



Coal Gasification Facility

LOCATION:

Bell County, KY

CLIENT:

Pine Mountain Regional Industrial Development Authority

TYPE OF PROJECT:

Site Feasibility

The Pine Mountain Regional Industrial Development Authority (P MRIDA) requested that Summit Engineering, Inc. examine a reclaimed mountaintop removal area in Bell County, Kentucky to determine its feasibility as a location for construction of a coal gasification facility.

The site was examined based on necessary site configurations (adequate acreage and elevations), coal requirements, raw water requirements, and other raw material requirements. Additionally, an analysis of coal reserves and availability in the area was conducted. Finally, the study was designed to analyze the environmental issues surrounding the facility to determine the feasibility of the identified site.

The site civil portion of the project required an analysis of infrastructure availability and cost, site preparation and cost, and site access alternatives. The coal reserves and availability portion of the project required an analysis of coal reserves in the area and current mining operations and regional production. The analysis of environmental issues required evaluation of waste products and disposal requirements (i.e., carbon dioxide capture and sequestration), potential impacts to endangered species, the potential for impacts to waters of the United States as defined by the Clean Water Act, and potential environmental effects of proposed water withdrawal activities. Additionally, an assessment of environmental permitting requirements was conducted.