



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

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

## **EDUCATION**

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

## **AREAS OF EXPERIENCE**

- Years of Experience – 23.0
- 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

Former 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, and Groundwater 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.

### *Patents and Publications:*

Encapsulated Reactant and Process - US Patent No: 7431849, 9611421, 10821489, 11370007 & US Pat Ap No: 17/373315 & 17/735669

A Process for In-Situ Treatment of Soil and Groundwater - US Patent No: 8210773, 8366350, 9061333

String of Reactant Chambers and Process Thereof - US Patent No: 9943893 & 10982528

A Process for Making Environmental Reactants - US Patent No: 10335757 & Japanese Patent: 6058708

An Apparatus and Method for Puncturing a Pipe - US Patent No: 10053964 & 10822930

Shaped or Sized Encapsulated Reactant and Method of Making - US Patent No: 10647045 & 11331839

A Method and System for In Situ Treatment of Water or Soil - US Patent No: 10843241

Controlled Release Adjunct for Contaminant Treatment - US Pat App No: 17/14855