Richard T. Eades

1617 McClung St, Charleston, WV 25301 304-344-2362 rick_eades@hotmail.com

Education

Certification Math/Science Ed University of North Carolina-Chapel Hill, 1997

 M.S. Geology University of Massachusetts-Amherst, 1989
"A Hydrogeologic Study of the Mundberry Brook Watershed Using Seismic Refraction and Reconnaissance Data"

Graduate Coursework George Washington University, 1984

B.S. Geology (cum laude) West Virginia University, 1982

Specialties

- Program and project management
- Facilitating teams
- Training courses, workshops, and guidance documents for environmental assessments, permitting, appeals, and GIS strategies
- Hydrogeology
- Site assessments at CERCLA/SARA, RCRA, DOD, DOE, and industrial sites
- Legislative and regulatory development
- Advocacy for citizens on environmental permitting, enforcement, and environmental impact issues
- Designing and supervising intern programs
- Innovative classroom and field education programs
- Public speaking and media interaction

Experience

Independent Contractor – Environmental Advocate/Educator January 1999-present, Charleston WV

<u>Clients</u>

WV Environmental Council, Ohio Valley Environmental Coalition, WV Highlands Conservancy, WV Citizen Action Group, Plateau Action Network, Southern Appalachian Folklife Center, Coal River Mountain Watch, Atkins&Atkins, Bell&Griffith, Monroe County Schools, Fayette County Commission, WV Department of Environmental Protection Stream Partners, US Office of Surface Mining, Canaan Valley Institute, Progressive Technology Project

Collaboration with Friends of the Earth, US Public Interest Research Group, Citizen Coal Council, and the National Academy of Sciences; and numerous state and local officials, elected representatives, and business leaders

Lobbying

Mining, quarrying, blasting, post-mining economic development, timbering, water pollution, stream protection, air quality, solid waste, medical monitoring, park preservation, electric deregulation, wind energy

Stakeholder in developing surface mining, blasting, quarrying, and air quality regulations; coalition building, science- and fact-based advocacy, constituent outreach, media strategies, legislative testimony, and closing the deal

Permitting, Compliance, and Enforcement

Investigating/addressing mountaintop removal surface mine(s), valley fills, coal slurry impoundments, dredging for coal fines, timber right-of-way, mining/timbering impacts on flooding, herbicide release (expert consultant), dewatering issues, and wastewater impacts on recreational waters

Leading technical challenges in public hearings, before appeals boards, and directly with regulatory authorities to re-define permit conditions, address preventable violations, and provide constructive criticism of technical approaches

Education and Supervision

- Twice taught James Monroe High School summer field course (once for college credit) on stream monitoring, chemistry, aquatic biology, water supply and global or national crises, regional and state water issues, wastewater treatment, spring water protection and bottled water industry
- Twice trained Project HOPE students in environmental issues and legislative lobbying methods
- Twice supervised interns (Duke grad and WVU senior) in intensive watershed studies, documented in reports and GIS maps, collaborating with as many as 34 professionals and 13 local, state, and federal entities
- Taught or volunteered in 11 West Virginia public, private, and trade schools, in addition to WVU and Marshall University

Public Speaking

- Testified in more than 10 hearings before West Virginia Legislature
- Testified in more than 12 additional public hearings (EPA, COE, state)
- Invited speaker 3 times Hugh O'Bryan Youth Leadership Conference
- Invited speaker 3 times West Virginia University
- Invited speaker twice Marshall University
- Invited speaker twice Conference on the Environment
- Invited speaker National Academy of Science (coal waste impoundments)
- Invited speaker twice Sustainable Fair
- Invited speaker Plateau Action Network annual fundraiser

<u>Media</u>

- More than 60 television, radio, and print media interviews
- Taped five 30-minute TV shows (PBS, EPA-TV, DEP-TV)
- Live guest for three 30-minute radio programs
- National/international media including:
 - US News and World Report, Mother Jones,
 - Utne Reader, Washington Post,
 - National Public Radio, Canadian Broadcasting Corporation
- Numerous press conference presentations
- Columnist Blue Ridge Press and state, local, and non-profit publications

Innovative Education Program at UNC Chapel Hill April 1996 – January 1997, Chapel Hill, NC

Select program (10 of 110 advanced degree applicants), 24 education credits, fulltime math/English teacher at inner-city summer school, semester as earth and physical sciences teacher at rural High School, 12 on-campus education credits

Program/Project Manager and Senior Hydrogeologist May 1989 - April 1996, Midwest Research Institute (MRI), Cary, NC

Program and project management

Managed EPA Underground Storage Tank Program delivery order contract, managed 27 government, 3 private contracts to completion on schedule and within budget

Facilitating teams in process improvement

Facilitated team of 18 *North Carolina* environmental regulators in problem identification, priority setting, guidance document development, speaker presentations for a "Consultant's Day," 415 consultants heard clear and documented requirements for site assessment, corrective action, trust fund, and compliance reporting efforts

Facilitated team of 20 *Delaware* environmental regulators guidance document development, speaker presentations for "Consultant's Day," 250 consultants heard clear and documented requirements for site assessment and corrective action efforts and submittals, with emphasis on soil vapor extraction and pilot program

Facilitated team and directed 12 presenters of *Maryland* environmental UST program to deliver newly created guidance to 300 contractors and consultants

Facilitated team of 35 *Louisiana* environmental regulators in guidance document development that detailed all submittals and provided templates for illustrations and tables for UST contractors and consultants (contributed to national award for Louisiana DEQ)

Facilitated team of 25 *Maine* environmental regulators in computer system setup to collect all staff generated field data, perform automated tracking of compliance status, cleanup progress, and fund expenditures for UST

Facilitated team of 20 *Connecticut* environmental regulators in developing guidance documents for UST site assessment, interim measure corrective action

Facilitated team of 22 *West Virginia* environmental regulators in guidance document development for UST site assessments, corrective actions

Facilitated team of 25 *California (Los Angeles County)* environmental regulators in data management system creation, outreach and communication products, and simplified reporting requirements

Training courses and workshops

Developed and presented 6 training courses to *Native Americans* from 135 tribes in *CA*, *AZ*, *NV*, and *NM*; featuring risk-based site assessment and cleanup; 280 attendees, with interests ranging from LUST sites to landfills and mining impacts

Developed and presented a 4-day training course covering site assessment report and corrective action plan reviews to 45 state environmental program staff from *OK*, *LA*, *TX*, *NM*, *AR*, *IO*, *MO*, *KN*, and *NB*

Developed and presented a 3-day training course covering site assessments and corrective actions to 28 state environmental program staff from *CO*, *WY*, *MT*, *UT*, *and ND*

Developed and presented 1-day bioremediation training course to 55 *North Dakota* UST program staff and consultants, and developed corrective action plan checklists for in-situ and ex-situ bioremediation and landfarming

Developed and presented training on vacuum-enhanced free product recovery to state UST program staff in *Delaware*

Developed and presented training to *EPA* and their contractors addressing how to prepare and conduct "Consultant's Days" or open forums to explain requirements to regulated communities and their contractors

Presented 10 *FrontLine Leadership* training courses covering topics from coaching for optimal performance to corrective action for MRI management, selected as in-house trainer for 72-person RTP office

Guidance documents

Key contributor to *national committee* of the 20,000 member Association of Groundwater Scientists and Engineers in the development of site assessment guidance document, for use in ASTM standards

Led teams of environmental program staff to create customized guidance:

- North Carolina site assessment guidance
- Connecticut site assessment, interim corrective action guidance
- West Virginia site assessment, interim cleanup, corrective action guidance
- Maryland site assessment guidance
- Delaware site assessment guidance presentations
- Louisiana site assessment guidance
- Nevada corrective action guidance for Petroleum Fund coverage
- Alaska's corrective action guidance for cold climates

Groundwater monitoring and risk-based assessments

Evaluated <u>Yellow Freight</u> UST sites in 4 states, involving compliance, site assessment, and relative risks to nearby environmental and human receptors

Designed, wrote specifications, and oversaw groundwater monitoring program for DOE's *National Renewable Energy Laboratory*, in Golden CO

Public speaking

Invited keynote speaker Groundwater Professionals of North Carolina 1994

Invited keynote speaker Louisiana UST Conference 1992

Invited speaker *National All States Conference for EPA HQ/Regional staff*, addressing monitoring technologies for detecting petroleum releases 1991

Invited speaker US Air Force conference on LUST site cleanups 1992

Hydrogeology and Technology Evaluation

Developed marketing strategies to expand use of horizontal dewatering systems for groundwater containment and remediation

Assisted EPA in research objectives in response to Science Advisory Board

Supported demonstration projects for using vacuum extraction at LUST sites

Developed best-use-of-technology parameters for *EPA* to determine when contaminated groundwater/soil cleanups reached technically achievable limits

Evaluated vacuum enhanced free product recovery as an innovative technology

Reviewed site assessments and corrective actions for enforcement cases involving leaking USTs on *Indian Lands*, to prevent contamination of water supply wells

Technical reviewer for the journal Ground Water 1994-1995

Technical presentations at 6 national conferences on petroleum-contaminated site investigations, corrective actions, and regulatory process improvements

Project Manager/Hydrogeologist 1988-1989, Environmental Compliance Services, Springfield, MA

Managed 20 site investigations and emergency response projects in MA, CT, RI; responsible for costs, scheduling, subcontractors, client interfacing, regulatory deliverables, invoicing, and completion within contract terms

Field investigations and oversight, UST tank closures, groundwater monitoring, multimedia sampling, soil gas surveying, and on-site emergency coordination with state and local officials

Developed in-house health and safety training materials, quality control/quality assurance program, prototypes of report formats for regulatory compliance, and field methods for soil gas monitoring using portable GC

Project Manager/Geologist 1980-1986, Science Applications International Corporation (SAIC), Morgantown WV and McLean VA

Military base investigations

Project manager for completion of DOD IRP investigation at *McEntire Air National Guard Base* in *SC*; monitoring wells, multimedia sampling, contaminant extent, oversaw subcontractors and deliverables on \$249K project

Phase II site investigations at *Dover AFB* (*DE*), *Hill AFB* (*UT*), *Charleston AFB* (*SC*), *Niagara Falls Air Force Reserve Facility* (*NY*); various support in costing, work plans, drilling, monitoring well installation, sampling, data interpretation, subcontractor selection and oversight, and reporting

Phase I investigation of *Titan missile testing site, Littleton CO*, evaluating groundwater contaminant risks and pathway potential for reaching public drinking supply, and monitoring recommendations in surficial deposits, shallow dipping sedimentary bedrock, and deeper fractured crystalline bedrock.

Superfund sites

Stringfellow Superfund site investigation in CA; geophysical and downhole television log interpretation and recommendations for packer assembly and placement for hydrogeologic flow testing in fractured bedrock

Western Processing Company Superfund site in WA; remedial action/capping evaluation, core sampling, permeability analysis, co-author of published results and recommendations in Journal of Environmental Engineering

Denny Farm Superfund site in MO; prepared case study of remediation cost, technical methods, cleanup effectiveness, and alternative technology options at dioxin-contaminated site underlain by solution-enhanced limestone

Innovative technology

Developed criteria for evaluating emerging remediation technologies for EPA Office of Research and Development for bench- and pilot-scale testing, developed Requests For Proposals (RFPs) and reviewed and scored proposals

Evaluated failed wastewater treatment system in MO, determined substrate suitability and liability in karst terrain for alternative treatment methods

Radioactive waste site

DOE High-Level Radioactive Waste Repository in NV; synthesized peer reviews on borehole shaft sealing and risks of radionuclide transport via boreholes

Oil and gas research and development

Task manager for *Multi-Well Test Program* for *DOE* and *Gas Research Institute* to optimize gas production from Devonian shale; responsible for well coring, offgassing analysis, correlation of gas production to lineaments, and geologic framework determined from constructing multiple isopach and structure contour maps using 300 Devonian gas well logs and production data

Assisted in gas well flow testing, on-site equipment maintenance including wirelines and real-time computer processing of drawdown and buildup data in offset wells, drilling and installation of 3,500-foot test wells, packer assembly and placement for well testing, geophysical logging and interpretation, and downhole video logging and subsurface fracture orientation and analysis

Coal mine permitting and environmental impact assessment

Evaluated deep mining impacts from coal mining in 200 square mile area for *Consolidation Coal*; assisted in construction of isopach maps, structure contour maps, cross-sections and fence diagrams using up to 300 exploration well logs for each deep mine, average suite of 19 maps for each of 8 deep Pittsburgh coal mines in Northern WV

Surveyed and personally interviewed 1,100 households with domestic water supply wells, collected and plotted altimeter and projected location data onto cross-sections, determined relationship of groundwater impacts to mining from Consol's Pittsburgh and Waynesburg deep mine and air shaft operations

Hydrologic impact assessments for roughly 80 coal mining and preparation plant sites in KY, WV, and VA; authored environmental sections of 40 mine permits, assisted in field data gathering at numerous other sites

Acid mine drainage sampling for impacts on streams from numerous Northern WV coalfield sites, collecting and analyzing samples for AML submittals, collecting and analyzing flow data, maintaining field and laboratory equipment

References and list of publications available upon request

Public Service and Volunteering

United Way Campaign Coordinator - Midwest Research NC (1989 to 1996)

MRI Volunteer Coordinator - Served numerous organizations (1989 to 1996)

Habitat for Humanity - Durham NC, crew leader (1989 to 1993)

Little League Basketball Coach - Chapel Hill NC (1993 to 1995)

Partnership for Science and Math (RTP) - 10 NC public schools (1992 to 1996)

Scientist-in-Residence - West Cary Middle School NC (1993 to 1994)

United Way Fund Distribution Committee - Wake County NC (1994 to 1995)

Environmental Federation of NC - created first NGO workplace access in NC, for umbrella organization of 17 environmental non-profit groups (1993, ongoing)

Southern Environmental Law Center – technical reviews for off-shore drilling EIS and proposed low-level radioactive site assessments in NC (1993 to 1995)

Various NC Non-profits - South Raleigh CLEAN, National Toxics Campaign, Clean Water Fund, Stanly Countians Opposed to Toxic Hazards (1989 to 1997)

Project HOPE - legislative education and training (1999 to 2000)

Volunteer instructor - 11 WV public, private, trade schools (1999 to 2001)

WVU Economic Justice Coalition - panels, workshops (2000 to 2001)

Marshall U. Student Activism for the Environment - presentations (2001 to 2002)

Hugh O'Bryan Youth leadership conference - panelist (1999 to 2001)

Various WV Non-profits - Cacapon Institute, Coal River Mountain Watch, WVU Sierra Club, WV Organizing Project, WV Rivers Coalition (1999 to 2002)