

# SPECIALTY EARTH SCIENCES, LLC

Carmel, Indiana

Eric S. Lewis, LPG, RPG, PG Senior Geologist

## **EDUCATION**

 Bachelor of Science in Geology Ball State University, 1995

## LICENSES AND CERTIFICATES

- Indiana Licensed Professional Geologist (License #IN2180)
- Texas Professional Geoscientist (License #15052)
- Mississippi Registered Professional Geologist (License # 0991)
- Florida Professional Geologist (License # PG3070)
- Idaho Professional Geologist (License # PGL-1735)
- Tennessee Licensed Professional Geologist (License # 6252)
- Kentucky Professional Geologist (License # 283677)
- Indiana Wastewater Operator Class A-SO Certificate (Certificate # WW022093)

## **PUBLICATIONS**

 Atlas of Hydrogeologic Terrains and Settings in Indiana –

Authors: Fleming, Anthony H., Lewis, Eric S., and others, 1995, Indiana Geological Survey Open-File Report 95-7.

#### **TRAINING**

- **Environmental Professional** as defined by the ASTM Standard
- OSHA 40-Hour HAZWOPER & 8-Hour Refreshers

## AREAS OF EXPERIENCE

- Specialty Earth Sciences, LLC 4 Years
- EnviroForensics 16 Years
- Precision Environmental Services 7 Years
- Central Environmental Contractors 1 Year
- Indiana Geological Survey 2 Years
- Indiana Dept of Natural Resources 1 Year

Mr. Lewis is a Licensed Professional Geologist in 7 states with 31 years of experience. He has experience in groundwater, soil, and vapor intrusion investigations and remediation projects in Indiana, Michigan, Illinois, Ohio, Mississippi, Florida, Texas, Idaho, Tennessee, and New York. Professional experience includes managing project teams and consulting clients through the regulatory process; design and management of investigation and remediation projects for private and public clients; and negotiating regulatory closure for clients.

Professional focus has been on investigation and interpretation of subsurface releases of hazardous substances for purposes of evaluating and controlling the risk and cost implications to clients. Followed by the design and management of remediation work plans to facilitate cleanup of chlorinated solvent, petroleum hydrocarbon, heavy metal, and PCB projects using various remedial technologies including soil excavation, soil vapor extraction with ozone sparging, electrical resistivity heating, multiphase extraction, and chemical injections (oxidants and reductants). Projects range in size from dry cleaners and retail gas stations to railroads, municipalities, manufacturing, and bulk storage facilities.

Conducted and managed Phase I and Phase II Environmental Site Assessments in support of property and financial transactions at many agricultural, commercial, municipal, and industrial sites. Clients have included financial institutions, purchasers, and sellers. Experience with many forms of Phase I ESAs including ASTM E1527-21 Standard for All Appropriate Inquiry (AAI) and ASTM E2600-10 Standard for Vapor Encroachment Screening for Real Estate Transactions.

## PROJECT EXPERIENCE

- Thermal Remediation of a Chlorinated Solvent Site - Senior project manager overseeing investigation and remediation of a historically sensitive (100+ yr old) property. Remediation activities included: partial building demolition (historic portion of building had to remain) to facilitate installation/operation of an Electrical Resistivity Heating (ERH) system; installation/operation of a soil vapor extraction system to capture contaminant vapors offgassing from the ERH system; injection of an enhanced reductive dichlorination (ERD) solution, into the downgradient contaminant plume to address off-site impacts. The ERD injection was performed during the ERH cooldown period to utilize the residual heat from the ERH system to enhance the ERD reactions.
- Munitions Depot, Northern Indiana Senior geologist and project manager for site investigation of a former World War II ammunitions depot, active signal flare/chimney fire suppressor manufacturer. The project was managed under the IDEM's Voluntary Remediation Program (VRP). Investigation activities were focused on Perchlorate impacts to soil and groundwater. Subsurface investigations required the use of magnetometers and ground penetrating radar (GPS) for the purpose of clearing soil boring locations near possible unexploded ordinance (UXO) in the former ammunition depot test range area.
- Wastewater Treatment Plant, Central Indiana –
  Senior geologist in charge of site investigation
  and multi-phase extraction pilot study for PCB
  LNAPL plume. Full-scale remediation system
  design is under way.

- Former Recycling Facility, Southern Indiana Managed site investigation, bench scale
   contaminant (metals and PCBs) stabilization
   study, and large scale soil excavation at a former
   metal, glass, and plastic recycling facility. Work
   was performed for the local municipality using
   historical insurance to allow site redevelopment.
- Dry Cleaner, Southern Indiana Managed site investigation and remedial measures for an active dry cleaning facility. Investigation activities included installation of groundwater monitoring wells in karst limestone bedrock, tracer dye study, vapor intrusion study, and an exposure pathway risk assessment. The remedy, which included surgical soil excavation and disposal of PCE impacted soils from beneath the facility, was implemented within two weeks to meet the needs of the client and limit down time for the facility. Negotiated risk-based closure through IDEM's State Cleanup Program.
- Vapor Intrusion Assessment and Mitigation –
  Managed numerous vapor intrusion assessments
  at chlorinated solvent sites, including adjacent
  properties. Assessment included evaluation of
  existing soil and groundwater data, and the
  collection of soil gas, sub-slab vapor, and indoor
  air samples for laboratory analysis. Results were
  adjusted based on standard attenuation factors
  and compared to indoor air thresholds
  established by IDEM and OSHA. Sub-slab
  depressurization systems were designed and
  installed to mitigate indoor air impacts, where
  appropriate.
- Construction and demolition management at environmental sites.

## LITIGATION SUPPORT

• Litigation Support - Mr. Lewis has provided technical support to legal counsel regarding the cause, origin, transport, and potential cost of environmental releases. Has contributed to consulting expert reports relied on by counsel during dispute resolution, mitigation, and settlement cases. In addition, expert reports and affidavits were prepared as part of the litigation support and expert witness duties. Mr. Lewis was retained as an expert in the following cases:

Haber Land Co. LTD. v. American Steel City Industrial Leasing, Inc. et al, Case No. 1:2018cv04091 Contaminants: Coal ash and PCBs

Beard, et al. v. Advanced Disposal Services Solid Waste Midwest, LLC, et al. Case No. 82D05-1508-CT-04187 Contaminants: Phenol, Bisphenol A (BPA)