

IRA L. WHITMAN, PH.D., P.E.

PRINCIPAL

EDUCATION

Ph. D. Environmental Engineering Science The Johns Hopkins University	1968
M.S. Civil Engineering The Polytechnic Institute of Brooklyn	1963
B.C.E. Civil Engineering The Cooper Union	1961

REGISTRATION AND CERTIFICATION

Board Certified Environmental Engineer, American Academy of Environmental Engineers
Certified in the specialty of Hazardous Waste Management

Registered Professional Engineer, New Jersey, New York,
Maryland, Ohio, Delaware, Pennsylvania, Connecticut

Certified by NJDEP as a Temporary Licensed Site Remediation Professional LSRP #505652

RESPONSIBILITY AND EXPERIENCE, WHITMAN

In 1985, Dr. Whitman founded Whitman consultants in Environmental Engineering and Management. The company is dedicated to serving its clients in the field of environmental compliance by bridging the gap between management and technical issues in environmental compliance and property redevelopment.

Dr. Whitman is an expert on site remediation, compliance with ISRA, the New Jersey Industrial Site Recovery Act, and on Brownfield site redevelopment. The Whitman Companies has managed environmental compliance projects for industries in most fields of manufacturing, including chemicals, steel, electronics, ceramics, printing, rubber and machinery. He serves on the Site Remediation Advisory Committee, a group established to assist NJDEP in implementing its site remediation activities.

Dr. Whitman has devoted considerable attention to the problems of redeveloping urban industrial sites and the risks and economic benefits associated with site reuse. He has helped to guide a national effort on Brownfields through the Northeast Midwest Institute in Washington,

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D.C., as a member of the Institute's Board of Directors, and a municipal effort as a member of the Brownfields Environmental Solutions for Trenton (BEST) advisory group since 1995.

Dr. Whitman has supervised site remediation design and implementation projects in a number of states, involving a variety of contaminants, ground water conditions, and remediation technologies, since 1985.

Dr. Whitman has served in an expert capacity on numerous cases involving environmental compliance and site remediation. He has prepared expert reports and testimony involving ground water and soil contamination, site redevelopment, underground storage tanks, and a variety of regulatory, engineering, insurance and scientific matters. He has recently expanded his areas of interest to include alternative conflict resolution and mediation approaches applied to environmental and business conflicts, and is presently looking into the relationship between climate change (global warming) and environmental degradation.

Dr. Whitman's other recent professional assignments include:

- Representing clients in matters of insurance claims pertaining to site remediation
- Review and comment on proposed environmental regulations and legislation
- Providing expert testimony on site remediation with regard to the condemnation taking of a large Brownfield site in an arbitration hearing conducted under procedures established by the New Jersey Supreme Court in Housing Authority of the City of New Brunswick v. Sudyam Investors, LLC.
- Serving as an expert in the Sudyam Investors Case on behalf of the property owner whose property was taken by Eminent Domain.

SUMMARY OF OTHER PROFESSIONAL EXPERIENCE

**Princeton Aqua Science
Edison, New Jersey**

1980-1985

President and C.E.O.

Responsible for all business, technical and marketing activities for Princeton Aqua Science, a firm of environmental scientists and engineers.

- In five years led the firm to a five-fold increase in sales, and a ten-fold increase in profits.
- Developed regional preeminence in chemical and aquatic bioassay analysis, hazardous waste site investigation, and environmental impact analysis.

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- Directed staff of 80 including eight Ph.D.s and six Registered Professional Engineers. Disciplines included geology, chemistry, biology, civil, chemical, mechanical, and environmental engineering.
- Managed all marketing, sales, and public relations.
- Responsible for developing and implementing annual business plans, budgets, and capital acquisition and marketing programs for the company.

Dr. Whitman guided PAS into becoming one of the primary ECRA and site remediation authorities in the state, areas of environmental engineering that were responsible for much of the company's growth. Because of PAS' established reputation as an ECRA consultant, the firm was acquired in 1985 by a major national environmental engineering and remediation consulting firm.

NUS Corporation Gaithersburg, Maryland

1976-1980

Director, Public Works Programs

Responsible for developing and executing projects in environmental engineering and energy for federal, state, and local agencies. Served as advisor to corporate management on the development of programs in hazardous waste management. Public sector business development included projects related to:

- Advanced wastewater treatment
- Energy development, conservation, and integrated uses
- Solid waste, resource and fuel recovery
- Water resources management

Ira L. Whitman, P.E. Environmental Engineering and Management Columbus, Ohio

1975-1976

Principal

Sole proprietor in environmental consulting during 18-month period. Private and public sector clients included American Public Works Association (APWA) and National Academy of Science. For APWA, developed a 40-hour EPA training program entitled "Troubleshooting Operations at Wastewater Treatment Plants." Course was presented in all ten EPA regions.

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**State of Ohio EPA
Columbus, Ohio**

1972-1975

Director and Member of Governor's Cabinet

Served as organizer and first Director of the Ohio EPA. Management, regulatory and technical responsibility for all State programs in water and air pollution control, solid waste, drinking water, environmental impact and comprehensive water planning. As Ohio EPA Director, served on the boards of the following authorities:

- Ohio Power Siting Commission, Chairman
- ORSANCO
- Great Lakes Basin Commission
- Ohio Air and Water Development Authorities
- IJC Great Lakes Water Quality Board
- Trustee, Association of State and Interstate Water Pollution Control Agencies

**Battelle Memorial Institute
Columbus, Ohio**

1968-1972

Director, Urban and Environmental Planning Programs

Organized and managed programs in environmental planning, EIS analysis, water resources and regional development. Developed the first quantitative environmental evaluation system under NEPA for the U.S. Bureau of Reclamation, U.S.D.I. Managed a large multidisciplinary evaluation of resource management in the Great Lakes basin, which included collaboration with Elinor Ostrom, recent recipient of the Nobel Prize in Economics.

Prior to Battelle, employment included flood plain management and hydraulic engineering for the Baltimore and New York Districts, U.S. Army Corps of Engineers.

PRESENTATIONS AND SPEAKING ENGAGEMENTS

Dr. Whitman actively speaks on many subjects in the environmental field. Recent speaking engagements include:

1. March 2007 Global Warming, Brandeis University National Women's Committee, East
January 2008 Brunswick, New Jersey and subsequent presentations on the international
and political issues associated with climate change.
2. December 2006 Environmental Issues in Commercial Real Estate Practice, New Jersey
Institute for Continuing Legal Education, New Brunswick, New Jersey

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3. November 2006 Browfields 101, Workshop at EPA National Brownfields Conference, Boston, Massachusetts
4. July 2006 Market Driven Decision Making – Brownfield Redevelopment by the Private Sector, Brownfields 2006, Wessex Institute of Technology, Tallin, Estonia
5. June 2006 Private Sector Perspectives – Overview of Ground Water Issues, Ground Water 2006, New Jersey Water Environment Association, East Brunswick, New Jersey
6. May 2005 Evaluating Environmental Liability, 2005 Industrial Property Summit, Chicago, Illinois
7. October 2004 Brownfield Redevelopment – How Ready Are You To Market Your Sites?, ICMA National Conference, San Diego, California
8. March 2004 Things You Learn on the Job As An Expert Witness, Cook College Seminar
March 2006 The Role of the Environmental Professional in Litigation.
9. February 2004 How Developers Value Land Reuse, Resources for the Future Workshop on Estimating Community Economic Impacts from the Reuse of Contaminated Properties.
10. December 2002 Why Redevelopment of Contaminated Properties Works in New Jersey
Financial Transaction Committee, New Jersey Bar Association
11. November 2002 Profile of The Brownfield Developer
Brownfields 2002 Conference, Charlotte, North Carolina
12. December 2001 Brownfield Case Study: Brooklyn Navy Yard
New York Real Estate Forum, Baruch College, New York, New York
13. September 2001 Brownfield Stakeholders, Partnership For Sustainable Brownfield Redevelopment, Brownfields 2001 Conference, Chicago, Illinois
14. Sept.-Nov. 1996 Lectures at eleven universities nationwide on Brownfield Site Remediation and Restoration, endowed Kappe lecturer by American Academy of Environmental Engineers
15. January 1995 Identifying and Prioritizing Contamination Problems at Brownfields Sites, USEPA Brownfields Workshops, Newark, NJ, Buffalo, NY and San Juan, PR

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PROFESSIONAL ASSOCIATIONS AND ACTIVITIES

American Academy of Environmental Engineers

American Society of Civil Engineers (Life Member)

Water Environment Federation

Site Remediation Committee, NJ Water Environment Association

National Association of Industrial and Office Properties

Licensed Site Remediation Professional Association of New Jersey

Dr. Whitman served as Chairman of The Clean Water Act Reauthorization Committee and the Government Affairs Committee for the Water Environment Federation, Alexandria, Virginia. He has been a Director at Large on the Board of Control of the Federation and a member of the Executive Committee. In 1998, he was honored by the Federation as an Honorary Member of WEF in recognition of his years of professional contribution and service.

Dr. Whitman served on the Board of Directors of the Northeast-Midwest Institute, a non-profit research and policy organization serving the 18 state Northeast and Midwest Regions. He was a member of the Training and Technology Transfer Advisory Committee of the Northeast Hazardous Substance Research Center, New Jersey Institute of Technology and The Outreach Advisory Committee, Center for Hazardous Substances in Urban Environments, The Johns Hopkins University.

In 1992, Dr. Whitman received the NJWPCA award for Professional Advancement of Hazardous Waste Management. In 1996 he became the first recipient of WEF's national award for Hazardous Waste Management. In 2008 he received the Gano Dunn Engineering Alumni Award from the Cooper Union Alumni Association.

Dr. Whitman has served on professional panels and advisory groups throughout his career, including: Board of Trustees, New Jersey Marine Sciences Consortium; Advisory groups to New Jersey Department of Environmental Protection, National Academy of Sciences, and USEPA. He presently serves on the Board of Trustees of the Municipal Land Use Center at the College of New Jersey.

PUBLICATIONS

Dr. Whitman has authored numerous professional publications in the field of Environmental Management. Recent publications include:

“Overcoming Environmental Constraints to Redevelopment”, Chapter 12, Redevelopment, American Bar Association, 2008

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“Global Warming – Global Opportunity”, NJBIZ, April 16, 2007

“Brownfield Redevelopment By the Private Sector,” Proceedings, Brownfields III Conference, July 2006, WIT Press, Southampton, U.K.

“Redevelopment of Portfields,” New Jersey Brownfields Marketplace, May 2004

“Smart Growth – Is It For Real?,” National Hotel Executive, August 2003

“A Look at New Issues in Brownfield Redevelopment,” New Jersey Real Estate Journal, April 2002

“New Opportunities for Brownfield Redevelopment,” Pollution Engineering, March 2002

“Buying Into Brownfields,” Commercial Investment Real Estate, September/October 2001

“Putting the Development in Brownfield Redevelopment,” Environmental Protection, August 2000, Co-author Barry Skoultchi

“Engineering The Remediation of Brownfields Sites,” EM, Air & Waste Management Association’s Magazine for Environmental Managers, April 1997