The goal of this work is to promote the high-volume beneficial use of Ohio FGD by-products in the reclamation of abandoned and active Ohio coal surface mine sites. The focus of this project is the beneficial use of FGD gypsum and stabilized sulfite FGD material at coal mine sites in the vicinity (within 15 miles) of Ohio FGD generating stations.

The objective of this project is to demonstrate in the field that FGD gypsum and stabilized sulfite FGD material can be beneficially utilized in large volumes for reclamation at abandoned and active coal surface mine sites. We are implementing three demonstration projects of varying constructability scales and fill material combinations:

a) **Large volume (about 1 million tons)** FGD gypsum backfill for an abandoned highwall near the Conesville power plant of AEP. Stabilized FGD sulfite material generated at the plant will also be used as a liner below and cap over the gypsum fill.

b) **Medium volume (about 0.2 million tons)** of FGD gypsum in combination with onsite spoil to reclaim a permitted mine site at which coal will be recovered by Ohio American Energy near the Cardinal power plant.

c) **Small field trial of filling auger holes** with a CCB grout (including FGD gypsum) at a potential coal remining site so as to allow for potential recovery of coal by mine operator.

The project duration is three years (October 1, 2009 to September 30, 2012). It includes first year of background water quality monitoring, two years of placement of FGD gypsum at the sites, and monitoring of the sites for the duration of the project. The project co-sponsors include:

- Ohio Coal Development Office
- The Ohio State University
- American Electric Power
- Ohio American Energy
- Electric Power Research Institute
- OhioDNR – DMRM
- USEPA
- USDOI - Office of Surface Mining
- American Coal Ash Association
- Midwest Coal Ash Association
- Ohio Mineland Partnership

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