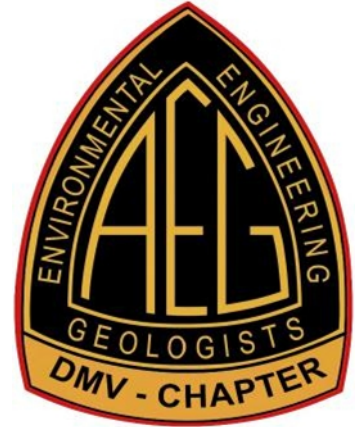
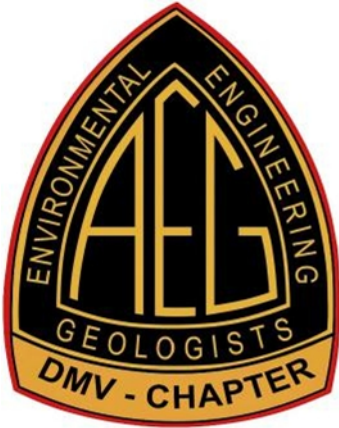


Association of Environmental & Engineering Geologists

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Notice of Meeting

Tuesday, April 21, 2026

**Presentation Category:
Environmental**

Topic:

**Retrospective of the Earthline Hazardous-Waste Landfill Failure,
a Case Study of Legacy Landfills and Dumps and
Improving Field Inspections to Reduce Groundwater Contamination**

Presenter:

**Dr. Christopher 'Chris' Stohr
2025 – 2026 Jahns Distinguished Lecturer**

Abstract

Subject of a landmark, legal-precedent setting trial, an unlined, hazardous-waste landfill was said by experts 'not to leak in 100 years' however, contaminants were detected in monitoring wells 3 meters from the burial trenches only 3 years after closure. Field and lab tests, and remote sensing measurements showed causes for the 'faster than predicted' contaminant migration from a hazardous waste landfill, but why?

Legacy landfills are unlined, thinly-covered cemeteries of waste similarly constructed throughout the world. Most landfill inspections mostly rely upon institutional memory and traditional 'walk over' traverses to identify flaws and deficiencies for written reports. These defects can be better identified and mapped by image processing of freely-available airborne lidar, historical black and white photography and modern color infrared orthoimagery using GIS technology to direct low-cost, spot repairs for maintenance and custodial care to reduce undesired contamination from legacy waste structures.

About the Presenter:

Dr. Christopher 'Chris' Stohr **2025 – 2026 Jahns Distinguished Lecturer**

Dr. Christopher 'Chris' Stohr (retired, Illinois State Geological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign), Mahomet Aquifer Council, Illinois Board of Licensing for Professional Geologists, former Champaign County [IL] Board Member, has been selected by AEG and GSA-EEGS as the Richard Jahns Distinguished Lecturer for 2025-2026. This lecture series honors the late Dr. Jahns by promoting student awareness of environmental and engineering geology through annual lectures at academic institutions. The Jahns lecturer additionally typically visits AEG Chapters during the year.



Dr Stohr continues professional and community work after more than 40 years of applied geology, research and humanitarian work in the midwestern USA, Africa and South America. Obtaining a BS in Geology at Saint Joseph's College in Rensselaer IN [minor in Philosophy/Theology] and MS in Engineering Geology at Purdue University developing applications for innovative digital image processing of remotely sensed imagery at the Laboratory for Applications of Remote Sensing Chris began work at the Missouri Geology and Land Survey performing investigations for dams, sewage lagoons, hazardous and nuclear waste sites, dye tracing, dumps and landfills in the Ozarks and throughout that state; directed an inventory of 3,600 dams; and conducted a site selection study for hazardous waste disposal facilities in Missouri. He worked as part of a Shannon and Wilson team conducting special fault studies, reconnaissance mapping, trench mapping and paleomagnetic studies for nuclear power plant in central Iran using U.S. NRC procedures.

At the Illinois State Geological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign [ISGS] he participated in or led research on landslides, trench covers, groundwater, agronomic analysis of lake sediments, downhole geophysics, precision agriculture, remote sensing, coastal erosion, close range photogrammetry and terrestrial and aerial laser scanning, archeology, glacial geology, Height Modernization [geodetic surveying], and geologic sequestration of carbon dioxide.

ISGS investigations at the Earthline Industrial Chemical Waste Landfill identified failure mechanisms and the observed difference drainage characteristics of depressions in earthen covers of landfills using post-sunset thermal infrared imagery [ASPRS Autometric Award] which became the focus of a late-

career PhD dissertation. Chris has investigated dumps and legacy landfills in Midwestern USA, Egypt, Malawi, and Patagonia, Argentina.

Dr Stohr was a Fulbright Senior Specialist at Beni Suef University, Egypt and participated in and led international humanitarian development projects in Malawi, Africa. He is a Professional Geologist and Certified Engineering Geologist in Illinois and Oregon, and sits on the Illinois Board of Licensing for Professional Geologists. Chris served as thrice-elected member of the Champaign County Board, and twice appointed to serve on the Mahomet Aquifer Council, sits on the Illinois Professional Geologist licensing board, and is an active member of ASPRS, AEG and GSA.

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Please reserve your seat by **12 pm Monday, March 20, 2026**
Visit our website & E-Pay System

<https://www.aeg-bwh.org/ticketpurchase>

Meeting Information

Date/Time:

Tuesday, April 21, 2026
6:00-8:30 PM

Meeting Location:

Brewer's Alley
124 N. Market Street
Frederick, MD 21701

Parking:

Church Street Parking Garage
17 East Church Street
Frederick, MD 21701

Cost (dinner and meeting):

Members:	\$45
Non-members:	\$50
Retiree Members:	\$30
Students:	\$20
Virtual Meeting	\$10

Agenda:

6:00-6:45 PM	Social
6:45-7:30 PM	Dinner
7:30-8:30 PM	Presentation
7:30-8:30 PM	Presentation (Virtual Attendees)

Virtual (Hybrid) Meeting Attendance (via MS Teams)

(Virtual attendees will be sent a meeting attendance link via email prior to the meeting presentation).

**RIVERS, RAILS,
ROADS & ROCKS**



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