A GLOBAL COMPANY PROVIDING INNOVATIVE PRODUCTS AND SOLUTIONS TO CHALLENGING CONSTRUCTION PROBLEMS

LINING TECHNOLOGIES | REMEDIATION TECHNOLOGIES | DRILLING SYSTEMS | BUILDING MATERIALS



A wholly owned subsidiary of AMCOL International Corporation

### **OUR PARENT COMPANY, AMCOL® INTERNATIONAL**

AMCOL International operates in 26 countries across 6 continents. Since the company began in 1927, our cornerstone has been the mining and processing of bentonite clay. The unique characteristics of this "mineral of a thousand uses"—including its ability to swell to several times its original volume when wetted and return to its original size when dried—have proven invaluable in a broad range of industrial and consumer applications from facial creams to fine wine to cast metal parts for cars.

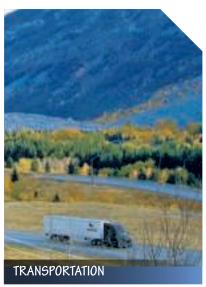
Today we have successfully diversified our operations to encompass four business segments: minerals and materials, environmental, oilfield services, and transportation. With over 240 worldwide patents, we are proud of our history of innovation and look forward to continuing to provide our clients with cost-effective, sustainable technologies and services well into the future.













OUR MISSION: To exceed our customers' expectations through innovative solutions, superior service, and industry-leading technology.



CETCO, the environmental subsidiary of AMCOL International, offers products and services that help manage risks and solve complex environmental construction problems across markets that include lining, remediation, drilling, and building envelope.

### **WORLDWIDE CAPABILITY**

CETCO is supported and serviced by more than 40 offices and production locations globally. From Chicago to Copenhagen, from Shanghai to Sao Paulo, CETCO can support your project needs.

#### USA

California - Santa Ana Georgia - Cartersville Illinois - Hoffman Estates Wyoming - Lovell

#### **South America**

Brazil - Sao Paulo Chile - Santiago

#### Europe

Czech Republic - Prague Denmark - Copehagen England - Birkenhead France - Paris Poland - Szczytno, Wroclaw Spain - Segovia

#### Asia

China - Shanghai, Suzhou, Beijing India - Bhuj, Mumbai Malaysia - Kuala Lumpur Singapore South Korea - Gyeonggi-do, Seoul

#### Australia

Geelong





### CETCO FACTS.

Our protective liners safeguarded over **7,000 acres** of surface area in 2010 alone.

One truckload of our geosynthetic clay liner is equivalent to

150 truckloads of compacted clay.

Our Liquid Boot® gas vapor mitigation system currently protects over

### 50 million square feet

of structures from vapor intrusion.

Our innovative waterproofing technologies have enhanced the longevity of

### thousands of structures

around the world for over 60 years.

### **TECHNOLOGY & DEVELOPMENT**



The AMCOL research & development team creates new technologies and expands upon existing ideas that can be applied across the company's business groups. Spread throughout the globe, our scientists and engineers collaborate with clients, universities, and government agencies to develop leading-edge solutions designed to meet customer's individual needs.

Catering specifically to the environmental segment, CETCO scientists offer expertise in polymers, surfactants, surface science, and mineralogy. With over 40 years of experience, CETCO not only develops products to optimize performance but utilizes our state-of-the-art piloting equipment and external proving grounds to test and validate our solutions.

From jobsite-specific problem-solving to industry-leading product development, CETCO will work with you to develop long-term solutions that not only meet your project's needs but provide value to your business. How can our scientists help you?

### **R&D** capabilities include:

- ▶ Chemical Compatibility Evaluation
- ▶ Chemical Resistance Testing
- ▶ Evaluation for Slope Performance
- ▶ Hydraulic Conductivity Testing
- ▶ Leachability Testing
- Material Characterization
- Oxygen/Vapor Diffusion Rates
- ► Rheological Evaluation
- ▶ Sheer Resistance Evaluation
- ▶ Site-Specific Soil Testing
- ▶ Soil Treatability Studies
- ► Specialty Polymer-Treated Products
- ► Thermal Conductivity Evaluation
- ▶ Water Treatment Studies





# LINING TECHNOLOGIES



For 25 years, the lining technologies business unit of CETCO has been an industry-leading manufacturer of geosynthetic clay liners (GCLs). Providing consistent performance in a wide variety of lining, capping, and liquid containment applications, CETCO GCLs are not subject to performance decreases from varying moisture content or compactive effort like a traditional compacted clay liner. With a total thickness of less than one inch, GCLs provide better hydraulic performance than several feet of compacted clay. Our full range of engineered environmental liner systems includes BENTOMAT® geosynthetic clay liners, AKWASEAL® pond liners, TEXDRAIN® drainage geocomposites and VOLCLAY® bentonite soil sealants.

In conjunction with our high quality products, CETCO provides unparalleled engineering support. Our technical staff is expertly trained in specification review and can offer testing or design assistance. Additionally, CETCO maintains a large technical database of laboratory test reports from past projects and reference articles to assist you on your next project.

COUER ROCHESTER MINE Lovelock, NV

### **APPLICATIONS:**

Landfill Liners and Caps

Mining Facilities

Coal Ash Disposal

Secondary Containment

Ponds

Wastewater Lagoons

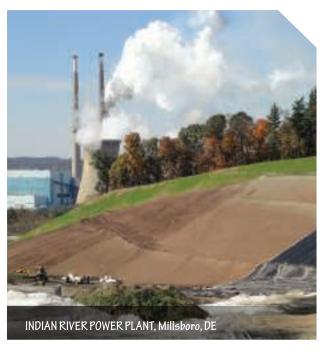
Canals

Civil and Highway

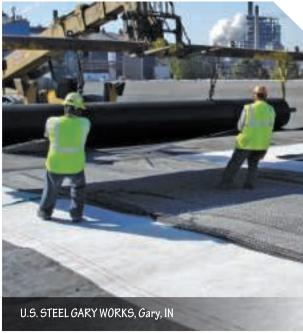
Dams

Stormwater Basins

Agricultural Waste









### REMEDIATION TECHNOLOGIES



CETCO's Remediation Technologies group is widely respected for its innovative products and individualized approach. From brownfield redevelopment to soil treatment to subaqueous sediment containment, CETCO allows customers the convenience of working with a single manufacturer to meet all the needs of your particular remediation project. Our products include Liquid Boot® gas vapor mitigation systems, Reactive Core Mat™ in situ sediment capping material, Organoclay® organic adsorbent media, and Quik-Solid® superabsorbent media.

With the desire to educate as well as innovate, CETCO Remediation Technologies group travels across the country, partnering with industry professionals to provide free educational seminars on the latest industry trends. We also offer webinars as a convenient, economical way to learn different approaches to specific remediation applications.

ZIDELL BARGE COMPANY SLIPWAY, Willamette River in Portland, OR

### **APPLICATIONS:**

Vapor Intrusion Mitigation

Capping

In Situ Treatment

In Situ Stabilization

Dredging and Solids Dewatering

Permeable Reactive Barriers

**Embankment Seepage Control** 

Slurry Walls

LLW / Radioactive Waste Solidification

Waste Packaging & Handling

NSF Tank & Reservoir Liners







# **DRILLING SYSTEMS**



CETCO has a complete line of professional products designed to enhance the cost-effectiveness of both vertical and horizontal drilling operations. Combining top-quality bentonite with the latest innovations in polymer science, our product assortment includes high-quality drilling fluids, grouts, sealants, polymers, and additives.

All CETCO drilling products are supported by our experienced team of field engineers and research scientists, offering customers advanced technical support and continuous product development. Helping maximize drilling efficiency and meeting your needs in the field, CETCO is committed to ensuring success in any drilling project.

TRUMP INTERNATIONAL HOTEL AND TOWER Chicago, IL

### **APPLICATIONS:**

Horizontal Directional Drilling

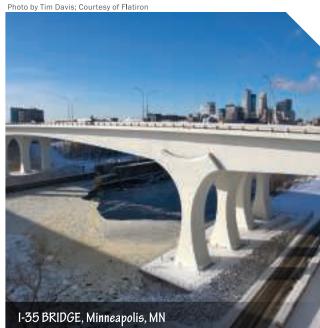
Waterwells

Ground Source Heat Pump

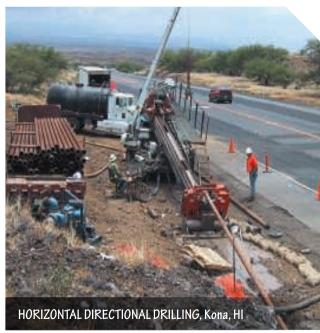
Foundations

Minerals Exploration









# **BUILDING MATERIALS**



With more than 60 years of waterproofing experience, CETCO features a wide variety of active and passive waterproofing membrane technologies for use in protecting the building envelope above and below grade. Our roofing products include recycled rubber underlayments, fluid applied roofing membranes, and complete green roof systems to address your sustainability requirements.

Whether for new construction or restoration applications, CETCO's diverse product offering and integrated product approach are designed to accommodate the varied conditions encountered during construction. And since a quality process is just as important as quality products, we also offer the HydroShield™ Quality Assurance Program. Utilizing design guidance, approved applicators, and certified, third-party inspectors, this industry-leading program will ensure superior, long-term performance from your structure's waterproofing, roofing, or green roof system.

RESTORATION AND GREEN ROOF, YANKEE STADIUM, BUILDING J New York, NY CETCO's research and development has kept pace, or even pushed the industry, to respond to the requirements to keep water 77 out of a structure and then to also keep out air and water vapor as well. I will continue to depend on CETCO to provide excellent resources to protect our buildings.

### **APPLICATIONS:**

Green Roofs

Roofing Underlayments

Remedial Waterproofing

**Backfilled Concrete Walls** 

Blindside Waterproofing

**Concrete Joint Waterstops** 

**Precast Concrete Structures** 

Property Line Shoring Walls

Shotcrete Foundation Walls

Split-Slab Decks

Underslab

**Tunnel Waterproofing** 









\* Patent Pending

### SUSTAINABILITY: COMMITMENT TO A CLEANER, GREENER FUTURE

CETCO continually strives to integrate sustainable and environmentally conscientious practices into the way that we do business.

- Our GCLs generate a dramatically lower carbon footprint during installation than compacted clay systems.
- Our geothermal grouts help reduce emissions and lower reliance on fossil fuels.
- We facilitate the clean-up of brownfields and industrial sites.
- Our green roofs are an eco-friendly way of mitigating heat island effect and reducing stormwater runoff.
- ➤ Our StrongSeal<sup>TM</sup> roofing products are made from recycled tires.
- ▶ We sponsor seminars that educate engineers on the latest sustainability practices.

"With its LEED Silver certification, our headquarters reflects the CETCO mission of pairing practical innovation with sustainability efforts."

- Patrick Carpenter, CETCO President















#### ABOUT AMCOL® INTERNATIONAL CORPORATION



CETCO is a subsidiary of AMCOL® International Corporation, which currently trades on the New York Stock Exchange under the symbol "ACO". With approximately 2,400 employees and over 68 facilities across 6 continents, AMCOL produces and markets a wide range of specialty mineral products used for industrial, environmental, and consumer-related applications. Headquartered in Hoffman Estates, Illinois, AMCOL prides itself in designing and delivering value-added, world-class quality products and services specially suited to fit our customers' needs.

