The increased use of coal to generate electricity has brought with it an increased amount of coal combustion by-products (CCBs). Metal ions released from these CCBs can be harmful to the environment and therefore need to be contained.

**PROJECT DETAILS**

Coal Ash Disposal – Midwest Utility

**LOCATION**

Central Illinois

**PRODUCTS USED**

BENTOMAT® SDN
EASY ROLLER™ Deployment System

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**CHALLENGE:**

A pond and landfill used to store CCBs in Central Illinois needed to be suitably lined. Due to the high inorganic and heavy metals in the waste, both the pond and landfill would require low-permeability liner systems to eliminate release into the environment. The engineers needed to design a system that would perform to their specifications on a 3:1 slope for the sides of the landfill. In addition, poor weather delayed the project’s startup, compressing the overall construction schedule. These challenges resulted in concerns that the new facilities would not be completed in time and would not be permitted to accept waste.
EASY ROLLER™ deployment system puts installation back on schedule

SOLUTION:
Approximately 2.5 million square feet of BENTOMAT® SDN was installed in the site’s gypsum management facility and CCB landfill. A high density polyethylene (HDPE) geomembrane was installed over the GCL to create a state-of-the-art composite liner system. Given the time constraints, the EASY ROLLER™ GCL deployment system was used to speed installation.

RESULT:
Thanks to the EASY ROLLER™ Deployment System, installation of the liner was much less labor intensive. This increased productivity and allowed more manpower to be allocated to the geomembrane installation. The project was completed early and the owner’s expectations were exceeded.