Statement of Qualifications – Project Profiles

Project: **Gold Mine Reclamation**

South Carolina

SERVICES PROVIDED:

- Engineer of Record
- Surface Water Management
- Site Investigation/ Characterization
- Survey/Mapping Procurement
- Geochemical Evaluation
- Long-term Pit Water Level Evaluations
- Specifications, Drawings and Bid Documents
- Cost Estimate
- Construction Management

The project involved reclamation of an open pit gold mine and associated process facilities and waste piles. The facility consisted of a heap leach gold mine and processing facility including three heap leach piles, three open pits, a waste rock dump, stormwater detention basin and processing ponds. The site covered approximately 100 acres and contained 3 million cubic yards (cy) of heap leach material, 3 million cy of waste rock, 10 million gallons of low pH, high metals concentration pit water and 5 acres of process ponds.

As the Engineer of Record, **TREC** personnel compiled existing site information and determined the only additional data required to complete the reclamation design were borrow area delineation, acid rock drainage prediction and pit water quality. A topographical survey and mapping was performed to develop final site grading plans and perform hydraulic evaluations to minimize materials handling and erosion. The design included placing the three heap leach piles and waste rock into the open pits in an order that, when ground water recovered, would minimize future acid rock drainage; a regrading plan; low permeability cap and revegetation; treatment of 10 million gallons of pit water using magnesium oxide; regrading the process ponds; and providing site drainage to minimize erosion. **TREC** personnel prepared a bid package, assisted in contractor selection and performed construction management.

Soil cover being placed over low permeability geocomposite fabric on regraded mine waste pile.