



CHEMICAL POND CLOSURE

Project Scope Highlights

- Basin Dewatering
- Subgrade soil and CCR stabilization utilizing lime
- 208,000 tons of dense graded aggregate (DGA) import and compaction
- Cast In place concrete ditch construction
- 650 linear feet of HDPE pipe installation

Project Overview

As a result of changing CCR regulations, the Chemical Pond at a partnering utility in Kentucky was scheduled for closure. Additionally, the customer wished to utilize the site for a future waste water treatment facility. The area needed to be stabilized and filled to support that construction. The work scope involved stabilization, significant rock fill placement and other, associated civil tasks.

Project Challenges and Solutions

The primary challenge was starting the project with a soft basin that was inaccessible to heavy equipment, combined with a large quantity of imported fill over a short time frame:

- The basin had silted CCR's and soft subsoils that were inadequate to support construction equipment or the end product of a stable construction pad.
- Trans Ash utilized a lime stabilization process to provide the working platform that would support the needs of the fill placement. This process utilized excavator mounted mixers and spreaders that placed and mixed the lime into the in-situ material followed by dozers once the material solidified. Finally, the gravel fill material was placed to complete the process. This process was repeated in an assembly line fashion across the basin until the installation was complete.
- Procuring significant volumes of fill stone from local quarries, with the capacity to meet project schedule, proved to be a challenge due to time constraints and tight onsite access. This challenge was mitigated by partnering with a trucking firm with a large fleet of side dump trailers and instituting a project specific traffic plan that efficiently cycled the trucks



Original Conditions



Lime Spreading



Lime Mixing Process



Ash/Soil Stabilization Progression



Stone Delivery



Stone Placement

“Trans Ash was able to schedule the work such that multiple tasks could be completed at the same time. This allowed the project to be completed on schedule and on budget.”



Concrete Ditch



Completed Pad