MSHA DID NOT EVALUATE WHETHER CIVIL MONETARY PENALTIES EFFECTIVELY DETERRED UNSAFE MINE OPERATIONS
BRIEFLY...

MSHA DID NOT EVALUATE WHETHER CIVIL MONETARY PENALTIES EFFECTIVELY DETERRED UNSAFE MINE OPERATIONS

August 16, 2019

WHY OIG CONDUCTED THE AUDIT

The Mine Safety and Health Administration’s (MSHA) Civil Monetary Penalties (CMP) program financially penalizes mine operators for safety hazards found during inspections. Inspection citations are intended to remedy safety violations and discourage future safety hazards within the mine. MSHA issued more than $1 billion in CMP violation penalties during Calendar Years (CY) 2000 – 2017.

MSHA has been reported in the media for allegedly allowing mine operators who were delinquent in paying their penalties to continue to operate without consequence.

WHAT OIG DID

We conducted an audit to answer the following question:

To what extent has MSHA’s CMP program deterred unsafe mine operations?

To answer this question, we primarily conducted data analysis of publicly available information that represented the scope of our review, CY 2000 – CY 2017, to identify trends and patterns regarding safety violations, penalties assessed, and penalty payment statuses, as they related to mine conditions.

READ THE FULL REPORT


WHAT OIG FOUND

MSHA did not demonstrate the CMP program deterred unsafe mine operations. Although MSHA officials believed their safety programs collectively improved mine safety, MSHA did not separately evaluate the impact of the CMP program.

Our data analysis showed no correlation between penalties paid and the safety of mine operations. Specifically, the data revealed most fatal or permanent injury accidents occurred at mines where operators generally paid their penalties in full. Additionally, we found no correlation between the percentage of penalties paid and the average number of fatal or permanent injury accidents. Further, the frequency of severe violation recurrence was very similar whether or not violation penalties were paid.

MSHA has not measured the impact of the CMP program on mine safety, as Agency officials believed it is too difficult to distinguish the effect of CMP from other MSHA safety and enforcement initiatives. Without metrics, MSHA cannot ensure CMP is achieving its intended purpose.

Although MSHA did not demonstrate the CMP program was improving mine safety, we found the program was generally successful in collecting assessed penalties. MSHA collected approximately 90 percent of all violation penalties (or $900 million) during the 18-year period we reviewed.

Finally, our review noted MSHA does not prevent mine operators who were delinquent in paying their penalties from commencing operations on a new mine without consequence.

WHAT OIG RECOMMENDED

We recommended MSHA develop metrics for CMP that will allow review and measurement of the effect of the CMP program on changing operator behavior to deter unsafe mine operations and implement controls to ensure operators are in good standing prior to assigning legal identification numbers for new mines.

In responding to our draft report, MSHA highlighted the difficulties in implementing our recommendations. The OIG will work with MSHA on identifying actions to remediate the issues.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSPECTOR GENERAL’S REPORT</td>
<td>1</td>
</tr>
<tr>
<td>RESULTS</td>
<td>2</td>
</tr>
<tr>
<td>MSHA Did Not Measure The Impact Of The CMP Program On Mine Safety</td>
<td>3</td>
</tr>
<tr>
<td>MSHA’s CMP Collection Process Operated As Designed</td>
<td>8</td>
</tr>
<tr>
<td>The Scofflaw Enforcement Program Pursued Operators With Delinquent Violation Penalties</td>
<td>11</td>
</tr>
<tr>
<td>Mine Operations Allowed To Commence Without Consideration Of Operator Safety Record or Delinquency Status</td>
<td>15</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>16</td>
</tr>
<tr>
<td>OIG’S RECOMMENDATIONS</td>
<td>17</td>
</tr>
<tr>
<td>Summary of MSHA’s Response</td>
<td>17</td>
</tr>
<tr>
<td>EXHIBIT 1: SEVERE ACCIDENTS VS PAID PERCENTAGE</td>
<td>19</td>
</tr>
<tr>
<td>APPENDIX A: SCOPE, METHODOLOGY, &amp; CRITERIA</td>
<td>20</td>
</tr>
<tr>
<td>APPENDIX B: AGENCY’S RESPONSE TO THE REPORT</td>
<td>23</td>
</tr>
<tr>
<td>APPENDIX C: ACKNOWLEDGEMENTS</td>
<td>25</td>
</tr>
</tbody>
</table>
This audit report presents the results of our review of the effectiveness of the Mine Safety and Health Administration’s (MSHA) Civil Monetary Penalties (CMP) program in protecting miners by financially penalizing mine operators for safety hazards. MSHA’s inspectors issue citations to mine operators when safety hazards are found during inspections, and monetary penalties are then assessed based on several factors regarding the mine, the mine operator, and the severity of the safety hazards.

MSHA’s main reasons for issuing citations are to identify safety issues that need to be remedied and to create financial disincentives to discourage future safety hazards. MSHA issued more than $1 billion in violation penalties from Calendar Year (CY) 2000 through CY 2017, all in the interest of improving mine safety.

MSHA had been reported in the media for allegedly allowing mine operators who were delinquent in paying their penalties to continue operating without consequence. If true, these media allegations were concerning to us, so we conducted a review to answer the following question:

To what extent has MSHA’s CMP program deterred unsafe mine operations?

---

1 Eighteen years of public datasets were available for review at the time of reporting, so we focused our review on this period.
Based on our work, we determined MSHA could not demonstrate the CMP program’s impact on deterring unsafe mine operations. Although MSHA believed its safety programs collectively improved mine safety, and the annual number of fatalities from mining accidents has been in decline historically, MSHA has not separately evaluated the impact of the CMP program.

Our work included reviewing federal laws and regulations related to the CMP program, reviewing MSHA’s processes for assessing and collecting penalties, and interviewing MSHA management and staff about how the CMP program worked and any efforts underway to improve it.

After validating the reliability of MSHA’s publicly available data for the scope of our review, CY 2000 – CY 2017, we examined the data to identify trends and patterns regarding safety violations, penalties assessed, and mine operator debt payments.

**RESULTS**

Our data analysis showed no correlation between penalties paid and the safety of mine operations. Specifically, the data revealed most fatal or permanent injury accidents occurred at mines where operators paid almost all of their penalties assessed. Additionally, we found no correlation between the percentage of penalties paid and the average number of fatal or permanent injury accidents. Further, the frequency of severe violation recurrence was very similar whether or not violation penalties were paid.

The CMP program is intended to protect miners by financially penalizing mine operators for safety hazards found during inspections. MSHA has not measured the impact of the CMP program on mine safety, as Agency officials believe it is too difficult to distinguish the effect of the program from other MSHA safety and enforcement initiatives. Without metrics, MSHA has not been able to ensure CMP was achieving its intended purpose.

Although MSHA did not demonstrate the CMP program was improving mine safety, we found the program was generally successful in collecting assessed penalties. MSHA collected approximately 90 percent of all violation penalties (or $900 million) during the 18-year period we reviewed.

Finally, our review noted MSHA had not implemented controls to prevent mine operators who were delinquent in paying their penalties from receiving a new mine identification number and commencing operations without consequence.
MSHA DID NOT MEASURE THE IMPACT OF THE CMP PROGRAM ON MINE SAFETY

MSHA did not establish performance metrics to measure the impact of the CMP program on protecting miner safety. Based on our analysis, MSHA’s 18-year period of data reflected that most fatal or permanent injury accidents occurred at mines where operators frequently paid almost all of their assessed penalties. Additionally, our analysis showed the frequency of violation recurrence was very similar whether or not violation penalties were paid. Therefore, we determined penalties, paid or unpaid, revealed no positive correlation to the safety of mine operations.

MSHA officials have not measured the impact of the CMP program on mine safety, as they believed it difficult to distinguish the effect of the program from other MSHA safety and enforcement initiatives. Without a means of measuring CMP program effectiveness, MSHA has not been able to determine if CMP has been improving mine safety.

PERCENTAGE OF PENALTY PAYMENTS MADE DID NOT CORRELATE TO AVERAGE NUMBER OF SEVERE ACCIDENTS

The media has reported mine operators who did not pay penalties had an inferior safety record than those who did pay. As such, we anticipated MSHA’s data would reflect that operators and controllers with a higher average number of severe accidents, defined as those leading to death or permanent injury, would have had poor percentages of violation penalty payment.

However, the results of our analysis indicated there was no correlation between the percentage of penalty payments made and the average number of severe accidents. Conversely, our analysis reflected that most severe accidents occurred at mines where operators generally paid almost all of their assessed penalties, or greater than 99 percent, but less than 100 percent.

The typical, penalized mine operator incurred a low number of violations over time and paid its entire penalty. Our analysis of MSHA datasets indicated that 75 percent of operators paid their violation penalties in full, and of the operators who received a penalty, 84 percent had 100 or fewer violations across the entire 18-year period, as seen in Figure 1.
The average number of severe accidents over the period examined, CY 2000 – CY 2017, showed no significant difference between those who paid less than 50 percent and those who paid 100 percent of their penalties (see Figure 2).\(^2\) Contrary to our expectations, those who paid almost all of their penalties — greater than 99 percent, but less than 100 percent — had the highest average number of severe accidents.

\(^2\) Figure 2 does not reflect a rate of frequency. Rather, it represents a conservative view of accidents by mine operator group.
Mine operators are entities that operate one or more individual mines. Mine controllers are the corporate owners of mines and can be individuals or companies. After examining the operator data, we also examined the controller data to determine if there was any notable difference in our results.

Our analysis indicated that controllers had similar patterns as operators. Those who paid more than 99 percent, but less than 100 percent, had the highest average number of severe accidents over the period examined (see Figure 3). Therefore, data at the controller level produced results consistent with the data at the operator level.
We also analyzed operators with the most severe accidents over the period of time examined, CY2000 – CY2017, and determined that of the top 20 operators ranked by severe accident, the payment percentage was 98 percent on average (see Exhibit 1). This indicated that mines with the highest number of severe accidents generally paid the majority of their violation penalties.

These results partly contributed to our determination that the CMP program did not have a distinguishable effect on reducing mine hazards and protecting those who work in mines.

SEVERE VIOLATIONS RECURRED DESPITE CMP PROGRAM EFFORTS

We found that operators who paid violation penalties and those who did not pay continued to have severe violations year-after-year at about the same frequency.\(^3\) Severe violations were defined as violations that were Reckless or High-Negligence, or Significant or Substantial. These severe violations stemmed from safety hazards that had a reasonable likelihood of causing serious injuries to miners.

\(^3\) Paid indicates that penalties were 99.9 percent paid and the total unpaid amount was less than $1,000.
Our examination indicated more than 70 percent of 15,954 operators with severe violations for both groups — 11,983 operators who paid civil monetary penalties and 3,971 operators who did not pay — had repeated severe violations over the 18-year period. This repeat violation frequency was consistent, whether or not an operator paid its violation penalties (73 percent) or did not pay (77 percent), as seen in Figure 4 below. Additionally, 38 percent of those who paid and 37 percent of those who did not pay had at least 5 years or more with repeated, severe violations.

![Figure 4: Number of Severe Violations Over the Past 18 Years, Operators Who Paid or Did Not Pay Penalties](attachment:figure4.png)

Additional analysis revealed that while the percentage of significant and substantial violations across all operators decreased from 32 percent during CY 2000 – CY 2005, to 23 percent during CY 2012 – CY 2017, the percentage of Reckless and High-Negligence violations rose from 4.9 percent to 7 percent. This demonstrated violation penalties had an inconsistent effect, if any, on the type of violation.

Whether the operator paid or not, the frequency of severe violation recurrence was almost identical, indicating CMP did not appear to be effective at deterring unsafe mine operations after an operator was initially penalized.
METRICS TO MEASURE EFFECTIVENESS OF CIVIL MONETARY PENALTIES PROGRAM NEEDED

Our analysis indicated MSHA’s violation penalties may not have changed operator behavior and motivated them to fix safety hazards, as intended. Based on the recurrence of violations, those operators who paid violation penalties and continued to incur violations may not have considered the violation penalties a significant enough financial disincentive to avoiding future violations. Likewise, the operators who did not pay may not have seen the incentive in avoiding enforcement actions MSHA could take for nonpayment. This lack of effect on operator behavior and potential for repeat violations indicated the CMP program had not deterred unsafe mine operations.

MSHA did not have metrics for measuring the performance of the CMP program, either individually or in conjunction with the other MSHA enforcement programs. As such, MSHA could not determine the positive or negative contributions CMP has had on miner safety over time. Further, CMP’s effect has not been monitored with respect to other MSHA safety initiatives, such as training or the advance of new equipment in the mines.

According to MSHA officials, it has been difficult to determine which aspects of safety improvements have been the result of a specific program, and not the result of collective MSHA efforts. However, CMP requires a variety of MSHA resources, so efforts should be made to determine the value added by the program. Federal standards require MSHA to measure the CMP program to ensure its goals are achieved. As such, MSHA should develop metrics that will allow review and measurement of the effect of the CMP program on changing operator behavior to deter unsafe mine operations.

MSHA’S CMP COLLECTION PROCESS OPERATED AS DESIGNED

Our review found MSHA effectively managed the collection of penalties under the CMP program. Specifically, our analysis of MSHA’s data confirmed MSHA was collecting a majority of its penalty assessments. Further, MSHA utilized the U.S. Department of Treasury’s debt collection capabilities to facilitate this process, as intended.
REGULAR AND SPECIAL PENALTY ASSESSMENTS

While MSHA used citations issued during safety inspections to identify for the mine operator the safety issue that needed abatement, it also used civil monetary penalties to serve as a financial disincentive for mine operators to neglect safety issues in the future. In doing so, MSHA primarily used one of two processes for creating a penalty assessment – regular and special.

The regular penalty assessment process was based on a number of factors determined by the inspector during a mine inspection, and later by MSHA’s Office of Assessments, which calculated the penalty based on all factors considered. These factors included: 1) the operator’s history of prior violations; 2) the size of the operator’s business in terms of tonnage mined (for coal) or hours worked (for metal non-metal); 3) if the violation was deemed to be negligent by the inspector; 4) the gravity of the violation, as determined by the inspector; and 5) the operator’s willingness to correct the violation once notified. At the operator’s request, MSHA would also consider the effect of the penalty on the operator’s ability to stay in business.

When there was a willful violation or dangerous condition at a mine, MSHA could forgo the regular penalty assessment process and perform a special penalty assessment, which assigned a higher maximum point value to the same six factors considered, resulting in a higher maximum penalty.

THE CMP COLLECTION PROCESS

When an operator received a violation penalty notice, it had the option to contest it, pay the penalty in full, or establish a payment plan to pay the total cost over an agreed-upon timeframe. The violation penalties were considered delinquent when a payment, or other arrangement, had not been made within 30 days after the date the operator received the statement, and 8 percent interest was assessed.

MSHA’s Civil Penalty Compliance Office (CPCO) was responsible for receiving and applying payments for 30-day delinquent violation penalties. After 45 days, MSHA issued its first demand letter to the operator. After 90 days, another 6 percent interest was assessed. If no payment had been made within 100 days of the violation notice, MSHA started the process of transferring the debt to Treasury.4 Per the Digital Accountability and Transparency Act of 2014, CPCO

4 Specific criteria can cause a debt to be ineligible for transfer to Treasury (i.e., bankruptcy or legal action).
was required to transfer the debt to Treasury prior to reaching 120 days of delinquency.

According to Treasury officials, many agencies referred debts to Treasury prior to the 120-day mark, and 60 days due process for an agency to manage a debt was the minimum allowable timeframe. Treasury officials further stated the collection rate was better the sooner a debt was transferred to them.

If Treasury was unable to collect the violation penalty, the debt was returned to MSHA, where a determination was made on the likelihood of collection. If the debt was determined uncollectable and exceeded $600, MSHA reported it to the IRS as taxable income of the mine’s corporate owner. Debt was typically written off by CPCO when returned from Treasury for one or more of the following reasons: bankruptcy, debtor death, disability, inability to pay, out of business, or two years elapsed.

We reviewed Delinquent Notices and Final Demand Letters to verify they were sent as described. Examination of these documents demonstrated MSHA properly notified recipients of their delinquent status. Additionally, we analyzed a Treasury Referral Report on Debt and Receivables to ensure the process of debt transfer occurred as described by CPCO officials. We concluded, based on our interviews with CPCO officials, our review of the process, and our analysis of associated documentation, that MSHA’s CMP collection process worked as designed.

**ANALYSIS OF MSHA’S DATA CONFIRMED MAJORITY OF PENALTIES COLLECTED**

Our analysis of the data found MSHA collected approximately 90 percent of all penalties during the period CY 2000 – CY 2017, or $900 million out of the $1 billion assessed. This percentage was consistent when analyzed across the past 5 years, 10 years, and the entire 18-year period, as seen in Figure 5 below.

This analysis included both coal and metal non-metal (MNM) mines.
Based on our review of the CMP collection process and analysis of MSHA’s collection rate, we determined the CMP collection process was managed as intended.

**THE SCOFFLAW ENFORCEMENT PROGRAM PURSUED OPERATORS WITH DELINQUENT VIOLATION PENALTIES**

In addition to the CMP program, MSHA’s efforts to protect the safety of miners included other compliance and enforcement programs — namely Scofflaw and Pattern of Violations (POV). The Scofflaw program was enacted in 2012 to identify delinquent operators who posed potential safety threats, and to issue notification that unless their delinquent penalties were paid, their mines could be shut down. In 2018, MSHA adopted a new enhanced enforcement approach to the Scofflaw program with a more frequent use of mine closure citations for non-payment under CMP.

Through the POV program, MSHA intended to protect the safety and health of miners by holding mine operators accountable for addressing safety issues that led to significant and substantial violations. If an operator’s violations occurred frequently and met specific criteria, MSHA automated POV program was meant...
to detect that pattern and trigger enhanced enforcement action. Per the Mine Act, MSHA had direct authority under the POV program to withdraw miners from unsafe mines, when appropriate.

To be issued a POV notification, a mine must have met one of two sets of criteria, including the number of Significant and Substantial violations received. Depending on the circumstances at a mine, MSHA considered mitigating factors that may not have caused the mine to receive a POV notice. Prior OIG reporting indicated MSHA had not used the POV program for 32 years, from 1978 – 2010. The threshold for being issued a POV notice is high, and our analysis identified that MSHA has not issued a POV notice since 2014.

OIG plans to review the POV program in future work.

**2012 SCOFFLAW PROGRAM**

From 2012 to 2018, under the Scofflaw Program, MSHA’s Office of Assessments generated two listings per month of operators and mines with the most delinquent CMP violation penalties. Additionally, on a quarterly basis, the Office of Assessments generated a list of all delinquent, active mines who owed $5,000 or more and were more than 90 days delinquent. These operators and mines, referred to as “Scofflaws,” were deemed likely to have a potential accident in the future and were therefore of particular concern to MSHA. Officials from the Office of Assessments, the Department’s Office of the Solicitor (SOL), and the Coal and MNM program areas reviewed the monthly and quarterly Scofflaw listings to determine if special enforcement actions were required.

When a Scofflaw was identified, MSHA had two enforcement options to consider. One option was to take a Scofflaw to federal court by working with the Department of Justice under Section 108 of the Mine Act. However, it was up to the Department of Justice to pursue operators in federal court and MSHA could only recommend cases. Our review found this option utilized only six times during CYs 2012 – 2017.

Another enforcement action MSHA utilized on a limited basis, as it was not part of MSHA’s standard operating procedures, was issuing an operator another citation via 104(a) of the Mine Act. A 104(a) citation allowed MSHA to state which element of the Mine Act was violated by the operator, the degree of hazard and exposure, and the degree of negligence by the operator.

A 104(a) citation carried a deadline for abatement, at which time if the violation had not been abated, MSHA would determine if an extension was warranted or if a 104(b) order should be issued. A 104(b) order withdraws all miners from the
mine until such time that the original violation is abated. MSHA issued five 104(a) citations from 2012 to 2017, and only ordered the withdrawal of miners via 104(b) orders two times between years 2012 – 2017.

In 2015, then-Assistant Secretary for MSHA testified to Congress that proposed legislation would clarify and fill gaps in MSHA’s authority with regard to holding mine operators accountable for not paying delinquent debts. The proposed legislation would have amended the Mine Act to add a provision authorizing MSHA to issue a withdrawal order at any mine where the operator had not paid its penalties or entered into a payment plan. The legislation did not become law in 2015 and was proposed again in 2017, but was not enacted.

2018 SCOFFLAW PROGRAM

In February 2018, at the Assistant Secretary’s direction, new standard operating procedures were implemented for the Scofflaw program. Although no memorandum was issued or guidance announced, MSHA said the new procedures were discussed with MSHA and SOL senior officials, as well as the Office of the Secretary, prior to the new program beginning in March 2018.

The new Scofflaw procedures required a monthly list of operators who had total unpaid delinquent debt of $10,000 or more (at MSHA or Treasury), and whose violation penalties were at least 45 days past due. Operators who were bankrupt, mines that were not active, and those that had entered into payment plans were removed from the list. The list was then reviewed by the Office of Assessments, Coal and MNM program areas, and SOL during a monthly meeting to identify Scofflaws for enforcement action. Any Scofflaws requiring enforcement action would then trigger a special enforcement meeting among MSHA and DOL solicitors.

MSHA had three special enforcement actions available to it as described in the 2018 Scofflaw Standard Operating Procedures. Those actions included: 1) seek an injunction under Section 108 of the Mine Act, as occurred in the prior Scofflaw procedures; 2) try for enforcement with the Court of Appeals under Section 106 of the Mine Act; or 3) issue a citation to the operator for failure to pay violation penalties under Section 104 of the Mine Act.

Once a Scofflaw was selected for an enforcement action, it received a 30-day demand letter with details of their violations and delinquent assessments. If a 104(a) citation was to be issued, MSHA waited 7 days after the 30-day demand

Questions for the Record before the U.S. House of Representatives, Committee on Education and the Workforce, Workforce Protections Subcommittee, dated April 23, 2015

5 Questions for the Record before the U.S. House of Representatives, Committee on Education and the Workforce, Workforce Protections Subcommittee, dated April 23, 2015
period to confirm non-payment of the violation penalties. If an operator had not paid their delinquent violation penalties in full, or established a reasonable payment plan, then a 104(a) citation was issued for non-payment of penalties.

For the first offense, operators had 30 days to abate the 104(a) citation by either paying their delinquent violation penalties in full or setting up a payment plan. If an operator had previously received a 104(a) citation, making another a repeat offense, it had 14 days to abate the citation by paying their delinquent violation penalties. MSHA issued thirty-eight 104(a) letters to mine operators in 2018, and two 104(a) letters in 2019.

If, after 30 days, an operator who received a 104(a) citation had not paid the delinquent violation penalties or set up a payment plan, MSHA could issue a 104(b) mine withdrawal order, removing all miners from a mine, effectively closing it down. There were 15 Scofflaws who received a 104(b) order in 2018, and 3 Scofflaws who received a 104(b) order in 2019. We performed data analysis of these Scofflaws and determined 98 percent of the violations were abated. The unabated violations remained at 10 distinct mines.

This indicated 8 of the 18 Scofflaws who received mine closure orders, while delinquent in paying their penalties, had no outstanding safety violations at their mine at their time of closure and closed only to recover the violation penalty money.

When a Scofflaw received a 104(b) order, MSHA ordered withdrawal of the miners citing Section 110(j) of the Mine Act, which states:

Civil penalties owed under this Act shall be paid to the Secretary for deposit into the Treasury of the United States and shall accrue to the United States and may be recovered in a civil action in the name of the United States brought in the United States district court for the district where the violation occurred or where the operator has its principal office. Interest at the rate of 8 percent per annum shall be charged against a person on any final order of the Commission, or the court. Interest shall begin to accrue 30 days after the issuance of such order.

The MSHA Scofflaw program that began in 2012 and was enhanced in 2018, pursued delinquent operators that posed a safety hazard to miners. The 2018 enhancements included more frequent mine closure citations. While there

---

6 Information regarding the Scofflaw program changes was presented at the exit after the completion of our fieldwork, and new datasets covering CY 2000 - CY 2019 were utilized for this analysis.
was no provision in the Mine Act that expressly authorized MSHA to close mines for reason of penalty non-payment, there was also no provision that expressly prohibited MSHA from doing so.

**MINE OPERATIONS ALLOWED TO COMMENCE WITHOUT CONSIDERATION OF OPERATOR SAFETY RECORD OR DELIQUENCY STATUS**

MSHA does not consider an operator's safety record prior to the operation of newly registered or transferred mines. A mine legal identification number is required by MSHA before mine operations commence. When mine ownership changes, operators must file required paperwork with MSHA. Our data analysis found mines that experienced changes in ownership had worse safety records than those where ownership did not change. Moreover, by changing ownership, mine operators could also escape financial responsibility for past violation penalties.

As shown in Table 1, mines that changed ownership had higher violation rates and a greater percentage of severe accidents, and included both those that paid penalties and those that did not. We found 46 percent of the 22,526 mines that changed ownership had violations, while only 26 percent of the 63,895 mines that did not change ownership had violations. For mines that changed ownership, the percentage of mines with severe accidents was 5 percent, while only 1 percent of mines that did not change owners had severe accidents.

<table>
<thead>
<tr>
<th></th>
<th>Mines with Ownership Change</th>
<th>Mines without Ownership Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Mines</td>
<td>22526</td>
<td>63895</td>
</tr>
<tr>
<td>Total Number of Mines with Violation</td>
<td>10285</td>
<td>16814</td>
</tr>
<tr>
<td>Percentage of Mines with Violation</td>
<td>45.70%</td>
<td>26.30%</td>
</tr>
<tr>
<td>Average Violation Count per Mine</td>
<td>134</td>
<td>43</td>
</tr>
<tr>
<td>Total Number of Severe Accident</td>
<td>1948</td>
<td>978</td>
</tr>
<tr>
<td>Number of Mines with Severe Accident</td>
<td>1132</td>
<td>676</td>
</tr>
<tr>
<td>Percentage of Mines with Severe Accident</td>
<td>5%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source OIG Analysis of MSHA Public Datasets
MSHA did not consider delinquency status prior to assigning new mine identification numbers, which are required before mine operations commence. For instance, an operator on the February 2017 Scofflaw Listing who owed $34,000, and had not made a payment since July 2015, was able to begin operating a new mine in May 2017 without consequence. Approximately 4,000 mine operators who were cited for safety violations and were delinquent in paying the associated penalties could commence operations at a new mine.

According to MSHA’s data, 25 percent of mine operators during the period reviewed did not pay their violation penalties in full. These mine operators could avoid the financial responsibility for the violation penalties by selling the mine or possibly declaring bankruptcy.

When an operator sold a mine and owed a delinquent debt, it became difficult for MSHA to enforce payment of penalties incurred under CMP. MSHA followed its usual procedures to collect the debt, which remained the responsibility of the selling operator, unless it was a condition of the sale to transfer the debt as well. Ultimately, MSHA transferred the debt to Treasury for collection purposes. If Treasury was unable to collect, MSHA needed to determine whether it was appropriate to write off the debt. Once the mine was sold, the delinquent operator could not be pursued as a Scofflaw, since there was no mine to shut down.

Given that approximately 30 percent of mines changed operators at least once during the 18-year period of our review, the substantially higher violations and greater percentage of severe accidents at mines that changed ownership was concerning. Analysis of violations from CY 2000 — CY 2017 revealed that 99 percent of all violations were abated, meaning the safety issues found were resolved, even if the violation penalties were not fully paid.

While MSHA monitored reports to ensure timely abatement of safety hazards, operators could still attempt to avoid financial responsibility for a violation penalty by selling the mine without consequence. Further, monitoring did not help ensure that violations did not recur. MSHA’s mission is to protect the health and safety of miners. Without holding mine operators accountable for their safety record or delinquency status prior to commencing operations at a new mine, mine operators have less of an incentive to prevent future safety hazards.

**CONCLUSION**

Our data analysis showed no correlation between penalties paid and the safety of mine operations. Further, MSHA has not evaluated the CMP program to determine whether CMP has effectively deterred unsafe mine operations.
Violation penalties should serve as a financial deterrent to neglect a safety hazard in the future. While MSHA effectively assessed and collected the monies associated with violation penalties, the agency did not establish a metric to ensure the purpose of the program – deterring future safety issues – was met.

In 2018, MSHA adopted a new enhanced enforcement approach to the Scofflaw program with a more frequent use of mine closure citations for non-payment of penalties. This approach utilizes mine closure orders to encourage delinquent operators to pay their penalties. However, we also found that the assignment of new mine identification numbers was not impacted by an operator’s safety record or delinquency status, thereby enabling new mine operations to commence without consideration of these concerns.

OIG’S RECOMMENDATIONS

We recommend the Assistant Secretary for Mine Safety and Health:

1. Develop metrics for the CMP program that will allow review and measurement of its effect on changing operator behavior to deter unsafe mine operations.

2. Implement controls to ensure good standing of operators with regard to safety record and delinquency status prior to assigning a legal mine identification number or changing the legal ownership structure of a mine.

SUMMARY OF MSHA’S RESPONSE

In its response, MSHA highlighted some of the difficulties in implementing our recommendations, as presented. However, with regard to the first recommendation, MSHA stated that it would work with the OIG to explore various options for developing metrics to measure the CMP program. With regard to the second recommendation, MSHA believes it does not have the legal authority to implement the necessary controls. We will work with MSHA to discuss possible ways to implement the necessary controls and meet the intent of the recommendation. We included management’s response to our draft report in its entirety in Appendix B.
We appreciate the cooperation and courtesies MSHA extended us during this review. OIG personnel who made major contributions to this report are listed in Appendix C.

Elliot P. Lewis
Assistant Inspector General for Audit
## EXHIBIT 1: SEVERE ACCIDENTS VS PAID PERCENTAGE

<table>
<thead>
<tr>
<th>Operator Name</th>
<th>Severe Accidents</th>
<th>Total Amount Paid</th>
<th>Total Unpaid Amount</th>
<th>Paid Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidation Coal Company</td>
<td>51</td>
<td>$27,006,395</td>
<td>$43,893</td>
<td>100%</td>
</tr>
<tr>
<td>Jim Walter Resources Inc</td>
<td>38</td>
<td>$7,406,219</td>
<td>$889,666</td>
<td>89%</td>
</tr>
<tr>
<td>Performance Coal Company</td>
<td>37</td>
<td>$15,051,816</td>
<td>$529</td>
<td>100%</td>
</tr>
<tr>
<td>Vulcan Construction Materials, L.P.</td>
<td>29</td>
<td>$1,700,212</td>
<td>$1,142</td>
<td>100%</td>
</tr>
<tr>
<td>Newmont USA Limited</td>
<td>27</td>
<td>$4,051,120</td>
<td>$10</td>
<td>100%</td>
</tr>
<tr>
<td>Freeport-McMoRan Morenci Inc.</td>
<td>19</td>
<td>$2,245,215</td>
<td>$176,065</td>
<td>93%</td>
</tr>
<tr>
<td>Consol Pennsylvania Coal Company</td>
<td>19</td>
<td>$3,184,639</td>
<td>$0</td>
<td>100%</td>
</tr>
<tr>
<td>Martin Marietta Materials</td>
<td>17</td>
<td>$2,749,514</td>
<td>$1,214</td>
<td>100%</td>
</tr>
<tr>
<td>Marfork Coal Company</td>
<td>17</td>
<td>$12,952,148</td>
<td>$1,231,066</td>
<td>91%</td>
</tr>
<tr>
<td>Brooks Run Mining Comp, LLC</td>
<td>16</td>
<td>$1,971,355</td>
<td>$13,172</td>
<td>99%</td>
</tr>
<tr>
<td>Asarco Inc</td>
<td>16</td>
<td>$3,453,083</td>
<td>$0</td>
<td>100%</td>
</tr>
<tr>
<td>Wolf Run Mining LLC</td>
<td>16</td>
<td>$5,288,475</td>
<td>$68,694</td>
<td>99%</td>
</tr>
<tr>
<td>Peabody Midwest Mining, LLC</td>
<td>16</td>
<td>$19,092,836</td>
<td>$326,633</td>
<td>98%</td>
</tr>
<tr>
<td>Holcim (US) Inc</td>
<td>15</td>
<td>$2,487,906</td>
<td>$38,537</td>
<td>98%</td>
</tr>
<tr>
<td>Ash Grove Cement Company</td>
<td>15</td>
<td>$1,328,923</td>
<td>$0</td>
<td>100%</td>
</tr>
<tr>
<td>Barrick Goldstrike Mines Inc</td>
<td>15</td>
<td>$2,868,316</td>
<td>$704</td>
<td>100%</td>
</tr>
<tr>
<td>Martin Marietta Aggregates</td>
<td>14</td>
<td>$320,961</td>
<td>$241</td>
<td>100%</td>
</tr>
<tr>
<td>Luminant Mining Company LLC</td>
<td>14</td>
<td>$1,086,139</td>
<td>$2,799</td>
<td>100%</td>
</tr>
<tr>
<td>Mt. Sterling Energy Mining</td>
<td>13</td>
<td>$6,637,742</td>
<td>$89,210</td>
<td>99%</td>
</tr>
<tr>
<td>McElroy Coal Company</td>
<td>13</td>
<td>$10,886,753</td>
<td>$752</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>20.85</strong></td>
<td><strong>$6,588,488</strong></td>
<td><strong>$144,216</strong></td>
<td><strong>98%</strong></td>
</tr>
</tbody>
</table>

Source: OIG Analysis of MSHA Public Datasets
SCOPE

OIG audited MSHA’s CMP program and analyzed MSHA datasets using data analytics covering CYs 2000 through 2017. Analysis was also performed on datasets covering CYs 2018 through 2019 after fieldwork ended based on new information presented at the Exit Conference. We performed audit work at MSHA’s National Office in Arlington, VA.

METHODOLOGY

We conducted this audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

To accomplish our objective, we obtained an understanding of MSHA’s CMP Process. We also reviewed federal laws and regulations; reviewed MSHA’s CMP policies and procedures; conducted walkthroughs of the CMP process; and interviewed key management and support personnel at MSHA headquarters. Finally, we utilized data analytics to determine patterns and potential findings across the entirety of MSHA datasets.

RELIABILITY ASSESSMENT

To determine the reliability of MSHA publicly available datasets, we used an approach consistent with the Government Accountability Office’s Assessing the Reliability of Computer-Processed Data (GAO-09-680G, July 2009, External Version I). We obtained public datasets from MSHA and an OIG data scientist validated the Structured Query Language (SQL) utilized to generate the public dataset. The Data Scientist confirmed no alteration of data from underlying sources was made when publishing for public use. We confirmed our understanding of the data MSHA used through interviews, walkthroughs, and documentation reviews. We determined that the data was sufficiently reliable to support our audit conclusions, findings, and recommendations.
DATA ANALYSIS

An OIG data scientist utilized SAS Software to perform data analytics on MSHA public datasets and answer questions developed during the audit. Further, the SAS Software was used to identify trends and patterns in the data that were used as lines of inquiry with MSHA for the purpose of understanding the CMP program.

INTERNAL CONTROLS

In planning and performing our audit, we considered MSHA’s internal controls relevant to our audit objective by obtaining an understanding of those controls, and assessing control risks for the purpose of achieving our objective. The objective of our audit was not to provide assurance of the internal controls; therefore, we did not express an opinion on MSHA’s internal controls.

CRITERIA

- Department of Treasury Managing Federal Receivables, Chapter 6 - Delinquent Debt Collection
- 30 CFR Part 50, Accidents, Injuries, and Production in Mines
- 31 CFR Parts 900-904, Federal Claims Collection Standards
- Digital Accountability and Transparency Act (DATA) of 2014
- MSHA Program Policy Manual, Version 3
- GAO Standards for Internal Control in the Federal Government

PRIOR COVERAGE

During the last 9 years, we have issued 3 reports of significant relevance to the subject of this report. Unrestricted reports can be accessed at https://www.oig.dol.gov/auditreports.htm, and include the following:

MSHA Needs to Improve its Civil Penalty Collections Practices (Report No. 05-12-001-06-001; November 18, 2011).

Pattern of Significant and Substantial Violations Rate Extended Analysis (Report No. 05-11-002-06-001; December 15, 2010)
In 32 Years MSHA Has Never Successfully Exercised its Pattern of Violations Authority (Report No. 05-10-005-06-001; September 29, 2010)
APPENDIX B: AGENCY'S RESPONSE TO THE REPORT

U.S. Department of Labor

Mine Safety and Health Administration
201 12th Street South, Suite 401
Arlington, Virginia 22202-5452

AUG - 7 2019

MEMORANDUM FOR: ELLIOT P. LEWIS
Assistant Inspector General for Audit

FROM: DAVID G. ZATEZALO
Assistant Secretary of Labor for
Mine Safety and Health

SUBJECT: Response to the Office of the Inspector General's (OIG)
Draft Audit Report, MSHA Did Not Evaluate Whether Civil
Monetary Penalties Effectively Deterred Unsafe Mine
Operations

The Mine Safety and Health Administration (MSHA) appreciates the opportunity to
comment on the work the OIG did evaluating MSHA’s Civil Monetary Penalties (CMP)
program. MSHA offers the following comments in response to the OIG
recommendations.

Recommendation 1: "MSHA should develop metrics for the CMP program that will allow
review and measurement of its effect on changing operator behavior to deter unsafe
mine operations."

MSHA will explore options to address this recommendation. MSHA will attempt to
“Develop metrics for the CMP program that will allow review and measurement of its
effect on changing operator behavior because it is only one of many variables within MSHA’s comprehensive compliance
strategy. MSHA may need to discuss with the OIG its approach as the Agency moves
forward with exploring options related to this recommendation.

Recommendation 2: "MSHA should implement controls to ensure good standing of
operators with regard to safety record and delinquency status prior to assigning a legal
mine identification number or changing the legal ownership structure of a mine."

Due to MSHA’s authority under the Federal Mine Safety and Health Act of 1977 (Mine
Act), MSHA cannot implement this recommendation. Mine identification numbers assist
MSHA administratively by allowing it to efficiently perform inspections, issue citations,
propose assessments, and track mine ownership history. Mine identification numbers
are assigned to new mines and do not change thereafter regardless of changes in
ownership. Under 30 CFR Part 41, MSHA processes legal identity reports submitted by the operator within 30 days of any new mine opening or changes in ownership or operation. MSHA’s authority under the Mine Act does not extend to the ownership, transfer or operational structure of a mine. MSHA has no authority under the Mine Act to issue regulations or implement controls that would turn its mine identification or legal identification processes into licenses or permits to acquire, transfer, or operate mines. Finally, as a practical matter, because MSHA is notified after a mine is opened or transferred, MSHA generally would not have an opportunity to vet safety records and delinquency status prior to opening or transfer.

We appreciate the opportunity to comment on the report. If you have any questions or need further information, please contact Patricia W. Silvey, Deputy Assistant Secretary for Mine Safety and Health.
APPENDIX C: ACKNOWLEDGEMENTS

Key contributors to this report included:

Stephen Fowler, Audit Director
Brian A. Devaney, Audit Manager
Leslie Antoinett Hunter, Program Analyst
Fangfang Xu, Data Scientist
Carolyn Cayode-Gorman, Assistant Counsel
REPORT FRAUD, WASTE, OR ABUSE
TO THE DEPARTMENT OF LABOR

Online
http://www.oig.dol.gov/hotline.htm

Telephone
(800) 347-3756 or (202) 693-6999

Fax
(202) 693-7020

Address
Office of Inspector General
U.S. Department of Labor
200 Constitution Avenue, NW
Room S-5506
Washington, DC 20210