

SEEPAGE CONTROL > CUTOFF WALLS / HYDRAULIC BARRIERS

LEE CREEK LAGOONS CUTOFF TRENCH

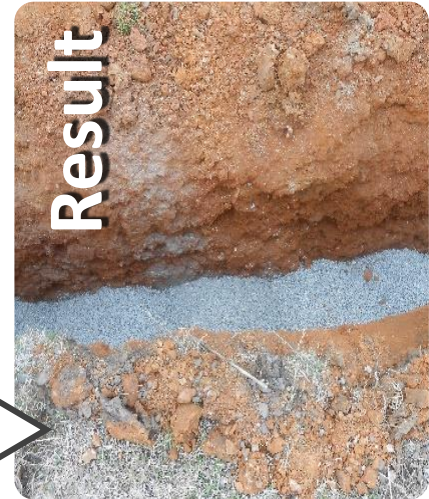
FORT SMITH, AR (COMPLETED MARCH 2013)



Issue



Solution



Result

Potential non-compliance of discharge from the Lee Creek Treatment Plant led the City of Fort Smith, AR Utilities to evaluate the condition of wastewater storage lagoons at the facility. Since seepage was identified as a potential issue, the City opted for a vertical hydraulic barrier, or "cutoff trench" down gradient from the outer edge of the lagoon berms. Instead of deep slurry walls or rigid piles, AquaBlok was chosen because it could be installed rapidly, without mechanical compaction or elaborate

equipment requirements. Once the contractor excavated the open cut trench, approximately 30 cubic yards of AquaBlok was used for backfill, and immediately began to swell and self-compact in the saturated soils of the trench. Within 24 hours, the AquaBlok was fully hydrated, providing an effective impermeable barrier to prevent further seepage through embankment soils. The AquaBlok cut off trench was a key component of the City's compliance strategy.

GEOTECHNICAL sealing solutions

COMPOSITE BENTONITE AGGREGATE composed of a specific gradation of stone coated with sodium bentonite and a proprietary binder.



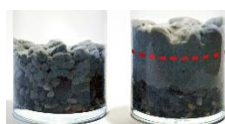
HOW AQUABLOK WORKS AquaBlok Composite particles expand when hydrated, transforming the material into the cohesive seal that self-compacts and conforms to uneven surfaces. The result is a natural and sustainable hydraulic barrier.



AquaBlok Dry



AquaBlok Hydrated



AquaBlok Hydrated [24 hr]

SEEPAGE
CONTROL

POND
SEALING

REPAIRS

For technical support or questions regarding geotechnical engineering applications, please contact

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