwater best management practices (BMPs), and dust collection systems. Evaluated the adequacy of Cargill’s Stormwater BMP Plan and recommended enhancements to facility BMPs and operational practices to reduce salt pollution in stormwater runoff and salt dust from becoming airborne. Participated in two in-person settlement negotiation meetings that resulted in a Consent Decree. Continues to evaluate reports, designs, and conduct additional analyses as required under the Consent Decree.

Advocacy Technical Support – Mount Rushmore Firework Display Environmental Assessment Water Quality Impact Technical Review

National Parks Conservation Association (NPCA)

Mount Rushmore National Memorial

Evaluated the National Parks Service Environmental Assessment (EA) on the proposed resumption of the Independence Day Fireworks Event at Mount Rushmore National Memorial for the potential for adverse environmental impacts from firework related pollutant release, especially the persistent pollutant perchlorate, with a focus on potential surface water, groundwater, and drinking water impacts and their associated risks to human health and aquatic species. Prepared a technical report to assist NPCA in submission of public comments on the EA.

Advocacy Technical Support – Mozambique Seismic Surveying and Offshore Oil Drilling

Our Children’s Earth Foundation (OCE)

Mozambique, Africa

Analyzed the Environmental Pre-Feasibility and Scope Definition Report (EPDA) for potential adverse impacts to marine life, the marine environment, human populations, and the local community’s social/economic status resulting from proposed off-shore seismic surveying and off-shore petroleum drilling adjacent to the Bazaruto Archipelago National Park (BANP) in Bazaruto Bay, Mozambique. The BANP is a unique coastal environment home to endangered and threatened marine species, marine mammal (e.g. whales and dolphins) feeding and breeding grounds, and sensitive natural areas, such as coral reefs. Prepared a technical report to assist OCE in submission of public comments and participation in stakeholder meetings that in part assisted in cancellation of the proposed project.

Litigation Support, Robert Carter, et al., v. Monsanto Company and Apogee Coal Company

Calwell, Luce, diTrapano, PLLC

Nitro, West Virginia

Analyzed and reviewed historical documentation to quantify airborne dioxin deposition from an herbicide manufacturing process. Calculated mass balances of dioxin generated by the overall production process and individual unit processes and determined the quantities of dioxin that discharged to the environment via air emissions, solid waste streams, and sewer discharges over a 25-year production time frame. Calculated the mass of dioxin remaining in soils adjacent to the plant based on air deposition modeling and the half-life of dioxin. Assisted in preparing an Expert Report.



RELEVANT EXPERIENCE & REPRESENTATIVE PROJECTS

Site Remediation:

Engineer of Record, Peter Jay Sharp Center for Opportunity

The DOE Fund, Inc.

Brooklyn, New York

Professional Engineer of Record for a brownfield site regulated under NYSDEC's Voluntary Cleanup Program. Performs operation, maintenance, and monitoring of a soil vapor extraction (SVE) system to remediate chlorinated solvent contaminated soils and groundwater beneath a former knit goods mill. Monitoring activities include monthly groundwater and SVE system monitoring, semi-annual groundwater sampling, and annual treated groundwater discharge sampling. Analyzes monitoring results to evaluate remediation system performance and meet NYSDEC reporting requirements. Coordinates modifications to the remediation system, including installation of permanent vacuum monitoring locations, and analysis of the SVE system's sub-surface vacuum. Responsible for monthly Progress Report and annual Periodic Review Report submittals to the NYSDEC.

Litigation Support, Valley Truck Services, Inc., et al., v. Textron, Inc., et al.

Transportation Injury Law Group, PLLC

Asheville, North Carolina

Designed two different groundwater treatment systems to remediate a former industrial site contaminated with volatile organic compounds (VOCs) and potentially with 1,4-Dioxane. The first system consisted of an air stripper with air effluent treatment to remove VOCs. The second system consisted of advanced oxidation using hydrogen peroxide and ultra-violet light to treat VOCs and 1,4-Dioxane. Estimated the construction costs and performed a present worth analysis for each system, including 30 years of operation and maintenance, equipment replacement, and demolition costs.

Litigation Support, Penn Environment v. PPG Industries, Inc.

Terris, Pravlik & Millian, LLP

Ford City, Pennsylvania

Assisted in design of the remedy for the discharge of heavy metals, silica, and high pH contaminated groundwater to the Allegheny River from a former industrial waste lagoon. Remedy included a collection system, treatment plant, horizontal groundwater well, and capping system. Performed cost estimate of the remedy capital and operation and maintenance costs.

Monitoring and Construction Oversight, 236 Richmond Valley Road

Charleston Equites/Tottenville Equities

Staten Island, New York

Conducted monitoring and construction oversight for the redevelopment of a NYSDEC Brownfields Program site. Ensured all work was conducted in accordance with the site's Remedial Action Work Plan, Site Management Plan, and Health and Safety Plan. Conducted air quality monitoring and oversaw the proper handling and disposal of excavated contaminated materials. Responsible for daily reporting to the NYSDEC.



RELEVANT EXPERIENCE & REPRESENTATIVE PROJECTS

Pro Bono Assistance:

Sanitary Sewer Overflows (SSOs) - California State Water Board SSO Technical Working Group California Coastkeeper Alliance (CCKA) California

Served as CCKA's technical engineering advisor in formulation of regulatory requirements contained within a new proposed state permit for operation and performance of sanitary sewer collection systems as part of CCKA's participation in the California State Water Board's SSO Technical Working Group (SSO Technical Working Group). Participated in SSO Technical Working Group meetings and CCKA team discussions. Continues to provide technical expertise to CCKA as part of the SSO Technical Working Group as needed.

Water Quality Protection – Land Development Impacts

Land Preservation Collection (LPC)

Orange County, New York

Advised LPC, a local, community-based advocacy group, related to the potential adverse impacts to a local stream and downstream receiving pond from a proposed housing development. Assisted LPC in identifying potential adverse water quality impacts during and after construction, understanding local, State, and Army Corps of Engineers guidance and regulations, and preparing LPC's presentation to the local planning board.

Community Environmental and Health Protection – Auto Dealership Fire Community Impacts

Private Citizens

Ulster County, New York

Advised a group of local citizens whose property was located adjacent to the site of an automobile dealership (Dealership) that burned down, destroying the entire structure, car maintenance areas, stored materials, and numerous automobiles. The Dealership was ruled condemned and contaminated by New York State Department of Environmental Conservation (NYSDEC) due to elevated levels of numerous dangerous chemicals, including asbestos, lead, and cadmium, however, condemned debris remained at the Dealership exposed to wind, precipitation and stormwater for months. Assisted with preparation and collection of soil and stormwater runoff samples and comparison of analytical results to NYSDEC regulatory standards. Continues to assist the local citizens as needed.

Publications:

Draganchuk, Kevin, Preventing SSOs – Lessons Learned for Watershed Protection, New York Water Environment Association, Spring Technical Conference and Exhibition, June 13, 2018.

Draganchuk, Kevin, I&I Removal – Lessons Learned for Avoiding Pitfalls and Increasing Effectiveness, New York Water Environment Association, Virtual Spring Technical Conference and Exhibition, June 9, 2020.

Draganchuk, Kevin, Road Salt Pollution Prevention at its Source – A Case Study in Best Practices, New York Water Environment Association, Virtual NYC Watershed Science and Technical Conference, September 15, 2020.

