Of Mines and Markets

BY BETTY JOYCE NASH

A recent explosion in a West Virginia coal mine in April killed 29 miners, and injured two. As of press time 31 miners have died in West Virginia's underground coal mines so far in 2010.

These tragedies have intensified public scrutiny of the industry, the labor market that serves it, and the regulatory structure that has grown up around it. West Virginia also lost 23 miners in 2006. Among other accidents, the number includes 12 killed in the Sago Mine blast near Buckhannon.

Workplace disasters raise legitimate questions about the role of market discipline in workplace safety as well as the effectiveness of regulation.

"Market discipline, if it works perfectly, produces an efficient amount of safety, not the maximal amount of safety," says Devra Golbe, an economist at Hunter College of the City University of New York. "Thus, even in a perfect market, the choices firms and workers make are not likely to result in an accident-free workplace, because safety is costly and some industries, like mining, are inherently risky."

The median number of days away from work in underground coal mining due to work illness or injury was 34 days compared to eight in all private industries, according to the U.S. Dept. of Labor's latest available data, 2008.

The recent blast happened at Performance Coal Co.'s Upper Big Branch Mine, a subsidiary of Richmond, Va.-based Massey Energy. According to the U.S. Mine Safety and Health Administration (MSHA), the mine appealed 77 percent of its "significant and substantial" violations from 2007 through 2009. Appeals have been increasing, in part, because of federal rules legislated after the 2006 Sago disaster. The laws hiked fines and the number of inspectors. Fines rise with the number of violations, so companies have a greater incentive to contest them. An appeal, however, can keep mines from the "potential pattern of violation" category, a status that could lead to a shutdown. Two-thirds of penalties are now appealed, overloading judges at the Occupational Safety and Health Administration.

Appropriate laws can enhance safety, but may also reflect prevailing politics. Laws may also fail to keep pace with changing industry expertise. For instance, standards to prevent explosions that can occur in the presence of high levels of combustible gases are said to be outdated.

Costs associated with accidents, in theory, give firms an incentive for safety because of lost production time, lawsuits, workers' compensation claims, increased insurance costs, and possible stock market losses. Massey now produces six days a week at some mines to make up for reduced coal output from Upper Big Branch to meet contract obligations. Its stock value fell following the accident. The firm also faces several lawsuits from pension fund investors. And Massey has said it did not carry business-interruption coverage for Upper Big Branch. Two years ago, Massey agreed to pay $4.2 million in criminal and civil penalties following the 2006 deaths of two miners after a fire at another Massey subsidiary.

The market for workplace safety may be "quite imperfect," Golbe says. "Moreover, in a labor market where jobs are scarce, the price for avoiding a dangerous job may be unemployment."

Economic theory suggests mines will have trouble attracting employees if they're unsafe. But information about accident risk may be unavailable or hard to decipher. Although with the strong mining tradition in West Virginia, the risks may be widely known.

The presence of contract workers also complicates the issue. Mine operators are ultimately responsible for contractor safety, according to Ellen Smith, managing editor of *Mine Safety and Health News*. "Percentage-wise, it's safe to say there are a higher number of injuries with contract workers," she says, citing the Blacksville No. 1 mine explosion in 1992, also in West Virginia. Contractors sealing a mine shaft didn't realize they should have taken methane readings.

Higher wages can reflect job hazards, although this compensating wage differential varies according to labor supply. For example, in West Virginia, the annual mean wage of explosives workers, roof bolters, extraction workers, and continuous mining machine operators, ranges from $42,320 to $50,500, according to the Bureau of Labor Statistics. The wages are higher than for service jobs, and above Raleigh County's median income of $38,672, according to the Census Bureau's American Community Survey. Most people there work in social or educational services, retail trade, or other service jobs; 9 percent work in agriculture, fishing, or mining.

Economist Clifford Hawley of West Virginia University suggests that in some mining areas of West Virginia, employers may exert monopsony power. (A monopoly firm is a single seller; a monopsony firm is a single buyer.) "Typically among nearby mining opportunities, it's rare that you have much competition, and so the miners' wages will be lower to the extent that there is monopsony power in the labor market," he says. A dominant firm like Massey Energy may also influence wages of smaller mines.

Mining jobs require skills but not college degrees. And in some mining communities "there's just not a lot for people without a college education to do," says Hawley. "Mine workers are not mobile enough to say, 'Well, I'll move out of West Virginia.' People in West Virginia are very tied to where they live; they are just not geographically mobile — that's by choice and by culture." **RF**