

**WRITTEN TESTIMONY OF  
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Good morning, Mr. Chairman and Members of the Committee, I appreciate the opportunity to discuss the OIG's oversight work relative to the Mine Safety and Health Administration (MSHA) and specifically our report on MSHA's Pattern of Violations (POV) Authority. As you know, the Office of Inspector General (OIG) is an independent entity within the Department of Labor; therefore, the views expressed in my testimony are based on the findings and recommendations of my office's work and not intended to reflect the Department's position.

As we approach the one-year anniversary of the Upper Big Branch mine disaster, which took the lives of 29 miners, we are reminded of the incredible sacrifices that workers make every day and the Department's responsibility to ensure worker safety and health.

**MSHA Oversight Work**

Over the years, the OIG has devoted significant resources to providing oversight of MSHA's safety and health responsibilities. For example, previously issued audits found that:

- MSHA's Accountability program, established to ensure that mine inspection responsibilities are performed effectively, was not well designed and needed to be strengthened.
- MSHA was not fulfilling its statutory inspections mandate due to resource limitations and a lack of management emphasis on ensuring that inspections were completed.
- MSHA did not have a rigorous, transparent review and approval process for roof control plans consisting of explicit criteria and plan evaluation factors, appropriate documentation and active oversight.
- MSHA did not ensure its journeyman inspectors received required periodic retraining, therefore the inspectors may not have had the up-to-date knowledge of health and safety standards or mining technology.

Consistent with the committee's request, I will focus my testimony on the Pattern of Violations Audit that we conducted after the disaster at the Upper Big Branch Mine.

## Pattern of Violations Audit

Last year's explosion at the Upper Big Branch Mine South in Montcoal, West Virginia, raised concerns about the mine's safety record and MSHA's process for identifying mines with a potential pattern of violations. These concerns were amplified when MSHA reported that a computer error had omitted Upper Big Branch from the potential POV list. This omission precluded MSHA from (a) warning the mine operator that the mine demonstrated a potential pattern of violations and (b) initiating closer monitoring of the mine's rate of significant and substantial (S&S) violations.

POV authority is an important tool that lets MSHA take enhanced enforcement actions when a mine demonstrates recurring safety violations that could significantly and substantially contribute to the cause and effect of health and safety issues. Once MSHA notifies a mine it demonstrates a potential pattern of violations, the mine must take immediate action to reduce future S&S violations or face tougher sanctions.

In response to a Congressional request, the OIG conducted an audit to determine how MSHA had used its POV enforcement authority. We were also asked to review MSHA's policy, criteria, regulations, and information systems regarding POV sanctions to determine whether they were reliable and effective in determining and sanctioning habitual violators.

During the course of this audit, we became aware that MSHA had, at times, set arbitrary limits on the number of potential POV mines to be monitored in any single district. The OIG was very concerned about 10 mines that may have been excluded for reasons other than appropriate consideration of the health and safety conditions at those mines. We immediately relayed our concerns to MSHA, which subsequently discontinued that policy and re-examined the safety and health conditions at those mines.

We completed our audit in September 2010, and concluded that in 32 years, MSHA had never successfully exercised its POV authority. We determined that successful administration of this authority had been hampered by a lack of leadership and priority in the Department across various administrations. This allowed the rulemaking process to stall, and fall victim to the competing interests of the industry, the operators, and the unions representing the miners as to how that authority should be administered. Specifically, our audit found that:

- ***MSHA did not implement regulations for administering its POV authority until 1990, even though it had the authority to do so since 1977.*** The regulations MSHA implemented in 1990 created limitations on its authority that were not present in the enabling legislation; specifically, requiring only the use of final citations and orders in determining a POV, and creating a "potential" POV warning to mine operators and a subsequent period of further evaluation before exercising the POV authority. This made it difficult for MSHA to place mines on POV status. According to MSHA officials, in the 17 years that followed -- from 1990 until mid-2007 -- MSHA district offices across the nation operated with

limited guidance from the national office and performed POV analyses based on individual interpretations of requirements. District offices were responsible for conducting the required annual POV screening of mines, but never put any mine operator on POV status. In 2007, MSHA made its first attempt to implement a standard quantifiable method for screening and monitoring potential POV mines.

- ***MSHA did not verify the implementation of mine operators' written POV corrective action plans.*** POV regulations gave a mine operator who received a potential POV warning reasonable opportunity to institute a program to reduce repeated, S&S violations at the mine. The regulations gave mine operators an opportunity to submit a written corrective action plan, which would give them additional time before MSHA made a determination of the mine's POV status. Most mine operators submitted a written corrective action plan, even though regulations did not require them. While MSHA District personnel reviewed and discussed with mine operators the plans they submitted, we found that MSHA did not approve, disapprove or monitor these plans. In addition, the nature and basis of MSHA's reviews also varied based on each District Manager's interpretation of the POV criteria and process. As a result, MSHA could not demonstrate that these corrective action plans had any role in subsequent declines in violation rates.
- ***Three logic errors caused unreliable results from MSHA's POV computer application.*** MSHA's POV computer application, implemented in 2007 in connection with the POV model, contained logic errors, inconsistencies with the stated selection criteria, and an anomaly in the spreadsheet formulas used to identify mines having more than five S&S violations of the same standard. These deficiencies occurred because the computer application was not developed, tested, maintained, and documented in the disciplined and structured manner normally associated with major computer applications.

To demonstrate the potential impact of these errors, we ran both MSHA's uncorrected program and the OIG's corrected program against a copy of the enforcement data as of May 10, 2010. MSHA's uncorrected program produced a list of 17 mines for potential POV evaluation. The OIG's corrected program, run against the exact same data, produced a list of 21 mines for potential POV evaluation. Our test results showed that the computer application errors had the potential to incorrectly include mines that had not met the POV screening criteria, as well as to exclude mines that had met the POV screening criteria.

- ***Delays in Testing Rock Dust Samples.*** Our audit also identified a lack of timeliness in MSHA's testing of rock dust samples from underground coal mines that could cause critical delays in MSHA identifying serious safety hazards including the risk of explosions.

Mine inspectors do not currently have a way to measure rock dust samples on-site during an inspection; therefore, they must collect and send samples to

MSHA's National Air and Dust Laboratory. Lab personnel test the samples and report the results to the mine inspector. Based on the reported results, the inspector determines whether a violation had occurred and a citation should be issued.

According to lab personnel, fluctuating workloads and the laboratory's recent participation in the National Institute for Occupational Safety and Health (NIOSH) evaluation of a portable dust meter, affected how quickly rock dust samples were tested after they were received. During the spring and summer months, rock dust samples were normally tested and the results were reported to mine inspectors in 2-3 days. However, during fall and winter months, inspectors collect a higher volume of samples because cold air dries out mine surfaces and increases the risk of explosions. During these periods of increased risk and workload, it could have taken 2 or 3 weeks to test and report results.

The handling of some rock dust samples from the Upper Big Branch mine illustrates the critical importance of completing these tests in a timely manner. On March 15, 2010, a mine inspector collected 14 rock dust samples from Upper Big Branch Mine during an inspection. Lab tests were not completed until 2 days after the April 5, 2010 accident. The results showed that one of eight samples tested (six samples contained too much moisture to test) did not meet regulatory standards. Based on these results, MSHA issued an S&S citation on April 13, 2010.

We found that MSHA had no performance standard for the timeliness of testing these samples. As a result of our concerns, on July 29, 2010, MSHA directed that rock dust samples were to be tested and the results reported to mine inspectors within 19 calendar days. However, the OIG told MSHA management that 19 days did not convey an appropriate level of urgency for completing tests related to safety hazards within a mine. MSHA is currently upgrading its National Air and Dust Laboratory and has indicated that the performance standard will be revisited when the upgrade is completed in July 2011.

- **Changing certain criteria significantly affects POV screening.** In an effort to provide information that may be helpful in MSHA's stated goal to revise the criteria and procedures, we conducted several "what if" analyses aimed at demonstrating the impact of various changes to the then existing criteria on the number of mines (a) identified as having a potential pattern of violations and (b) meeting MSHA's improvement metrics.

For example, eliminating the POV model's requirements for final orders resulted in the most significant change. This modification produced a list of 91 potential POV mines versus a list of 16 when only final orders were used.

Furthermore, while 94 percent of potential POV mines met MSHA's improvement metrics within the first inspection period following receipt of their notification

letter, fewer mines would have satisfied those standards if evaluated over a longer period of time. After two inspection cycles, 89 percent of mines still satisfied the improvement metrics. After three inspection periods, the success rate decreased to 85 percent.

After the release of our audit, we were requested by a House of Representatives committee to perform an expanded analysis of mines that had received potential POV notifications to determine the extent to which safety improvements were maintained over a longer period of time.<sup>1</sup> Mines receiving a potential POV notification from MSHA reduced their rate of S&S violations by an average of 63 percent after one subsequent inspection period; but the average reduction rate declined to 51 percent after the 8th subsequent inspection period.

On September 30, 2010, MSHA announced more stringent POV improvement provisions. MSHA currently requires mines to implement appropriate corrective action programs that achieve a 50 percent reduction in the rate of S&S violations, or a rate within the top 50 percent for all mines of similar type and classification. Furthermore, mines that do not choose to implement corrective action programs need to meet a more stringent improvement metric -- a 70 percent or more reduction in their S&S issuance rates or a rate within the top 35 percent for all mines of similar type and classification.

### **POV Audit Recommendations**

Our POV audit contained 10 recommendations to MSHA. Specifically, Mr. Chairman, we recommended that MSHA:

- Evaluate the appropriateness of eliminating or modifying limitations in the current regulations, including the use of only final orders in determining a pattern of violations and the issuance of a warning notice prior to exercising POV authority.
- Seek stakeholders' input (e.g., miners, miner representatives, mine operators) in the development of POV screening criteria, but assure that the process, including rulemaking, is not stalled or improperly affected because of competing viewpoints.
- Assure that POV selection criteria are sufficiently transparent to allow stakeholders to reasonably determine an individual mine's status at any point in time.
- Assure that POV decisions are based solely on the health and safety conditions at each mine.
- Implement a standard process for documenting all factors – both quantitative and non-quantitative – used to make POV decisions.
- Establish guidance on the preparation, review, and monitoring of mine operators' POV corrective action plans.

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<sup>1</sup> OIG Report No. 05-11-002-06-001, "Pattern of Significant and Substantial Violation Rate Extended Analysis," issued December 15, 2010.

- Eliminate the requirement that mines be in an “active” status to be screened for a pattern of violations.
- Use system development life cycle techniques (analysis, design, test, implement, and maintain) to reduce the risk of errors in any POV-related computer application.
- Re-evaluate the performance standard for timely completion of laboratory tests on rock dust or any other samples that yield enforcement related data, including addressing workload fluctuations and resources needs.
- Examine its process and metrics for monitoring the improvement of potential POV mines to increase the likelihood that improvements are not temporary.

### **Current Concerns and Planned Audit Work**

The Committee also requested that the OIG discuss any serious pending matters stemming from prior OIG work. We have one pending matter that would require legislative action. The OIG recommends a technical review of the existing language under Section 103 (k) in the Mine Act to ensure that MSHA’s long-standing and critically important authority to take whatever actions may be necessary to protect miner health and safety, including issuing verbal mine closure orders, is clear and not vulnerable to challenge.

Mr. Chairman, our oversight work in the area of mine safety and health continues. We currently have one audit in progress to determine whether MSHA effectively and timely collects final civil penalties from mine operators. In the near future, we plan to assess whether MSHA’s laboratories are providing timely and quality services in support of MSHA’s inspection and investigative responsibilities. We will also audit MSHA’s oversight of miner training. In addition, we plan to audit MSHA’s Metal/Nonmetal mandatory inspections.

Mr. Chairman, thank you for the opportunity to testify on our work. I would be pleased to answer any questions that you or any Members of the Committee may have.