



Kenneth Hayes, P.G.

SPECIALIZATION

Kenneth Hayes has over 25 years of management experience in various industries and more than 12 years of experience working as a Hydrologist for the USGS New Jersey Water Science Center focused in surface water and tidal hydrology and as a Sr. Project Geologist/Hydrogeologist at environmental and engineering firms.

Mr. Hayes performed complex environmental and remedial investigations under a variety of regulatory programs, including CERCLA, RCRA, ISRA, Pennsylvania Land Recycling Program, and USEPA Region III One Clean Up Plan. Mr. Hayes specializes in geophysical well log and subsurface data evaluation/interpretation, cross section construction, 3D subsurface modeling, aquifer test design and analysis, numerical and analytical groundwater modeling, fate and transport simulations, dye trace testing, drilling program design and management, wire-line coring, and geologic/hydrogeologic/surface water and tidal hydrology data collection and analyses.

EDUCATION

Ph.D., Geology, Temple University, Philadelphia, PA	Current
M.S., Environmental Science/Geology, Drexel University, Philadelphia, PA	2009
B.S., Geology, Temple University, Philadelphia, PA	2004

PROFESSIONAL AFFILIATIONS AND CERTIFICATION

Professional Geologist, Pennsylvania, Registration # PG-005042
National Groundwater Association, 2004 to present
OSHA 40-hour Hazardous Waste Operations Training
OSHA Hazardous Waste Operations Site Supervisor Training
American Association of Petroleum Geologists, 2008 to present
Pennsylvania Council of Professional Geologists, 2006 to present
Geological Society of America, 2004 to present
Society for Sedimentary Geology, 2010 to present
Rutgers University, Cook College: Regulatory Training in Underground Storage Tanks, 2008
Pennsylvania Council of Professional Geologist: Geophysical Well Logging and Imaging, 2009
Rutgers University, Cook College: Groundwater in Fractured Bedrock, 2010

WORK HISTORY

EnviroTrac Ltd., Senior Project Manager/Senior Hydrogeologist, 2013 to present
Whetstone Associates, Senior Hydrogeologist/Project Manager, June - August 2013
Environmental Resources Management, Ewing, NJ, Senior Project Hydrogeologist, 2010 to 2013
Langan Engineering & Environmental Services, Philadelphia, PA, Sr. Staff Geologist 2007 to 2010
United States Geological Survey, W. Trenton, NJ, Hydrologist, 2004 to 2007

REPRESENTATIVE PROJECT EXPERIENCE

- *Silver Mine Project, Mexico. Silver Standard Resources Inc.* - Senior Project Manager/Senior Hydrogeologist developing water resources to meet the engineering and design requirements for ore processing and a potable water supply over the 32 year mine life. This project falls under NI-43-101.

Kenneth Hayes, P.G.

- *USA, Confidential Client.* – Senior Hydrogeologist for the project included stratigraphic and hydrogeologic data analysis. Constructing a numerical groundwater model, fate and transport simulations, capture zone analysis, and 3D subsurface modeling.
- *USA, Confidential Client.* - Geologist for the project included identification and mapping of a 50 mi² mineral lease area where naturally occurring crude oil seeps exist including abandoned and open crude oil recovery tunnels.
- *Princeton University, USA* - Project Geologist/Hydrogeologist constructing a multiple layer numerical groundwater model for a New Jersey Bureau of Water Allocations groundwater withdrawal permit modification. Designing and implementing aquifer testing, analyzing and reporting aquifer characteristics as part of a new building construction and dewatering design.
- *Elk Hills Project, USA, Occidental Petroleum Corp.* - Geologist overseeing investigations to characterize and remediate, if necessary, multiple areas of concern on a 72 mi² petroleum and natural gas reserve prior to well placement.
- *Silgan Closures, USA, Silgan Whitecap Americas* - Project Hydrogeologist constructing a numerical groundwater model and running fate and transport simulations that resulted in a PADEP Release of Environmental Liability with an Environmental Covenant for the client.
- *USA, Confidential Client* - Project Geologist/Hydrogeologist analyzing geophysical, soil, bedrock, and hydrogeologic data to construct a numerical groundwater model, run fate and transport simulations, and build 3-dimensional geologic cross sections for a volatile organic compound remedial design.
- *Holland Hitch, USA, Holland USA Inc.* - Project Hydrogeologist performing borehole geophysical and hydrogeologic analysis and site characterization for TCE impacts at a former manufacturing plant including geophysical well logging and imaging analysis.
- *Inman Grove Shopping Center, USA, SBS Management Inc.* - Project Geologist/Hydrogeologist overseeing staffing for drilling programs, data collection and performing site characterization and hydrogeologic analyses for PCE impacts at two dry cleaning facilities.
- *CERCLA Project, USA, Delaware* - Project Geologist performing an extensive site characterization of a processing facility with completion of numerous soil borings, installation of monitoring wells, soil and sediment sampling, surface water sampling, tidal data evaluation of site water bodies, aquifer testing and analysis, and a detailed evaluation of subsurface data to support a Remedial Design submittal to the USEPA.
- *CERCLA/ISRA Project, USA, New Jersey* - Project Geologist overseeing wireline coring and installation of overburden and bedrock monitoring wells, supporting groundwater sampling, and fate and transport/numerical groundwater model construction. Analyzed borehole geophysical and FLUTE well data to define subsurface geologic and hydrostratigraphic units for a submittal to the USEPA Region II under CERCLA.
- *NJ ISRA Project, USA, New Jersey* - Project Geologist conducting geophysical, geologic, and hydrogeologic data evaluation for supporting site characterization under the NJDEP ISRA program.

- *RCRA Project, USA, Thomas & Betts.* - Project Geologist implementing a work plan for a RCRA facility investigation of a former printed circuit board facility to detect and define the extents of chlorinated solvents in the subsurface. Details include borehole geophysical analysis, soil and groundwater sampling, bedrock well installation, aquifer testing and analysis, data management and geologic/hydrogeologic analyses for a site conceptual model, and fate and transport assessment.
- *York Project, USA.* - Project Geologist aiding in development of a site characterization report including groundwater and soil vapor sampling and analyses, evaluation of dye trace testing in Karst geology, along with geologic, hydrogeologic, and Membrane Interface Probe analyses for a site conceptual model and remedial design submittal.
- *Fairless Project, USA, U.S. Steel.* - Field Geologist on multiple Act 2 projects at the Fairless Works. The projects include characterization of soil and sample collection to remediate and revitalize properties via the Pennsylvania Land Recycling Program and Pennsylvania Region III United States Environmental Protection Agency (USEPA) One Cleanup Plan program.

PUBLICATIONS

- Kenneth Hayes, Ilya Buynevich, David E. Grandstaff, Dennis O. Terry, 2011. Correlations in Magnetic Susceptibility across the Paleogene Boundary in central and southern New Jersey. Geologic Society of America Annual Meeting, October 9 – 12, 2011.
- Kenneth Hayes, Ilya Buynevich, David E. Grandstaff, Kristi Dobra, Dennis O. Terry, 2011. Changes in Magnetic Susceptibility across the Cretaceous/Paleogene Interval and Main Fossiliferous Layer at Sewell, New Jersey. Geological Society of America, Northeast/North Central Section Meeting, March 20 – 22, 2011.
- Kenneth Hayes, Allison Jelinek, and Ryan Andersen, 2009. “The Superfund Process – An Illustration Using Case Studies.” (Langan Environmental Workshop).
- Kenneth Hayes, Allison Jelinek and Jeff Smith, 2009. Former Koppers Site at Newport, DE: Moving Through the Superfund Process. (Langan Environmental Workshop).
- Kenneth Hayes, Robert Huff, Jeff Smith, 2008. Changes in Remedial Decisions during Design Stage. (Langan Environmental Workshop).
- Kenneth Hayes Eric Schleicher, 2008. Groundwater Dye Tracer Testing in a Fractured Carbonate Aquifer. (Langan Environmental Workshop).
- Kenneth Hayes, Ryan Andersen, Jason Hanna, 2008. Construction of a Passive Treatment System for Acid Mine Drainage. (Langan Environmental Workshop).
- Kenneth Hayes, 2008. The Cambrian Evolutionary ‘Explosion’ as Evidenced in the Burgess Shale, Chengjiang, and Sirius Passet Lagerstätte. Drexel University.
- Kenneth Hayes, Laura Toran, 2004. Geochemistry and Sediment Comparisons between a Karst Spring and Well. Geological Society of America, Northeast/Southeast Joint Meeting, March 25-27, 2004.