



**SPECIALTY EARTH SCIENCES, LLC**  
New Albany, Indiana

**JASON A. SWEARINGEN, CHMM**  
**Technical Director/ Principal Environmental Scientist**

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## EDUCATION

B.S. Environmental Science and Management  
Ball State University: Muncie, Indiana

Pursuing PhD in Environmental Chemistry at Indiana  
University: Bloomington, Indiana

## AREAS OF EXPERIENCE

- Years of Experience – 12.0
- Years with LEE & RYAN - 2.0
- Years with MACTEC – 4.0

Mr. Swearingen is currently serving as Technical Director/  
Principal Environmental Scientist at Specialty Earth  
Sciences, LLC in New Albany, Indiana on a variety of  
environmental remediation projects and research activities.

Mr. Swearingen's past work experience includes previous  
employment as a Senior Environmental Scientist with the  
national firm of MACTEC Engineering and Consulting,  
Inc. (formerly Law Engineering and Environmental  
Services, Inc.) headquartered in Alpharetta, Georgia.

Prior to joining MACTEC Engineering and Consulting,  
Inc., Mr. Swearingen served as a staff scientist with the  
regional firm of Lee & Ryan Environmental, located in  
Indianapolis, Indiana.

Job duties included site restoration, alternative remedial  
technique development, remediation system design and  
construction, environmental feasibility study design and  
implementation, site assessment, and various managerial  
works.

## CERTIFICATIONS

Certified Hazardous Materials Manager (CHMM)  
Certification Number# 10774

Innovative Technology Committee Chair (Midwestern  
States Environmental Consultants Association – MSECA)

## REMEDIAL PROJECT EXPERIENCE

### *Mechanical*

- Performed oversight of installation/ operation of various remediation systems such as Soil Vapor Extraction (SVE), Air Sparging (AS), BioVenting, and Total Fluids Extraction Systems.
- Facilitated the design and/ or construction of over 100 “turn-key” environmental remediation systems for various consulting clientele. Systems included: Multi-Phase Extraction (MPE), SVE, AS, BioVenting, Ground Water Treatment.
- Designed and/or implemented over 60 environmental feasibility studies for various consulting and private clientele.

### *Chemical*

- Co-developer of several proprietary, patent-pending, and patented in-situ chemical oxidation processes.
- Designed and/or implemented numerous in-situ and ex-situ chemical oxidation feasibility studies and treatments for consulting clientele.
- Designed and developed cost benefit analysis models relating to the financial comparison of remedial technologies and/or site specific remedial implementation.

### *Remediation Technology Patents*

- Encapsulated Reactant and Process  
US Patent No: 7,431,849  
US Pat App No: 12-269,520  
US Pat App No: 14-024,046  
US Pat App No: 14-920,370 US
- Directionally Drilled Permeable Reactive Barriers  
  
US Patent No: 8,210,773  
US Patent No: 8,366,350  
US Patent No: 9,061,333  
Pat App No: 15-014,308