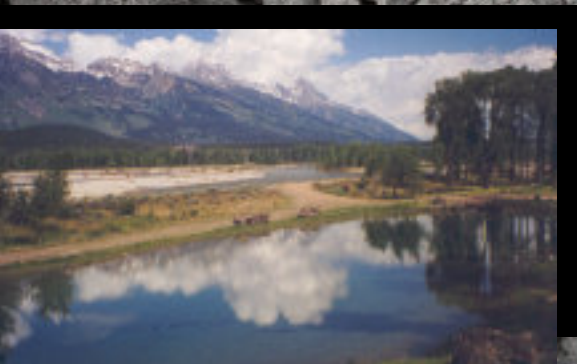


akwaseal[®]
POND LINER



2
LINING TECHNOLOGIES IN

1

**combining the strengths of
two lining technologies
into one high-performance liner**

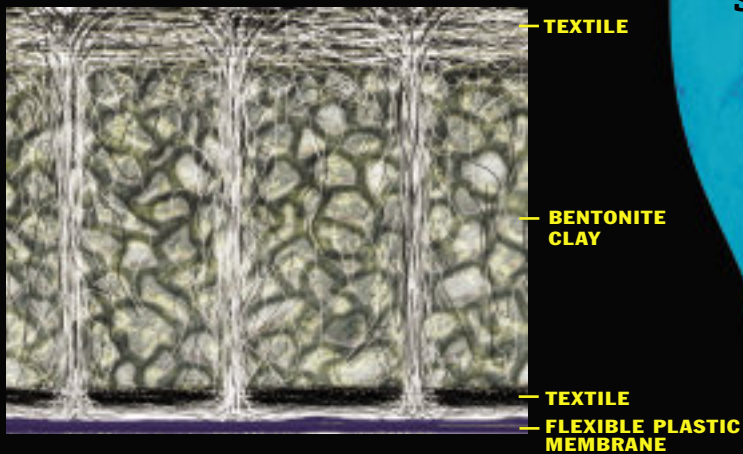
CETCO[®]
LINING TECHNOLOGIES

akwaseal

pond liner

AKWASEAL

A pond liner consisting of two water barriers – bentonite clay and a flexible plastic membrane. The bentonite clay is sandwiched between two textiles which are needlepunched together. The membrane is permanently laminated to the outer textile surface. The result is a self-healing, self-sealing liner system perfect for all types of water containment projects.



APPLICATIONS

Decorative Ponds

Canals

Stormwater Impoundments

Fish Ponds

Recreational Lakes & Ponds

Wetlands Construction

Agricultural Waste Lagoons

Roadside Drainage Creeks

Golf Course Water Hazards

Evaporation Ponds

Fire Protection Reservoirs

Pond liners contain water where existing soils cannot. Historically, two types have been used:

CLAY

- Oldest known lining material
- Not always available
- May deliver acceptable performance at low cost, but difficult to construct
- Variability in clay quality and consistency may cause leakage
- Compacted clay liner can crack due to temperature variations and settlement

PLASTIC MEMBRANES

- Readily available at economical price
- Exposed liner can puncture and degrade
- Fundamentally impermeable
- Small holes typical with construction can cause liner failure
- Synthetics are less dense than water – Liner may float or balloon
- Seaming may require specially trained personnel and equipment



AKWASEAL

COMBINES ADVANTAGES OF BOTH LINERS WITHOUT THE DRAWBACKS

- Durability allows a buried, natural looking installation
- Bentonite clay provides a self-healing, self-seaming liner with unmatched longevity
- Robust product won't shrink, crack, float, or balloon
- Easy to install yourself – no welding
- Manufactured product provides consistent quality





AGRICULTURAL WASTE LAGOON

Minnesota commercial dairy needed to build a 30,000 ft² waste containment pit meeting government requirements. With performance superior to an ordinary plastic liner, Akwaseal was chosen as the liner system to meet these regulations and eliminate the risk of liner flotation due to gas build-up. Akwaseal eliminated the need for specialty welding equipment and crews. Installation was performed by a local excavation company using rented equipment.



WORLD CLASS FISHERY

Colorado development contains upscale homesteads surrounding private streams and ten acres of lakes teeming with trophy golden trout. The lake and stream lining posed a challenge as the native soils were very rocky and porous. Owner had concerns that a traditional plastic liner might develop holes during construction in these harsh conditions. Akwaseal was chosen to provide durability, superior water containment, and a natural looking installation.



CORPORATE DECORATIVE POND

Michigan decorative lake surrounds a new construction tower housing an employee cafeteria. It is the centerpiece of an extensive landscaping area which includes decorative mounds, trees, picnic areas, and walkways. Good clay deposits were available within a reasonable hauling distance, but Akwaseal was the lower cost alternative. The site also benefited from the sodium bentonite clay contained in Akwaseal. The seasonal temperature changes causing the pond to freeze and thaw have had no impact on the liner's performance.



WETLANDS CONSTRUCTION

Arizona correctional facility constructed an innovative 4 million gallon wetlands project as a habitat for endangered flora and desert puff fish. High permeability native soils demanded the use of Akwaseal to provide water containment. Simple installation allowed the facility to use their own labor and minimize costs.



www.akwaseal.com

For more information please contact CETCO or your nearest Akwaseal distributor.