

JOHN SEYMOUR, P.E.

remediation
geoenvironmental engineering
geotechnical engineering
coal combustion residuals management

EDUCATION

M.S., Geotechnical Engineering, University of Michigan, Ann Arbor, Michigan, 1980
B.S., Civil Engineering, Michigan Technological University, Houghton, Michigan,
1976

PROFESSIONAL REGISTRATIONS

Illinois P.E. Number 062-040562
Michigan P.E. Number 6201033056
West Virginia P.E. Number 017091
Wisconsin P.E. Number 26727

CAREER SUMMARY

Mr. Seymour is a geotechnical engineer with nearly three decades of experience in the U.S., Canada, Spain, Guatemala and Korea in the areas of site remediation, deep foundations, and construction management. He has focused on waste management and remediation (Superfund (CERCLA) and RCRA) projects for 25 years, having had significant involvement in 17 sites providing professional services in the areas of project management, project coordination (client representative), site characterization, feasibility studies, bench/pilot studies, civil/geotechnical design, construction quality assurance (CQA), and operation and maintenance.

He has completed field studies including geologic and hydrogeologic studies, aquifer testing, seismic surveys, landfill settlement tests, and the characterization of volatile organic compounds (TCE and by-products), semivolatile organic compounds, PCBs, lead, and saline groundwater intrusion.

He has provided coal combustion residuals (CCRs) engineering services, regarding waste management of fly ash, bottom ash and flue gas desulfurization (FGD) waste for impoundments and landfills. These services have included geotechnical and environmental evaluations of waste disposal expansions, operations and closure, disposal permit application preparation for eight U.S coal power generation clients. Overall he has provided relevant consulting engineering services for 7 CCRs impoundments and 14 CCR landfills and provided records review, evaluation and engineering scope of work development for 4 additional CCR impoundments. He has



translated some of his experience into 11 technical papers and recently submitted two final draft research guidance documents on CCR impoundments (co-investigator), and provided 10 technical presentations at conferences including at conferences focusing on CCR management.

His clients have primarily included major industrial manufacturers (utilities, automotive, tools, appliances) and waste management/disposal companies. He has been the lead in the design of 11 landfills. He has been the project lead for several major (multi-million dollar) remediation sites. He also has assisted in remedy negotiations with state and federal agencies at many sites.

In addition, he has geotechnical engineering experience with the design and construction of deep foundations, including drilled piers, tie backs, foundation grouting and soil improvement programs, and diaphragm (slurry) walls.

Highlights of Mr. Seymour's representative experience include:

Geoenvironmental

J. C. Weadock Plant CCR Facility Engineering Study, Consumers Energy Company, Michigan. Mr. Seymour is the project director and senior technical reviewer for a study of the existing CCR facility. The study is to assess the future use and closure of the facility considering current regulations and future proposed federal regulations regarding CCRs under RCRA and the effluent limitation guidelines and standards for the steam electric power generating industry under the Clean Water Act.

Rivesville and Albright Power Plants, FirstEnergy, West Virginia. Engineer of Record for the design of the closure of two CCR landfills.

Coal Combustion Residuals Pond Closure Guidance Documents, Electric Power Research Institute, Nationwide. Mr. Seymour is a co-investigator/author and project manager for the completion of two guidance documents relating to CCR pond closures. They include: (i) "Coal Combustion Residuals Pond Closure- Dewatering and Capping Guidance", and (ii) "Coal Combustion Residuals Pond Closure- Construction over Closed Ponds".

Confidential Power Plant, Southern Ohio. Mr. Seymour is the project manager for the conceptual design of a 300-acre fly ash disposal pond closure.

General James M. Gavin Power Plant, American Electric Power, Cheshire, Ohio. He managed the design of and the Permit to Install (PTI) application for a 50,000,000 cuyd residual waste landfill for the solid waste permit application under existing OEPA rules which incorporated relevant portions of the U.S. EPA proposed RCRA Subtitle D regulations.

General James M. Gavin Power Plant, American Electric Power, Cheshire, Ohio. Mr. Seymour was the project manager for the focused feasibility evaluation (FFE) for a coal combustion residuals (CCR) landfill expansion and the resulting design and permit application for a landfill expansion.

Monroe Power Plant, DTE Energy, Monroe, MI. Mr. Seymour managed the FGD Gypsum Disposal Facility Preliminary Engineering Study and was the project manager to assess disposal options for new flue gas desulphurization (FGD) gypsum that will be generated at this coal fired electrical generating station. Mr. Seymour is the project director and engineer of record to conduct an evaluation of the earthen containment dike around the ash basin and to assess the potential for a failure due to operating issues.

Planta Las Palmas CCB Landfill Development Studies, Duke Energy International Guatemala, Guatemala. Mr. Seymour completed studies to optimize the development of a new coal ash landfill and prepare site investigation bid specifications. He was the project manager to prepare the detailed design and construction bid documents for the coal storage area, ash landfill, leachate treatment pond with discharge structure, and the power plant water intake structure.

Wauconda Landfill Superfund Site Cover Evaluation, Wauconda Task Force, Wauconda, IL. Mr. Seymour was the project manager for the evaluation of the existing soil cover over Superfund site.

R. Paul Smith CCB Landfill Expansion, Allegheny Energy Supply, Berkeley County, WV. Mr. Seymour was the project manager for the design and construction quality assurance of a coal combustion byproducts landfill at a coal-fired power plant in Maryland with the landfill located in adjacent West Virginia.

MIG/DeWane Landfill Superfund Site Remedial Design, Allied Waste Industries, Belvidere, IL. Assisted the client with negotiations of a Statement of Work with the Illinois EPA for this CERCLA site. He is conducting a remedial design of a new cover system and gas collection system over the 50 acre landfill.

Confidential Landfill Remedial Action Support Services, Republic Services, north-central IL. Providing technical support to legal counsel for the remedy selection process at a 40-acre solid waste facility closed in the 1970s and developed into a park.

Planta Arizona, CCB Landfill Design Consulting, Duke Energy International Guatemala, Guatemala. Mr. Seymour provided consulting to DEIG to layout a new coal ash disposal facility for a coal-fired electrical generating station.

Cardinal Plant Landfill Studies, American Electric Power, Brilliant, OH. Completed a feasibility study to assess the potential to develop a new flue gas desulphurization (FGD) waste landfill over an existing fly ash disposal area at a coal-fired power plant.

Yeoman Creek Landfill Superfund Site, PRP Group, Waukegan, IL. Mr. Seymour was the project manager and Project Coordinator for this CERCLA site closure.

Utility Company, Multiple Sites, WI. Contaminated site consulting services and ash landfill design, construction inspection/management services. Mr. Seymour was the Contract Manager and project manager for multiple sites, including evaluation of existing groundwater remediation system to improve performance and evaluate alternate technologies in Wisconsin, and development of an approach to address existing environmental impacts at an MGP site along the Fox River in Wisconsin

Albion-Sheridan Township Landfill, Cooper Industries and Corning, Inc., Albion, MI. Project Coordinator, at CERCLA site. Provided solid and hazardous waste closure, construction management, remedial design, QA officer, closure certification, solid and hazardous waste remediation.

McGraw-Edison Facility, Cooper Industries, Centerville, IA. Project manager for CERCLA Site that was a manufacturing facility in Iowa to remediate TCE in soil and groundwater. Provided design review and engineering oversight for the installation of an iron reactive permeable barrier wall for treatment of TCE in groundwater and a hydro-fracture enhanced vapor extraction system, including over one year of performance monitoring and evaluation, and fate and transport modeling of the TCE.

J&L Landfill, LTV Steel Company, Rochester Hills, MI. Project Coordinator at this CERCLA site. Provided solid and hazardous waste landfill closure, construction management, remedy negotiation, closure design, QA officer, closure P.E. certification, solid and hazardous waste.

Monroe Stamping Plant Lagoon Closure, Ford Motor Company, Monroe, MI. Project manager for the resident engineering services for this facility where 55 acres of lagoons were closed as a hazardous waste landfill under a RCRA corrective action.

Rasmussen Landfill, PRP Group, Green Oak Township, MI. Project coordinator at CERCLA solid and hazardous waste site. Provided work plans, pre-design and remedial design, construction management for a hazardous waste landfill cover and groundwater pump and treat system, and closure P.E. certification. The project included: removal of hazardous waste drums; preload program to estimate waste consolidation; groundwater aquifer testing; and groundwater modeling.

Motor Wheel Disposal Site, WR Grace, Inc., Lansing, MI. Project manager for cost allocation arbitration case among potentially responsible parties at CERCLA landfill.

Brownfield Redevelopment Site, WEPCo, Racine, WI. Project manager and remediation design engineer for brownfield development with manufactured gas plant wastes (organic and inorganic compounds) in groundwater and soil, and VOCs in soil gas;

included groundwater aquifer testing, site investigation, aquifer modeling, remedial design, construction engineering/resident engineering, operation monitoring for a groundwater extraction system, and soil gas collection system for commercial and residential development at a former manufactured gas plant site.

Janesville Disposal Facility, City of Janesville, Janesville, WI. Groundwater design task manager for this CERCLA site. The site had several landfills that required RCRA cap design and a groundwater extraction system design to prevent groundwater discharge to the Rock River. Based upon the reports, aquifer testing and groundwater modeling, developed the concept to eliminate the groundwater extraction and treatment system because the surface water discharge criteria would not be exceeded and there were no receptors between the landfill and the river.

National Industrial Environmental Services, Chemical Waste Management, Inc., near Wichita, KS. Project engineering, design and project management for CERCLA/RCRA facility corrective action. The project included remediation of VOC groundwater contamination, treatment of sludges containing acids and metals and organics (SVOCs and VOCs) and sludge disposal into two new hazardous waste landfill cells and litigation support. The project also included aquifer tests, groundwater modeling, air monitoring, geophysical surveys, agency reporting, two RCRA Part B permit applications, and technical support for two trials.

Equilon (Shell Oil) Wood River Facility, Shell Oil Company, Roxana, IL. RCRA Corrective Action project management for a refinery along the Mississippi River that had numerous disposal areas. This project included: i) preparation of a RCRA Facility Investigation (RFI) investigation work plan; ii) conduct of the RFI; iii) certification of closure of one RCRA management unit; and iv) RCRA Part B submittal.

Berlin & Farro Liquid Incineration Site, PRP Group, Swartz Creek, MI. Conducted a CERCLA RI/FS, baseline risk assessment, negotiations with Region V EPA and MDEQ for cleanup, and litigation support. The RI included investigation of soil, soil gas, groundwater, surface water and sediment, and included seismic reflection and resistivity geophysical investigations.

Butterworth Landfill, PRP Group, Grand Rapids, MI. Completion of a remedial design work plan that included predesign sampling of soil, groundwater, river sediment, and fish in the Grand River at this 180 acre solid and hazardous waste landfill under CERCLA.

Bailey Dump Superfund Site, Texas Water Commission, Bridge City, TX. Site manager to perform a remedial investigation over a two-month period to characterize uncontrolled hazardous waste landfill under CERCLA.

Salt Intrusion Groundwater Modeling and Feasibility Study, Morton Salt/Rohm & Haas, Inc., Manistee, MI. Project manager for conduct of a feasibility study and groundwater transport model to assess methods to mitigate salt intrusion into an unconfined aquifer in Manistee.

Hartley & Hartley Landfill, Joint Defense Group, Bay City, MI. Project manager for site regulated by the NRC as an SDMP site regarding licensing, leachate management system design, and MDEQ/MDNR interface. The site contained low-level radiological thorium-bearing slag and hazardous and solid waste.

LUST Sites. Management and/or director for over 10 leaking underground storage tank projects in Michigan and Illinois.

Litigation Assignments

Confidential Client, 2014. Mr. Seymour was retained as an expert in the field of CCR landfill design over a closed coal ash pond.

Confidential Client, 2013. Mr. Seymour was retained as an expert in the field of CCR ponds for the arbitration of a major insurance claim.

AmForge Site Expert Witness, Arvin-Meritor, Chicago, IL, 2006. Provided engineering support in the areas of contaminant fate and transport, risk assessment, and site characterization in cost recovery case. The cost recovery was undertaken by private parties brought under CERCLA.

Geotechnical

Baby Creek Overflow Treatment Facility, Detroit Water and Sewerage Department, Detroit, MI. Project manager for the geotechnical investigation and foundation design for a combined sewer treatment system.

Co-generation Power Facility, Sarnia, Canada. Project manager for geotechnical site investigation for a co-generation (steam and electricity) facility.

Vila Olimpica Building, Bovis International, Barcelona, Spain. Project manager to provide deep foundation geotechnical engineering at this 50 story high rise building along the Mediterranean coast.

Lucky-Goldstar Building, Lucky Development Company, Seoul, South Korea. Resident engineer and quality control manager for construction of the deep foundation and foundation grouting program.

Phase I Dam Safety Inspections, U.S. Army Corps of Engineers, Multiple Sites, MO. Field inspection of five dams and reporting writing for approximately 15 dams undergoing Phase I (non-intrusive) safety inspections.

Ann Arbor Wastewater Treatment Plant, City of Ann Arbor, MI. Field resident engineering support for construction of this new facility. His responsibilities included oversight of groundwater dewatering to avoid “bottom heave” of the excavation, compaction control and QC inspection of civil construction.

Beaver Valley Power Station, Duquesne Light, Shippingport, PA. Field resident engineering for foundation construction of an 888 megawatt nuclear fuel power plant.

PROFESSIONAL EXPERIENCE

Geosyntec Consultants, Chicago, IL, 2001-present

URS Corporation, Detroit, MI, 1997 – 2001

Woodward-Clyde Consultants (later URS), Chicago, IL and Detroit, MI, 1980-1997

Townsend and Bottum, Ann Arbor, MI, 1978-1979

Stone & Webster, Shippingport, PA, 1976-1978

AFFILIATIONS

American Society of Civil Engineers

Midwest Coal Ash Association

Society of American Military Engineer

REPRESENTATIVE PUBLICATIONS

- 15-05 “Reliability Analysis of an Existing Ash Basin Embankment” at the World of Coal Ash Conference, Nashville, TN, Omer Bozok, Burak F. Tanyu, Paul Sabatini, and John Seymour
- 15-01 “Conditions of Coal Ash Embankments”, at the U.S. Society on Dams Conference, April 2015 I Louisville, KY, John Seymour, P.E., Omer Bozok, Amanda Hughes, Ph.D., Brad Bodine, P.E; & World of Coal Ash Conference, Nashville, TN, May 2015.
- 13-04 “Challenges of Closing Large Fly Ash Ponds”, World of Coal Ash Conference, Lexington, Kentucky, April 2013.
- 11-05 “Advances in Design of Landfills over CCR Ponds and CCR Landfills”, Proceedings from the World of Coal Ash conference, Denver, CO, John Seymour, P.E. and Michael F. Houlihan, P.E. BCEE, May 2011.
- 11-06 “Case Study: Stability of Two Horizontal to One Vertical Embankment”, Proceedings from ASCE Geo-Frontiers 2011, Advances in Geotechnical

Engineering, Burak Tanyu, PhD, W. Neal, P.E., J Seymour, P.E., M ASCE, D. Bodine, P.E. M ASCE, and O. Bozok.

- 08-04 "Use of Tire Chips in the Final Cover System of a Superfund Site Landfill", ACSE Proceedings from GeoCongress 2008 titled: "The Challenge of Sustainability in the Geoenvironment", Majdi A. Othman, M. ASCE, Ph.D., P.E., and John Seymour, P.E.

INVITED PRESENTATIONS

- 15-06 "Slope Stability, Inspections, and Monitoring Considerations under the CCR Rule", Technical Short Course Teacher at the EPRI CCR Program Summer Meeting, June 2015, Bar Harbor, ME.
- 13-12 "CCR Pond Closures: Major Difficulties and Solutions", presentation to the Utility Solid Waste Activities Group, Washington, D.C., December, 2013.
- 13-04 Presentation of: "Challenges of Closing Large Fly Ash Ponds", at the World of Coal Ash Conference, Lexington, Kentucky, April 2013.
- 13-04 "Hot Topics Regarding Coal Combustion Residuals Management, presentation to Winston & Strawn Environmental Group, Chicago, Illinois, April 2013.
- 11-05 Presentation of: "Advances in Design of Landfills over CCR Ponds and CCR Landfills", at the World of Coal Ash conference, Denver, CO, May 2011.
- 09-04 "Geotechnical Design Considerations for Landfill Construction Over an Ash Pond", World of Coal Ash, Lexington, KY, May 2009