



Highlights of [GAO-08-424](#), a report to the Chairman, Committee on Education and Labor, House of Representatives

Why GAO Did This Study

In 2006, several mining tragedies led the Congress to pass the Mine Improvement and New Emergency Response Act of 2006 (MINER Act). The law required underground coal mine operators to develop emergency response plans that contain several components designed to improve accident preparedness and response, including providing a refuge of air to miners trapped underground after an accident and wireless communications systems. The Mine Safety and Health Administration (MSHA) is responsible for approving the plans and ensuring their implementation. GAO examined (1) the effectiveness of the approval process, (2) the status of implementation of the plans, and (3) MSHA's efforts to enforce and oversee implementation. To address these questions, GAO reviewed a nonprobability sample of emergency response plans, analyzed MSHA data, and interviewed MSHA officials and members of the mining community.

What GAO Recommends

GAO is recommending that MSHA clarify its guidance on the requirements for key components of emergency response plans; develop guidance on how mines can meet the June 2009 requirement for wireless communications systems; and take steps to analyze information on plans and their enforcement. MSHA agreed with the recommendations and noted several actions it is taking or plans to take to implement them.

To view the full product, including the scope and methodology, click on [GAO-08-424](#). For more information, contact Anne-Marie Lasowski at (202) 512-7215 or lasowskia@gao.gov.

MINE SAFETY

Additional Guidance and Oversight of Mines' Emergency Response Plans Would Improve the Safety of Underground Coal Miners

What GAO Found

The effectiveness of MSHA's process for approving underground coal mines' emergency response plans was hampered by several factors, including revisions and delays by MSHA in developing guidance for mine operators on the required components of the plans and the lack of specificity of its guidance, which delayed approval of the plans. MSHA revised its guidance several times and did not issue guidance on one key requirement—providing a refuge of air to miners trapped underground—until 6 months after the initial plans were due. In addition, while the content of the plans may differ because of the unique characteristics of the mines, GAO found that some plans did not specify the protections to be provided and information about these protections varied. For example, some of the plans did not specify whether refuges of air would be provided to miners working in certain areas of the mine to help them survive if they are trapped in the mine after an accident. As a result, it is uncertain whether all of the plans will help ensure that miners will be adequately protected in the event of an accident.

Most of the components of the mines' emergency response plans have been implemented but, as of January 2008, two key components remain. First, many mines have not implemented methods of providing air to trapped miners because needed equipment is not available. Second, mines have not begun to implement wireless communications systems or comparable alternatives to meet the June 2009 requirement in the MINER Act because fully wireless technology is not available and MSHA has not determined what technology it will allow mines to use to meet the requirement. The act provides that, where wireless systems are not available, alternatives to wireless communications systems are acceptable. While alternatives are currently available, MSHA headquarters officials told us they had no immediate plans to issue guidance detailing what technology would be acceptable in meeting the June 2009 requirement because they wanted to wait and see how new technologies developed by then. Given the delay, it is uncertain whether mine operators will be able to plan for and order the appropriate technology to meet the deadline, thereby missing opportunities to improve the chances of miners trapped in an underground coal mine after an accident to survive until they are able to be rescued.

MSHA's district offices have inspected many of the mines for compliance with their emergency response plans and have issued citations to enforce immediate implementation of the plans, but MSHA headquarters officials have not systematically evaluated the data on citations to identify potential problems with implementation or enforcement. For example, MSHA headquarters has not analyzed or compared citations issued under the statute or related regulations, which may lead to inconsistent enforcement and assessment of penalties. In addition, MSHA has provided insufficient oversight to ensure the quality of emergency response plans or to identify whether corrective actions are needed.