



# CCR TRANSPORT & MINE RECLAMATION

## Project Scope Highlights

- Load, haul and place 700,000 tons of CCR's annually
- Mine reclamation development and capping
- Fly ash and bottom ash basin maintenance
- Hydraulic dredging
- CCR basin excavation
- Coal & limestone hauling
- Facility and grounds maintenance

## Project Overview

In 2008 Trans Ash was selected to start a new mine reclamation operation in Southern Indiana. Throughout the life of the project, Trans Ash has offered innovative approaches to maximizing the storage potential of the mine while reducing costs. After 10 years the partnership between the facility and Trans Ash is ongoing as the Mine reclamation approaches its completion in the early 2020's

## Project Scope Details

The plant generates approximately 700,000 tons of CCR's annually, consisting of three materials: fly ash from silos, gypsum from a stacker pad and bottom ash from a basin. In addition to the plant output, periodic cleanouts of other onsite basins occur. This work includes both mechanical excavations utilizing excavators and hydraulic excavation utilizing dredges.

The haul route is all on private land except one road crossing this allows for high capacity off road haul trucks. Large capacity trucks are ideal for this project due to the length of the haul – in excess of 3.5 miles.

The mine reclamation operation includes the required civil work necessary to meet plant CCR output while keeping the site in permit compliance. The development of new cells and closure of completed areas is also a part of the overall compliance plan. The work scope also includes soil barrier liner installation, cover soil placement, storm water controls, mowing, fugitive dust control as well as the placement of the 700,000 tons of CCRs annually.



Gypsum Loading & 45 ton Truck



CCR Basin Excavation

## Project Challenges and Solutions

The primary challenge of this project is adapting to changing conditions throughout the long duration of the project while continuing to provide the best value to the facility:

- The output of the facility is highly variable from year to year. Trans Ash has modified its equipment and manages manpower to accommodate the large fluctuations while keeping costs down.
- The mine reclamation development changes from year to year. Trans Ash developed a long-term strategy to be sure the facility has ample storage for CCRs while maintaining a limited open footprint.
- The design of the mine reclamation allows for operational modifications. The final contours of the fill, as well as work around an existing high wall, has been optimized by Trans Ash for safety and to maximize the storage volume.
- The haul road crosses an adjacent mine and public county road. These two interactions create the potential for safety concerns. Trans Ash has instituted controls including MIOSHA trained employees, and traffic patterns to maintain a safe work site for our employees, the public, and our customer's personnel.



Mine Reclamation Operations

*“We are proud to have developed a long-term relationship with Trans Ash. They have adapted to the ever-changing scope of work, worked cooperatively with us, and offered us the best possible value.”*



Mine Reclamation Operations



Mine Reclamation Cap and Close