

Robert W. North | Senior Environmental Advisor, CIEC

11 Commerce Way, Suite A, Totowa, NJ 07512

732-236-6581
robert.north@efiglobal.com

Professional Summary:

Mr. North has over 35 years diverse experience conducting, designing and managing projects in the environmental field, including indoor air quality assessments, asbestos, mold and lead investigations and remediations, smoke damage assessments, Phase I and Phase II environmental due diligence investigations, soil and groundwater investigations, and solid and hazardous waste management. The projects have been for industrial, commercial and residential clients. In addition to the technical work, he has been responsible for management of staff, budget tracking and new business development. For investigations and cleanups involving regulatory agencies, Mr. North has acted as the primary liaison between the responsible party and the regulatory agency. His site investigation and remedial work has been completed under CERCLA, New Jersey's ISRA and Voluntary Cleanup Programs, Pennsylvania's Act 2, as well as state programs in New York, Ohio, North Carolina, and Florida. His due diligence work has included industrial and commercial properties across the United States as well as in Europe, Australia, and South Africa. As a Waste Management Consultant, he developed approaches for his clients to significantly reduce waste disposal costs. As an asbestos building inspector and lead paint risk assessor, he has completed hundreds of inspections of residential, educational, and commercial facilities. He has also completed indoor air quality investigations and mold assessments and prepared mold abatement plans for commercial and residential properties in New York, New Jersey, Connecticut, Pennsylvania, Maryland, and Virginia.

Mr. North meets the definition of an Environmental Professional as defined in 312.10 of 40 CFR 312.

Areas of Expertise:

- Mold and Water Damage Assessment
- Smoke Damage Assessment
- Asbestos and Lead Paint Inspections
- Indoor Air Quality Investigations
- Environmental Site Assessment
- Building Sciences

Licenses and Certifications:

AHERA Asbestos Inspector

Asbestos Building Inspector, Department of Labor, New York, License #15-03158

Asbestos Building Inspector, Department of Labor & Industry, Pennsylvania, License #056061

Asbestos Building Inspector, Department of Public Health, Connecticut, License #00959

Asbestos Building Inspector, Department of Environment, Maryland, License #873691

Mold Assessor, Department of Labor, New York, License #MA00826

American Council for Accredited Certification, Certified Indoor Environmental Consultant, Certificate #1807006

Project Experience:

Smoke Damage Assessment, Manufacturing Facility, Lewisburg Pennsylvania

As part of a multi-disciplinary team, conducted a smoke damage assessment of a 250,000 square foot manufacturing facility and 50,000 square foot attached office space. The project included a rapid response effort to determine the extent of smoke damage from a large equipment fire and assessing environmental impacts to surrounding land and waterways. The project also included developing multiple phases of smoke remediation plans, providing oversight of the mitigation contractor, and conducting post-cleaning verification sampling.

Mold and Water Damage Assessment, Manufacturing Facility, Verona Missouri

Completed a mold and water damage assessment at chemical intermediary manufacturing facility following a flash flood. The project involved assessing water damage impacts and possible mold development in several buildings and developing approach for addressing building, equipment, and product damage.

Mold and Water Damage Assessment, Large Apartment Building, Denver Colorado

Completed a mold and water damage assessment for a 6-story, 180- unit apartment building in Denver Colorado. The project included evaluating the extent and cause(s) of water damage and mold growth, and development of a remediation protocol on an expedited basis.

Smoke Damage Assessment, Medical Marijuana Facility, Cumberland Maryland,

Completed a third party smoke damage assessment of a 50,000 square foot medical marijuana facility in Cumberland MD. The project included reviewing work completed by other consultants, completing an on-site assessment of smoke damage to determine areas requiring remediation, and development of a cleaning protocol to address actual areas of damage.

Mold Assessment/Remediation, National Hotel Chain Hotel, Northern New Jersey

Completed a mold assessment and oversaw the mold remediation of 136 guest rooms at a hotel in northern New Jersey. The project included phased mold investigations of each floor to evaluate the extent and cause(s) of mold, design of the remediation plan for each floor, and room-by-room visual inspections and air clearance testing to verify completion of the mold removal actions. Provided recommendations on HVAC maintenance activities to reduce future mold issues.

Indoor Air Quality Assessment, Federal Occupational Health, Federal Building, Newark, New Jersey

Designed and completed an IAQ survey at the Veterans Administration file storage facility in Newark New Jersey. The investigation included standard IAQ parameters, volatile organic compounds by direct read instrumentation, asbestos air testing, microbial air testing, and a visual inspection for mold, damaged asbestos-containing materials, or other sources of airborne contaminants.

Indoor Air Quality Assessment, Federal Occupational Health, Social Security Administration-MAPSCC, Philadelphia, Pennsylvania

Designed and completed an IAQ survey of portions of a large office building to evaluate potential causes of employee air quality complaints. The survey included a thorough visual inspection of multiple floors of the building for evidence of mold, excessive dust or other sources of potential

irritants, air quality testing for volatile organic compounds and comfort parameters, and an assessment of the building's HVAC system operation and maintenance.

Asbestos Air Quality Assessments Federal Occupational Health, Multiple Social Security Offices in Mid-Atlantic Region

Completed semi-annual asbestos air monitoring at multiple Social Security offices in Regions 2 and 3. Projects includes collection and analysis of asbestos air samples by transmission electron microscopy and evaluation of data in accordance with SSA criteria.

Asbestos Building Surveys, Federal Occupational Health, Multiple Social Security Offices in Mid-Atlantic Region

Completed initial asbestos building inspections or building re-inspections at over 40 Social Security offices in Regions 2 and 3. Projects includes collection and analysis of samples of suspect building materials, assessment of building conditions, and evaluation of data in accordance with SSA criteria.

Hazardous Materials Site Survey, Rye Brook New York

Completed a hazardous materials site survey, including asbestos, lead, PCBs, petroleum, and other chemical products and wastes at the Rye Brook New York Public Works facility.

Indoor Air Quality Assessment, Childcare Facility, Little Ferry, New Jersey

Designed and completed an indoor air quality evaluation/vapor intrusion study of a childcare facility in Little Ferry New Jersey to address concerns with possible vapor intrusion from a plume of chlorinated solvent ground water contamination from an off-site source. The survey included standard IAQ parameters, direct read monitoring for VOCs, and summa canister sampling for VOCs following NJDEP protocols and comparison of the results to NJDEP vapor intrusion guidelines.

Indoor Air Quality Assessment, Facility Management Office, Co-op City, Bronx, New York

Completed an IAQ survey of the facility management offices at Co-op City in response to indoor air quality complaints. The survey included monitoring and evaluation of standard IAQ parameters and recommendations for modifying the operation of the HVAC system to ensure adequate outdoor air exchange.

Indoor Air Quality/Mold Assessment, Johnson Controls, Blackwood, New Jersey

Designed and completed an IAQ/mold assessment of a commercial office facility in Blackwood, New Jersey. The survey included standard IAQ comfort parameters, direct read monitoring for volatile organic compounds, air sampling for fungal contamination, and a thorough visual inspection of all areas of the facility and the HVAC system to assess odor complaints. Contamination was present due to multiple areas of roof leakage and due to humidity control issues. Recommendations were provided to address likely sources of the odor/air quality complaints.

Indoor Air Quality/Mold Assessment, Santander Bank Branch, Brooklyn, NJ

Designed and completed an IAQ/mold assessment at a bank branch in Brooklyn, New York in response to employee air quality complaints following a boiler system leak. The IAQ included ASHRAE comfort parameters, direct read VOC monitoring, and airborne particulate monitoring. The mold assessment was completed in accordance with the New York State Mold Law and included a thorough visual inspection, surface sampling and air sampling for mold. Developed a mold remediation plan to address mold from multiple sources, oversaw the remediation, conducted the clearance inspection and testing, and provided recommendations for eliminating sources of water intrusion.

Indoor Air Quality/Smoke Damage Assessment, Residential Property, Bridgeton, New Jersey

Designed and completed an IAQ in response to indoor air quality concerns following a furnace malfunction event. The IAQ included a thorough inspection of the HVAC system, direct read comfort parameter and VOC monitoring, summa canister testing for VOCs, formaldehyde testing, and surface sampling of HVAC duct components for smoke and chemical residues. Provided recommendations for duct cleaning and replacement following determination that plasticizer residues from melted plastic condensate pan were source of contamination.

Residential Mold Assessments - New York, New Jersey, Pennsylvania, Maryland, Virginia, and West Virginia

Mr. North has completed over 400 mold assessment/cause & origin investigations at residential properties in New York, New Jersey, Pennsylvania, Maryland, Virginia, and West Virginia. The assessments have included air quality testing for mold, surface testing, evaluation of multiple sources of moisture intrusion, and development of mold remediation plans consistent with applicable state regulation.

Asbestos Survey Celgene Corporation, Summit, New Jersey

Managed and conducted a comprehensive asbestos survey of a nine building corporate headquarters campus of a major pharmaceutical company.

Asbestos and Lead Inspections/Risk Assessment Hurricane Sandy, New Jersey RREM Program

Conducted several hundred asbestos and lead paint inspections of homes damaged by Hurricane Sandy. The project involved full, AHERA-compliant asbestos building inspections and HUD-compliant lead paint inspections/risk assessments of homes applying for grant funding through New Jersey's Reconstruction, Rehabilitation, Elevation, and Mitigation Program. Homes were located in Atlantic, Cape May, Ocean, Burlington, Middlesex, Monmouth, Union, and Bergen Counties.

Solid Waste Minimization, State Theater of New Jersey, New Brunswick New Jersey

Analyzed the waste generation and handling processes for the State Theater of New Jersey, developed additional recycling practices and negotiated contract changes with its waste disposal company resulting 35% savings in the Theater's waste disposal costs.

Superfund Remedial Investigation/Design, Quality Distribution Inc., Bridgeport New Jersey

Positioned a New Jersey Superfund site for several million dollars in long-term savings by successful management of the ground water investigation and modeling evaluation resulting in a redesign and simplification of ground water pump-and-treat system and proposed pumping rates were reduced by over 50%.

Phase II Site Investigations, Convenience Store/Gasoline Stations, Southeast United States

Managed the Phase II soil and ground water investigations of over 25 convenience store/gasoline stations located throughout the southern United States within a 60 day deadline. His work involved the day-to day coordination of multiple field crews, report development and review, and interaction with client.

Transactional Due Diligence, Major International Manufacturing Company

Provided oversight of Phase I ESAs and Phase II Site investigations of a major international manufacturing company with operations on three continents. Mr. North managed the design and

coordination of investigations at North American facilities and the report preparation and development of potential liability estimates.

Court Qualifications/Depositions:

Litigation CV available upon request.

Professional Experience:

McCabe Environmental Services, Sr. Project Manager, 2013 - 2016
Evergreen Waste Solutions, President, 2007 – 2012
ENVIRON International Corp., Sr. Manager, 1987 - 2006

Specialized Education:

Certified Indoor Environmental Consultant, Indoorsciences, 2018
New York State Mold Assessor Refresher Class, IAQSchool.Online, 2018, 2020
AHERA Asbestos Building Inspector Refresher Classes, NAETI, 2014-2019, 2021 BAOS, 2020
EPA Lead Paint Inspector Risk Assessor Refresher Class, NAETI, 2017
Mold, Indoor Air Quality, and Industrial Hygiene Sampling Workshop, EMSL, 2017
Fire, Smoke, Dust Characterization and Combustible Dust Workshop, EMSL, 2017
New York State Mold Assessor, NAETI, 2016
AHERA Asbestos Building Inspector, NAETI, 2013
Asbestos Safety Technician, Rutgers School of Public Health, 2013
Lead Paint Inspector/Risk Assessor, NAETI, 2013
OSHA 40-hour HAZWOPER Training, 1986, Refreshers 1987-2000

Education:

Master of Science, Geology, University of New Mexico, Albuquerque, NM 1986
Bachelor of Arts, Geology, Colgate University, Hamilton NY 1983

Publications and Presentations:

North, Robert W., S.E. Burkett; M.J. Sincock. Effective Enhancement of Biological Degradation of Tetracholoethen(PCE) in Ground Water in *Proceedings of the Sixth International In Situ and On-Site Bioremediation Symposium*, Battelle Press, Columbus, OH. ISBN: 1-57477-117-5. p 189-196, 2001

Fusillo, Thomas V and Robert North. Case Studies in Naturally-Occurring and Agriculturally-Related Arsenic in Southern New Jersey. National Ground Water Association, Eastern Focus Conference. October 2000.

North, Robert. Innovative Remedial Technologies and Brownfields Redevelopment. Invited Presentation. Southern New Jersey Development Council. April 1999



Wright, Robin and North, Robert W. Sediment textural characteristics of fluvial sandstones in the Mesaverda Strata at the Multi Well Experiment (MWX) site, Northwestern Colorado. Sandia National Laboratories Contract Report, 1985

Professional Affiliations

Indoor Air Quality Association