Jaclyn A. Baron Environmental and Water Resources Consultant Uhl & Associates, Inc.

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M. S. Water Resources Engineering, Thayer School, Dartmouth College, 1982 B. S. Chemical Engineering, Columbia University, New York, 1975 Bronx High School Of Science

SPECIALTIES

WATER QUALITY PROGRAMS

- Design and implementation of local and regional groundwater and water supply monitoring programs.
- Specification of sampling and analytical testing protocols.
- Management and analysis of groundwater chemical data.
- Data usability and trends analysis.
- Preparation of laboratory scope of work, including QA/QC and reporting.
- Assessment of the validity and soundness of groundwater quality data.
- User-friendly data presentation and comparison to Federal, State, WHO and other applicable drinking water quality criteria.
- Interpretation of water quality results in the context of public health risks.
- Evaluation of water quality degradation sources.

ENVIRONMENTAL EVALUATION, PROTECTION AND REMEDIATION

- Environmental assessments of commercial and industrial facilities.
- Remedial investigations of federal and state-regulated sites.
- Feasibility studies for remedial action selection.
- Implementation of soil and groundwater remedial actions.
- Regulatory interface and negotiations.
- Public and community involvement.
- Technical support for environmental litigation.

PROJECT MANAGEMENT

- Technical, financial, and personnel administration of environmental projects.
- Development of technical scopes of work, work plans, and cost estimates.
- Preparation of reports and correspondence.
- Critical reviewer and editor of project plans and documents.

EMPLOYMENT HISTORY

UHL & Associates, Inc. Partner and Principal Engineer, 1991 to present

Geraghty & Miller, Inc. Associate, Senior Scientist 1987 to 1991

Woodward-Clyde Consultants Staff, Assistant Project and Project Engineer 1982 to 1987

Exxon Chemical AmericasContact Engineer, Process Design Engineer 1975 to 1978

Bayway Refinery

PROFESSIONAL PROFILE

Ms. Baron's career start as a process and design engineer in petrochemical manufacturing provided her with direct experience of chemical technologies and equipment, operational procedures and limitations, effluent and emissions sources, and a very practical foundation for her future in water quality and environmental consulting.

With Woodward-Clyde Consultants in the early through mid1980's, Ms. Baron had the opportunity to work in the environmental field through a period of rapid development of federal programs to identify and address groundwater and water supply contamination issues, and apply state-of-the-art policy and technical practices to many site studies. She participated for five years in a prototypical groundwater remediation program for a large hazardous waste disposal facility. She managed the groundwater quality components of projects at many sites subject to the directives of the Superfund, hazardous waste, national pollutant discharge elimination, and clean water act regulations.

In the last 25 years with Geraghty & Miller and UHL & Associates, Ms. Baron has managed and directed a large variety of groundwater and soil contamination projects. She prepared numerous technical reports on groundwater quality investigations and monitoring, and she was the principal technical editor of all major reports issued by UHL & Associates. These included the comprehensive completion report of a two-year regional groundwater exploration study in Botswana, Africa with sections contributed by over fifteen technical experts and university professors. She also provided review and opinions on numerous technical programs and documents by others with respect to the validity of the studies, the soundness of proposed remedial actions, and the effectiveness of implemented groundwater remediation systems.

REPRESENTATIVE PROJECTS

WILLIAMS GAS PIPELINE – TRANSCO

For over 13 years, directed and managed various environmental projects at natural gas facilities in the Northeastern United States involving releases of mercury, petroleum products, and polychlorinated (PCBs). Managed soil remediation projects at multiple metering and regulating facilities along the main pipeline.

Managed the site investigation and remediation of a natural gas compressor station with 35 soil and groundwater areas of concern, that was granted no further action status by the New Jersey Department of Environmental Protection

MANAGED LONG-TERM GROUNDWATER MONITORING PROGRAMS AT 13

COMPRESSOR STATIONS IN NJ, PA, VA, MD and NC.

Evaluated trends in metal concentrations over time with increasing states of well development and implemented recent techniques such as low-flow sampling. Worked with state regulators to adjust the parameters and frequency of monitoring to fit site conditions; and achieved no further monitoring/action status for the groundwater at 5 compressor stations in Pennsylvania. Prepared technical reference reports summarizing the entire history of soil remediation and groundwater monitoring at Transco compressor stations in Pennsylvania. Set up programs and provided oversight for laboratories conducting routine drinking water monitoring at compressor stations in conformance with state requirements.

NEW JERSEY MUNICIPALITIES

Conducted environmental assessment of a former farm property to support the purchase of the property for preservation of open space by Union Township. Reviewed available NJ documents and prepared a draft Wellhead Protection Ordinance for Montville to protect the limited buried valley aquifer resource serving as the primary water supply to the township. Reviewed and commented on Environmental Impact Statements for proposed developments in these and other Townships.

CHUBB GROUP OF INSURANCE COMPANIES

Technical oversight of the investigation and remediation of many home heating oil tank leakage and spills in New Jersey and New York. Evaluation of site conditions and of applicable and reasonable steps for effective remediation, including sites remediated by soil removal, and by aeration, oxidation-reduction compounds (ORC) or chemical oxidation agents in-situ methods. Provided technical backup to cost negotiations for a hazardous soil cleanup at a Brownfields site in Queens, New York.

DEPARTMENT OF WATER AFFAIRS, GOV. OF BOTSWANA, SOUTHERN AFRICA

Provided detailed technical review and editing of a voluminous report documenting the findings and recommendations of a 2-year groundwater resource evaluation and development study over a 5,000 square mile area in the Kalahari Desert of northern Botswana. The report included the work products of a 30-person team of experts in the disciplines of vegetation analysis, geomorphology, structural geology, hydrogeology, geophysics, surface water geology, remote sensing, hydro-geochemistry, and stable isotopes.

AVX CORPORATION. FORMER ELCO U.S.A. FACILITY

Lead writer of the approved Remedial Investigation and Cleanup Plan documents for a former electronic-connector manufacturing facility in Pennsylvania remediated under "Act 2 of 1996". Provided technical

support for design and implementation of monitoring programs, and data interpretation and calculations related to the performance of a vacuum-enhanced recovery (VER) dual phase remedial system and the influence of natural attenuation in removing volatile organic compounds from soil and groundwater.

De MAXIMIS, iNC. HOWMET FACILITY

Reviewed years of groundwater and soil data generated by previous consultants for a manufacturing facility in New Jersey. Compiled these data into an accessible format and evaluated the data with respect to constituents of concern and potential migration pathways. Designed and managed a comprehensive groundwater monitoring event for a wide range of chemicals and low-level radionuclides in groundwater. The objectives of this event were to address issues and concerns of the state regulators regarding previous sampling by others, and to focus further site studies onto parameters/locations of importance for establishing a Classification Exemption Area for groundwater.

BIG V SUPERMARKETS, INC. (SHOP RITE)

Baldwin Place Mall. Managed the state CERCLA Remedial Investigation (RI) at a shopping center with dry cleaner-related contamination in Westchester County. Designed the sampling and analysis programs, interpreted the field and laboratory data, and was the lead writer of the RI Report. Instituted and for 8 years supervised a routine quarterly monitoring program for 20+ residential and commercial wells in neighboring areas impacted by tetrachloroethylene (PCE) and trichloroethylene (TCE) until public water supply became available. The program objectives included monitoring groundwater quality concentration trends, the extent/limits of impact, equipping wells as needed with individual GAC filter systems, and confirming acceptable drinking water quality was being provided by the individual wells treatment.

POTENTIALLY RESPONSIBLE PARTIES (PRP) GROUP. NOVAK SANITARY LANDFILL

Managed the federal CERCLA Remedial Investigation (RI) for a sanitary/industrial landfill in eastern Pennsylvania. Designed and implemented the sampling and analysis programs for the site surface water, groundwater and soil. Located, gained access to, and tested 10+ nearby residential wells used for drinking water. Supervised and provided technical editing of the work products of the expert teams conducting the air quality monitoring, quantitative risk assessment and data validation. Compiled and interpreted the water and soil quality data in the context of the site and regional hydrogeology and was the lead writer of the RI Report. Managed a quarterly residential well monitoring program for 2 years to confirm a lack of impact above applicable drinking water standards for constituents of concern including volatile organic compounds and landfill leachate parameters.

AETNA INSURANCE COMPANY

Provided technical/cost review of environmental reports and remedial plans by Insured's consultants for numerous sites concerning leakage/spillage from residential/commercial heating oil USTs, gasoline stations, and solvent spills at industrial facilities. Prepared opinions regarding the status of these sites and recommendations for directions of future efforts.

VIRGIN ISLANDS ALUMINA COMPANY

Managed a pre-purchase comprehensive environmental assessment study of a complex alumina refining facility in St. Croix, U.S. Virgin Islands. This study included finger-printing petroleum product in groundwater to identify it and distinguish between oil released by the alumina facility and gasoline released by the neighboring oil refinery; chemical analyses of solid materials lining the bottom of multiple-acre cooling ponds, and an engineering analysis of these ponds with respect to cooling capacity and effluent temperature limits.

U.S. ENVIRONMENTAL PROTECTION AGENCY REGION V: REMFIT and REM II CONTRACTS

Prepared work plans for CERCLA (Superfund) remedial investigations and pre-design phase studies at varied sites throughout the mid-western United States including former metal hydroxide sludge burial pits in Michigan; an oil reclamation facility in Indiana; a wood tar waste site in Michigan; a large wood treating facility in Indiana; a solid waste landfill in Ohio; and a former drum storage site in Ohio. Prepared and provided technical review of site-specific sampling and analysis plans and quality assurance/quality control project plans (QAPPs) for the generation of field and laboratory data for these and other sites assigned to the multi-firm project team. Interacted with USEPA to request special analytical services by providing special services analytical protocols to the contract laboratories. Served as the REM II regional health and safety officer.

CHEMICAL WASTE MANAGEMENT. NIES LANDFILL

Responsible for water-quality investigations and chemical testing programs throughout a 5-year RCRA remediation program at a major hazardous waste disposal facility in Kansas with heavy volatile organic and metal contamination. Conducted programs to delineate environmental impacts in air, soils, and groundwater; evaluate the effectiveness of closure and containment actions; stabilize chemical-laden sludges for land disposal; test and select compatible synthetic liner components for new disposal cells. Prepared RCRA permitting and report documents and exhibits for litigation.

PUBLICATIONS

K. H. Kastman and J. A. Baron, 1986. "Case History of Flyash-Stabilized Sludge Containing Metal and Organic Compounds." Proceedings of the ninth Annual Conference on Municipal and Industrial Waste, Madison, Wisconsin, September 1986.

D. Hendron, K. Kastman, J. Baron and J. Seymour, 1986. "Hazardous Waste Facility Failure Mechanisms and Site Remediation." Proceedings of Woodward-Clyde Consultants Professional Development Conference, St. Louis, Missouri, October 1986.

K.H. Kastman and J. A. Baron, 1985. "Contaminant Transport Model of a Hazardous Waste Site, Central United States." International Symposium on Management of Hazardous Chemical Waste Sites, Winston-Salem, North Carolina, October 1985.

Vincent W. Uhl, Anthony J, Rana, and Jaclyn A, Baron. 1998. Groundwater Resource Evaluation, Maun, Botswana, S. Africa. The Professional Geologist, November 1998.

Vincent W. Uhl, Anthony J, Rana and Jaclyn A. Baron. 1999. Groundwater Resource Assessment for Maun at the Distal Edge of the Okavango Delta, Northern Botswana. Paper presented at the 9th Stockholm Water Symposium, Stockholm, Sweden.

Vincent W. Uhl, Anthony J, Rana and Jaclyn A. Baron. 1999. Groundwater Resource Assessment and Development in Northern Botswana. Paper presented at WEDC Conference, Addis Ababa, Ethiopia.

Vincent W. Uhl, Anthony J. Rana and Jaclyn A. Baron. 2004. The East Orange Water Reserve – 100 Years of Wellfield Protection. Paper presented at AWWA New Jersey Conference, Atlantic City, New Jersey.

Vincent W. Uhl and Jaclyn A. Baron. 2005. Wellhead Protection, Strategies for Drinking Water Wells. Paper presented at the 15th Stockholm Water Symposium, Stockholm, Sweden.