



The Pioneer Of Geosynthetics

S I N C E 1 9 7 2

Coal

BACKGROUND

As the population grows, so does the demand for more electrical power capacity. This increase in demand has spurred the need for the new generating stations and innovative methods for improving efficiency at existing power plants. Geosynthetic materials provide solutions to various concerns associated with coal power generations such as groundwater protection, process water containment and ash impoundment.



Cooling water pond storage.

Today's coal-fired power plants require optimal performance from containment lining systems. GSE manufactures and installs the highest quality, most durable, longest lasting geosynthetics for use in Coal Combustions Product (CCP), cooling water and evaporation ponds.

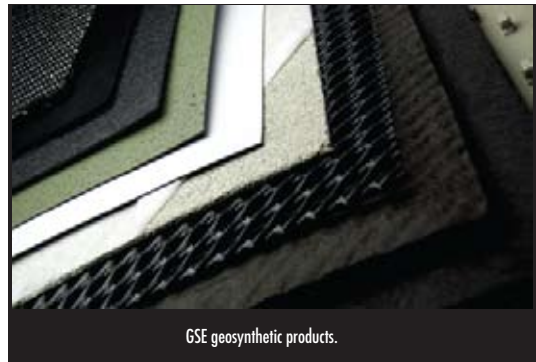


Coal ash impoundment.

With millions of square feet of geosynthetic products supplied and installed at coal power plants across the U.S.; GSE has the right geosynthetic products to meet your project requirements.

GSYNTHETIC PRODUCTS

GSE is the world leader in manufacturing geosynthetic materials for a variety of applications including landfills, leach pads, storage ponds and wastewater treatment. We offer the largest capacity and widest selection of HDPE & LLDPE geomembranes, geotextiles, geocomposites and geosynthetic clay liners.



GSE geosynthetic products.

A SPARK-TESTABLE GEOMEMBRANE

Impoundments at coal power plants are typically exposed to the elements and are in constant use. If a post-installation leak test is required or deemed beneficial, consider GSE's patented, spark-testable Conductive liner system. A large impoundment installation can be tested for pinholes and other construction related damage to insure 100% containment without the added expense of the flooding the floor or the inability to test slopes and all the uncertainties



Spark testing can be performed with hand-held equipment.

present with other post-installation testing methods. GSE Conductive liner can be regularly tested year after year to insure continued containment.



Installation of leak detection system.

Many impoundments require a leak detection system to ensure the integrity of the primary liner system on a continuous basis. This system consist of a secondary HDPE geomembrane below the primary liner which is overlaid with either a geonet or a geocomposite net. If the leak detection system is placed directly below the primary liner, a geonet is used. If an intermediate soil layer or primary clay layer is used, then a geocomposite liner is utilized.



Evaporation Pond.

CASE HISTORIES

GSE installed the liner system at the Springerville Power Plant in Northeast Arizona and operated by Tri-State Generation and Transmission Association. The Bechtel Group designed the 1,500 MW plant, as well as the evaporation ponds comprised of over 2.5 million SF of geosynthetics. The lining system installation was performed by GSE Installation Services. The installation was completed ahead of schedule and under budget.

The Power Generating Station located in the Mojave Desert consists of two 790 MW generating units that supply power to 1.5 million homes. The power plant is fueled by a low-sulfur coal. The plant operates under a zero discharge permit. The total project size was over 1.8 million SF of geosynthetic materials. To insure complete containment of all contaminants

which enter the pond, GSE Conductive White liner was selected for the quickest and most cost-effective leak detection inspection method available. The project was completed on schedule with a quick installation and economical leak detection of the installed geomembrane

COMPLETE INSTALLATION SERVICES

No other company offers more experience installing geosynthetic products than GSE. GSE installation services is your one top source that offers the experience, training expertise and complete range of geosynthetic products fabrication and technical support on any project.



GSE Installation Crew

ADDITIONAL INFORMATION

If you have an upcoming project please give us a call. We will provide you the recommendation for material and installation that best suit your project.