



Stakeholders Best Practices

Tailgate Safety Meeting Series II

**SAFETY AND
HEALTH ARE
VALUES!**

"SUPPORT THE IRS*"

*INCREASED ROOF SUPPORT

After several years of relatively low roof fall accidents, six of the first twelve fatalities in 2005 were the result of roof falls.

BEST PRACTICES:

- **Follow the approved roof control plan**
 - Ensure that all employees are familiar with the requirements of the plan on advance and retreat mining.
 - When adverse conditions are encountered or anticipated, review the plan.
- **Determine where and when additional support is necessary**
 - Conduct thorough examinations of roof, ribs and face before any work is performed, and thereafter as conditions warrant.
 - Study and review maps of adjacent mined areas. Be conscious of stream beds, low cover, and other geological conditions.
 - Evaluate the immediate roof conditions by drilling every test hole at least two feet deeper than the anchorage point of the longest installed roof bolt.
 - Be aware of strata changes and conditions, such as hill seams, vertical joints, cracks, kettle bottoms, etc., through frequent visual examination.
- **Install additional support to control draw rock between bolts**
 - Tighten bolt patterns, larger bearing plates, straps, roof caps (pizza pans/spider plates), roof mesh (wire or high tensile strength plastic).
- **When encountering extremely adverse roof conditions:**
 - Narrow entry widths (Increase pillar size).
 - Stagger crosscuts.
 - Limit depth of cuts.
 - Increase number of test holes. (i.e., every cut)
 - Install supplemental roof support, cribbing, posts, cable bolts, truss bolts, beams, etc.



Developed in cooperation with:

Beaver Gap E-3 Mine, Consol of Kentucky Coal Company, Knott County, Kentucky (Team Leader)
Darby #2, Powell Mountain Coal Company, Harlan County, Kentucky
E-4 Mine, TECO Coal Corporation, Perry County, Kentucky
Clean Energy Mine, ICG Knott County LLC, Knott County, Kentucky