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Office of Inspector General—Office of Audit

**MINE SAFETY AND HEALTH
ADMINISTRATION**



MSHA's OVERSIGHT OF MINE OPERATORS' TRAINING PLANS WAS ADEQUATE

Date Issued: September 28, 2012
Report Number: 05-12-003-06-001

**U.S. Department of Labor
Office of Inspector General
Office of Audit**

BRIEFLY...

Highlights of Report Number 05-12-003-06-001, issued to the Assistant Secretary for Mine Safety and Health.

WHY READ THE REPORT

The purpose of the Mine Safety and Health Administration (MSHA) is to prevent death, disease, and injury from mining and to promote safe and healthful workplaces for the Nation's miners. To assist in achieving this purpose, MSHA reviews, approves, and monitors health and safety training plans as required by Section 115A of the Federal Mine Safety and Health Act of 1977 (Mine Act).

Two program areas within MSHA — Coal Mine Safety and Health and Metal and Nonmetal Mine Safety and Health — are responsible for enforcing the Mine Act at all mining operations in the United States. This includes reviewing, approving, and monitoring training plans submitted by mine operators and contractors.

WHY OIG CONDUCTED THE AUDIT

The Office of Inspector General (OIG) conducted an audit to determine whether MSHA reviewed, approved, and monitored mine operators' training plans as required.

Our audit work covered training plans reviewed by MSHA during fiscal years 2010 and 2011.

READ THE FULL REPORT

To view the report, including the scope, methodology, and full agency response, go to:

<http://www.oig.dol.gov/public/reports/oa/2012/05-12-003-06-001.pdf>.

September 2012

MSHA's Oversight of Mine Operators' Training Plans Was Adequate

WHAT OIG FOUND

We found that generally, MSHA timely reviewed, approved, and monitored mine operators' required training plans. We also found MSHA's policies and procedures regarding the review, approval, and monitoring of training plans complied with federal laws and regulations.

We reviewed a sample of 163 training plans. MSHA did not adequately document its review of 4 plans, and 2 of these plans had minor deficiencies not identified by MSHA's review process. We did not, however, consider the minor deficiencies to be indications of a systemic problem with MSHA's review and approval process. We found no exceptions in our review of 93 regular safety and health inspections.

WHAT OIG RECOMMENDED

There were no findings and recommendations as a result of this audit. MSHA did not provide a written response to the report.

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U.S. Department of Labor

Office of Inspector General
Washington, D.C. 20210



September 28, 2012

Assistant Inspector General's Report

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The purpose of the Mine Safety and Health Administration (MSHA) is to prevent death, disease, and injury from mining and to promote safe and healthful workplaces for the Nation's miners. To assist in achieving this purpose, MSHA reviews, approves, and monitors health and safety training plans as required by Section 115A of the Federal Mine Safety and Health Act of 1977 (Mine Act).

Two program areas within MSHA — Coal Mine Safety and Health (CMS&H) and Metal and Nonmetal Mine Safety and Health (MNMS&H) — are responsible for enforcing the Mine Act at all mining operations in the United States. This includes reviewing, approving, and monitoring training plans submitted by mine operators and contractors.

The Office of Inspector General (OIG) conducted a performance audit to answer the following question:

Did MSHA review, approve, and monitor mine operators' training plans as required?

Our audit work covered training plans reviewed by MSHA during fiscal years (FY) 2010 and 2011. We reviewed federal laws and regulations and MSHA policies and procedures; interviewed key headquarters, district, and field office officials; and analyzed and identified key processes and critical decision and control points. We also reviewed a sample of 163 training plans and 93 regular safety and health (E01) inspections. We reviewed E01 inspections because both CMS&H and MNMS&H monitor training plans during those inspections. Our objective, scope, methodology, and criteria are detailed in Appendix B.

We conducted this performance 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.

RESULTS IN BRIEF

We found, generally, that MSHA timely reviewed, approved, and monitored mine operators' required training plans. We also found MSHA's policies and procedures regarding the review, approval, and monitoring of training plans complied with federal laws and regulations.

We reviewed a sample of 163 training plans. MSHA did not document its review of 4 plans and 2 of the reviewed plans had minor deficiencies not identified by MSHA's review process. We did not, however, consider the minor deficiencies to be indications of a systemic problem with MSHA's review and approval process. We found no exceptions in our review of 93 E01 inspections.

MSHA did not provide a written response to this report.

RESULTS

Objective — Did MSHA review, approve, and monitor mine operators' training plans as required?

MSHA's oversight of required mine operators' training plans was adequate.

We determined that MSHA timely reviewed, approved, and monitored training plans at the three district offices in our sample. Moreover, we determined that MSHA's policies and procedures were consistent among CMS&H and MNMS&H, and in compliance with applicable federal laws and regulations.

MSHA Effectively Reviewed and Approved Training Plans

Our review of 163 training plans found only 2 with minor deficiencies not identified by MSHA. In addition, we found 4 other plans for which MSHA did not adequately document its reviews. These 6 instances had no significant impact and did not indicate a systemic problem with MSHA's review and approval process. Specifically:

- 1 of 17 training plans from CMS&H District 1 did not identify the number of miners employed, as required by Title 30, Code of Federal Regulations (CFR), Part 48.3(c)(6). However, this deficiency did not affect the plan's final approval. MSHA acknowledged this deficiency and issued a directive to all staff to review and implement MSHA policies and procedures related to miner training and training plans.

- 1 of 66 training plans from CMS&H District 2 did not identify the location of training, as required by 30 CFR, Part 48.3(c)(4). However, this deficiency did not affect the plan's final approval. MSHA acknowledged this deficiency and mailed a letter to the operator requiring revisions to the plan, and retrained all employees on the procedures to be followed during evaluations of miner training and review of training plans.
- 4 of 80 training plans from the MNMS&H North Central district did not maintain documentation¹ of reviews to demonstrate MSHA timely approved or provided the mine operator status of the approval, as required by 30 CFR, Parts 46.3(f) and 48.3(a)(2).² These four instances were isolated cases and did not indicate a systemic problem because the remaining contained adequate documentation to demonstrate timely approval.

MSHA Effectively Monitored Training Plans

Our testing of 93 E01 inspections conducted during FY 2011 revealed that CMS&H and MNMS&H inspectors reviewed training plans prior to conducting E01 inspections and reviewed related training documentation while on site at the mines. Additionally, CMS&H performed periodic reviews of training plans every one to three years.

MSHA Has Resolved Its Backlog of Overdue Mine Plan Reviews

In October 2007, MSHA implemented the "100 Percent Plan" to ensure the agency completed all mandatory E01 inspections. Consequently, CMS&H district specialists were asked to contribute toward completing these inspections. This action moved resources away from conducting training plan reviews, lengthened the review process, and resulted in a backlog.

An internal MSHA report³ from May 2008 indicated 203 overdue training plan reviews. To reduce this backlog, CMS&H (1) increased its enforcement personnel by hiring and training 410 new inspectors; (2) established an electronic uniform mine file, which provides current and complete information for each mine, to increase the speed at which mine plans are reviewed; (3) increased the use of the Mine Plan Approval (MPA) system to allow district managers and headquarters staff to monitor and track mine plan approval activities; and (4) reassigned district personnel among the district offices to fill manpower needs where additional staff was needed. As a result, by February 2011, the backlog of overdue training plan reviews had decreased to only 3. We did not comment

¹ Once a training plan is approved by the district manager, documentation (i.e., review checklist, communication between MSHA and the operator or contractor, etc.) is no longer maintained.

² 30 CFR, Part 46.3(f), states, "The EFS Regional Manager must notify the operator...of the approval, or status of the approval, of the training plan within 30 calendar days of the date MSHA received the training plan..."

30 CFR, Part 48.3(a)(2), states, "Within 60 days after the operator submits the plan for approval, unless extended by MSHA, the operator shall have an approved plan for the mine."

³ MSHA identified a programming error in the MPA system which caused the number of overdue plan reviews to be overstated. MSHA was working with the Directorate of Program Evaluation and Information Resources to resolve this error in reporting.

on the 2008 backlog of training plan reviews because it had been effectively eliminated by FY2011, and because it was outside our scope period, which included only FYs 2010 and 2011.

Unlike CMS&H, MNMS&H did not experience a backlog of plan reviews as it had realigned district boundaries and temporarily transferred inspectors between districts to more efficiently conduct inspections.

MSHA's Policies and Procedures Complied with Federal Laws and Regulations

MSHA's policies and procedures for reviewing and approving training plans varied. Five of the twelve CMS&H districts and all six MNMS&H districts followed the same procedures. The remaining CMS&H districts created their own internal procedures for reviewing and approving training plans.

We found that MSHA's policies and procedures complied with federal laws and regulations. MSHA was required to (1) review each plan to ensure all information required by the CFR was provided,⁴ (2) determine if the plan was satisfactory, and (3) recommend approval or disapproval by the regional manager for Part 46 plans or the district manager for Part 48, 75, and 77 plans.

Part 46 Plans

MSHA's Directorate of Educational Policy and Development (EPD) planned, monitored, and evaluated all MSHA education and training programs. Within EPD, Educational Field Services (EFS) reviewed and approved Part 46 training plans in accordance with the CFR⁵ and the Education and Training Procedures Handbook (E&T Handbook). The EFS specialist (1) reviewed the plans to ensure all required information was provided, (2) determined if the plan was satisfactory or unsatisfactory, and (3) forwarded it to the EFS regional manager for approval or disapproval. This review and approval period was typically within 30 days from plan submission.

Part 48, 75, and 77 Plans

MNMS&H district offices relied on EFS to review Part 48 training plans.⁶ EFS followed the procedures provided in the CFR⁷ and the E&T Handbook. The EFS specialist reviewed each plan to ensure all required information was provided, and made recommendations to the district manager for approval or disapproval. This review and approval period was typically within 60 days from plan submission.

Five of twelve CMS&H district offices relied on EFS to review the submission of Part 48, 75, and 77 training plans. EFS followed the procedures outlined in 30 CFR, Parts 48.3,

⁴ Required information is set forth in 30 CFR, Parts 46.3, 48.3, 48.23, 75.161, and 77.107-1.

⁵ 30 CFR, Part 46.3(b)

⁶ Parts 75 and 77 training plans are only applicable to coal mines.

⁷ 30 CFR, Parts 48.3, 48.23

48.23, 75.161, 77.107-1, and the E&T Handbook. Further, the EFS specialist (1) reviewed each plan to ensure that all required information was provided, (2) determined if the plan addressed mine specific aspects, and (3) recommended approval or disapproval to the district manager. This review and approval period was typically 60 days from plan submission.

The remaining seven CMS&H district offices established their own internal standard operating procedures (SOP) for reviewing and approving Parts 48, 75 and 77 training plans. These districts utilized specialists and inspectors to review plans for compliance with 30 CFR, Parts 48.3, 48.23, 75.161 and 77.107-1. The review and approval period ranged from 10 to 60 days.⁸

We appreciate the cooperation and courtesies that MSHA personnel extended to the Office of Inspector General during this audit. OIG personnel who made major contributions to this report are listed in Appendix E.



Elliot P. Lewis
Assistant Inspector General
for Audit

⁸ Federal regulation and MSHA policy state that an operator must have an approved plan within 60 days of plan submission.

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Appendices

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Appendix A**Background**

The purpose of MSHA is to prevent death, disease, and injury from mining and to promote safe and healthful workplaces for the Nation's miners. To this end, MSHA reviews, approves, and monitors health and safety training plans as required by Section 115 of the Mine Act and 30 CFR, Parts 46, 48, 75, and 77. Specifically, within 30 CFR:

- Part 46 provides requirements for submitting and obtaining approval of programs for training and retraining miners at non-coal surface mines.
- Part 48, Subpart A provides the requirements for submitting and obtaining approval of programs for training and retraining miners working in underground mines.
- Part 48, Subpart B provides the requirements for submitting and obtaining approval for training and retraining miners working at surface mines and surface areas of underground mines.
- Parts 75 and 77 only apply to coal mines and provide the requirements for training and retraining certified and qualified individuals.

Within MSHA, EPD plans, monitors, and evaluates all MSHA education and training programs. Within EPD, EFS (1) provides assistance in the development of training plans; (2) reviews and approves Part 46 training plans; and (3) reviews Part 48 training plans (if requested) and forwards them to the districts for approval. During FY 2010, EFS specialists reviewed 3,244 training plans. In cooperation with the National Mine Health and Safety Academy, EFS also provides courses to assist mining instructors in meeting the educational needs of the mining industry, including instructor approval. EFS staff are located in 24 states and travel extensively to mines and training centers to provide assistance in customizing individual mine health and safety programs.

Two program areas within MSHA - CMS&H and MNMS&H - headquartered in Arlington, Virginia, are responsible for enforcing the Mine Act at all mining operations in the United States. This includes reviewing, approving, and monitoring training plans submitted by mine operators and contractors. CMS&H consists of 12 districts with 45 field offices located throughout the United States. MNMS&H consists of 6 districts with 47 field offices and field duty stations located throughout the United States and Puerto Rico.

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Appendix B

Objective, Scope, Methodology, and Criteria

Objective

We performed audit work to answer the following question:

Did MSHA review, approve, and monitor mine operators' training plans as required?

Scope

Our audit included reviews of training plans⁹ for compliance with 30 CFR, Parts 46.3, 48.3, 48.23, 75.161 and 77.107-1 submitted by mine operators, contractors, and cooperatives, and reviewed by MSHA during FYs 2010 and 2011; and MSHA policies and procedures effective during FYs 2010 and 2011.

Our audit universe consisted of 5,422 training plans MSHA reviewed during FYs 2010 and 2011. Of the 5,422 training plans, we selected a random statistical sample of 361 and tested 163 to determine if MSHA timely reviewed, approved, and monitored them. Because we did not identify any significant issues in the first 163 training plans in our sample, we did not test the remaining 198.

We conducted our fieldwork at MSHA headquarters in Arlington, VA, the CMS&H district office located in Mt. Pleasant, PA (District 2), and the MNMS&H district office located in Duluth, MN (North Central District). We also tested files from the CMS&H district office located in Wilkes-Barre, PA (District 1).

We conducted this performance 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.

Methodology

We obtained an understanding of MSHA's process for reviewing, approving, and monitoring training plans. To answer our audit objective, we (1) reviewed MSHA policies and procedures related to training plans to determine if they were consistent and in compliance with federal laws and regulations; (2) interviewed key MSHA headquarters, district, and field office officials; (3) determined if MSHA adequately and timely reviewed a sample of 163 training plans submitted and reviewed during FYs 2010 and 2011; and (4) determined if MSHA adequately monitored 93 training plans during E01 inspections conducted in FY 2011.

⁹ Unless otherwise specified, the term training plan includes all base plans, addendums, superseded and withdrawn plans.

Data Reliability

To determine reliability of MSHA’s training plan data, 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). The purpose of the data was to obtain a universe of training plans.¹⁰

CMS&H provided data from the MPA system which consisted of 3,910 Part 48, 75 and 77 training plans reviewed during FYs 2010 and 2011.

MNMS&H and EFS provided data from the EFS Time and Activity system which consisted of 1,512 Part 46 and 48 training plans reviewed during FYs 2010 and 2011. In total, our universe consisted of 5,422 training plans.

Sampling

We used a two-stage, stratified cluster sampling approach. In the first stage, we classified all twelve CMS&H district offices into two strata based on (1) the average number of mines during FYs 2010 and 2011, (2) the number of training plans received during FYs 2010 and 2011, (3) the number of violations issued during FYs 2010 and 2011, and (4) the number of overdue training plan reviews as of September 14, 2011. Stratum 1 consisted of eight CMS&H district offices and stratum 2 consisted of four CMS&H district offices. We randomly selected two CMS&H district offices from each stratum, totaling four CMS&H district offices. Since there are only six MNMS&H district offices, we did not use stratification to select our sample; instead, we randomly selected three MNMS&H district offices.

In the second stage, we selected a random statistical sample of training plans from each of the seven district offices in our sample. The table below shows our sample of 361 training plans by district.

Audit Sample		
MSHA District	Universe Size	Sample of Training Plans
CMS&H District 1	97	17
CMS&H District 2	371	66
CMS&H District 4	406	72
CMS&H District 11	160	29
MNMS&H North Central	220	80
MNMS&H Northeast	71	26
MNMS&H Western	195	71
Total	1520	361

¹⁰ We did not perform testing to determine if all mines submitted or had an MSHA approved plan in place.

Testing

We reviewed the sample of 163 training plans from CMS&H Districts 1 and 2, and MNMS&H North Central District. We found few issues, none of which had a significant impact. Further, we found MSHA's policies and procedures complied with federal laws and regulations. Given our preliminary results, we decided to end our testing at that point. Therefore, we made no projections to the universe.

MSHA Policies and Procedures

We reviewed MSHA policies and procedures, which included CMS&H internal SOPs related to training plans, to determine if they were consistent and in compliance with federal laws and regulations.

Federal Regulations

For our sample of 163 training plans submitted during FYs 2010 and 2011, we verified if CMS&H and EFS reviewed each training plan to ensure it complied with the following federal requirements: (1) a general description of the teaching methods and the course materials to be used during training, including subject areas to be covered, approximate time or range of time to be spent on each subject area, and location where training will be given for each course; (2) a list of the persons and/or organizations who will provide the training; (3) the approximate number of miners employed at the mine; and (4) the evaluation procedures used to determine the effectiveness of training.¹¹ In addition, we identified how CMS&H and EFS documented their review of training plans (i.e., transmittal/routing sheet, review checklist/guideline, etc.).

Timeliness

To determine if MSHA timely approved training plans, we reviewed a sample of 163 training plans submitted during FYs 2010 and 2011. For each training plan, we calculated the number of days it took for CMS&H and EFS to approve or disapprove the plan. We used the date the training plan was initially received and the date of the signed approval or disapproval letter for our calculations.

Monitoring

To evaluate if CMS&H and MNMS&H inspectors consistently reviewed training plans during E01 inspections, we reviewed a sample of 93 E01 inspections conducted during FY 2011. We requested the last completed E01 inspection conducted during FY 2011 at the mine where the training plan was implemented. The number of E01 inspections reviewed did not match the number of training plans in our sample (163 training plans) for the following reasons: (1) several mines had multiple training plans in place; and

¹¹ We used 30 CFR, Parts 46.3, 48.3 and 48.23 criteria for our testing.

(2) many training plans from the MNMS&H North Central District were submitted by contractors and cooperatives who were not required by law to have E01 inspections.

For each inspection, we analyzed how CMS&H and MNMS&H inspectors documented their review of the training plan prior to inspection, and the training plan and training certificates at the mine site. Specifically, we reviewed the following documentation: inspection notes, the Mine Activity Data form (MSHA Form 2000-22), and the Regular Inspection Information form (MSHA Form 4000-49A and MSHA Form 4000-49B).

In addition, each CMS&H district office created a “review rule” in the MPA system to determine the frequency of reviews of approved training plans.¹² Depending on the type of training plan, the MPA system calculates the date the review is due. These periodic reviews were performed every one to three years. We obtained periodic review reports from CMS&H Districts 1 and 2 for reviews scheduled during FYs 2011 through 2014 and identified the dates of these reviews.

Internal Controls

In planning and performing our audit, we considered MSHA’s internal controls that were relevant to our audit objective by obtaining an understanding of those controls, and assessing control risk for the purposes of achieving our objective. The objective of our audit was not to provide assurance on the internal controls. Therefore, we did not express an opinion on the internal controls as a whole. Our consideration of MSHA’s internal controls relevant to our audit objective would not necessarily disclose all matters that might be reportable conditions. Because of the inherent limitations on internal controls, noncompliance may nevertheless occur and not be detected.

Criteria

- Federal Mine Safety and Health Act of 1977, Section 115
- 30 CFR, Parts 46.3, 48.3, 48.23, 75.161 and 77.107-1
- General Accounting Office, Standards for Internal Control in the Federal Government, November 1999
- MSHA Program Policy Manual, Volume III, April 2006
- MSHA Education and Training Procedures Handbook, November 2003
- General Coal Mine Inspection Procedures and Inspection Tracking System, January 1, 2008
- Uniform Mine File Procedures Handbook, July 2009
- Metal and Nonmetal General Inspection Procedures Handbook, October 2009

¹² MNMS&H only reviews training plans during E01 inspections.

Appendix C

Acronyms and Abbreviations

CFR	Code of Federal Regulations
CMS&H	Coal Mine Safety and Health
E&T Handbook	Education and Training Procedures Handbook
EFS	Educational Field Services
EPD	Educational Policy and Development
FY	Fiscal Year
Mine Act	Federal Mine Safety and Health Act of 1977
MNMS&H	Metal and Nonmetal Mine Safety and Health
MPA	Mine Plan Approval
MSHA	Mine Safety and Health Administration
OIG	Office of Inspector General
SOP	Standard Operating Procedure

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Appendix D

Acknowledgements

Key contributors to this report were Nicholas Christopher (Audit Director), Robert Swedberg (Audit Manager), Kathleen Mitomi, Sheila Lay, Cassie Galang, Carmelle Paytes, Ajit Buttar, and Christine Allen.

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