February 23, 2009

MEMORANDUM FOR  MICHAEL A. DAVIS  
Deputy Assistant Secretary for Operations  
Mine Safety and Health Administration

THROUGH:  CHARLES J. THOMAS  
Director of Accountability  
Mine Safety and Health Administration

FROM:  ARLIE A. WEBB  
Accountability Specialist

SUBJECT:  MSHA Office of Accountability Follow-Up Audit, Hindman, Kentucky, Field Office, and

Introduction

This memorandum summarizes the Office of Accountability follow-up audit of the subject field office and mine. Follow-up audit subjects included MSHA field activities, level of enforcement, Field Activity Reviews (FARs), Accompanied Activities (AAs), MSHA supervisory and managerial oversight, mine plans, Uniform Mine File (UMF), and the conditions and practices at the mine. The audit was conducted during the week of [redacted] by Arlie A. Webb, and Charles J. Thomas. District 6 managers and supervisors accompanying the audit team were [redacted].

Overview

The initial audit at this field office was conducted in April of 2009. Although that audit revealed several positive findings, there were also numerous issues that required corrective actions. The mine visit also revealed numerous issues requiring correction.

The follow-up audit revealed that issues documented during the first audit, including the level of enforcement, determination of gravity and negligence, documentation of FARs and AAs, and time usage, have been addressed. Likewise, the mine visit conducted during this follow-up audit revealed numerous improvements.
A highly commendable effort has been put forth by MSHA Coal District 6, and the resulting improvements in the safety and health of the miners is evident. Each area of concern from the initial report is addressed below. Those issues are addressed by this report.

**Emergency Response Plan**

1. The emergency communication system was being maintained to meet plan requirements, and the visible warning light attached to the section mine phone operated properly.

2. The lifeline was being well-maintained, and there were no obstacles to impede passage of persons in the escapeways.

**Enforcement and Resource Utilization**

1. The term “unknown” was not found in any support documentation for citations and orders during a review of the two most recent E01 inspection reports.

2. The following time distribution figures represent the improvements made regarding inspector time distribution during E01 events at this field office:

<table>
<thead>
<tr>
<th>Time Category</th>
<th>Initial Audit</th>
<th>Follow-up Audit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel</td>
<td>10% of total</td>
<td>8% of total</td>
</tr>
<tr>
<td>MMU</td>
<td>15% of total</td>
<td>23% of total</td>
</tr>
<tr>
<td>Outby</td>
<td>27% of total</td>
<td>38% of total</td>
</tr>
<tr>
<td>Surface</td>
<td>27% of total</td>
<td>13% of total</td>
</tr>
<tr>
<td>On site Citation Writing</td>
<td>3% of total</td>
<td>7% of total</td>
</tr>
<tr>
<td>Off site Citation Writing</td>
<td>1% of total</td>
<td>0% of total</td>
</tr>
<tr>
<td>Other</td>
<td>17% of total</td>
<td>11% of total</td>
</tr>
<tr>
<td>Total Inspection Time</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

3. The event calendar, time and activity records, inspection notes, and IPAL documentation were all in agreement regarding the number of days, day of the week, and shifts worked during inspection activities.

4. 103(i) Spot inspections (E02) were being conducted at irregular intervals and within the time frames established by MSHA policy.
5. At the time of the follow-up audit, the Hindman field office was composed of one supervisor and 13 inspectors. Nine of these inspectors received their AR cards in 2008.

Mine Visit

A total of 12 citations were issued during this follow-up audit compared to 26 citations issued during the initial audit. The most notable reductions in violations were as follows:

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Citations Issued On Initial Audit</th>
<th>Citations Issued On Follow-Up Audit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulations in belt entries</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Electrical</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Ventilation</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Haulage and Clearance</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

The overall conditions, practices, and attitude toward safety observed during the mine visit improved dramatically.

MSHA Supervisory/Management Oversight

A comparison of in-mine conditions and practices, Field Activity Reviews, Second Level Reviews, and Peer Review results indicate that MSHA supervision at the level was not adequate. Issues related to the level of enforcement and consistency of inspection activities were not always being addressed, and there was not sufficient follow up on corrective action plans relative to Peer Review results. This is evidenced by the continuing recurrence of identical issues for three consecutive years of Peer Reviews.

The District Manager has instituted an “Enhanced Work-Product Review” process within the district. Review teams are composed of the and other personnel if needed. Reviews conducted to date cover the following areas:

a. Inspection events
b. Citations, orders, and safeguards
c. Level of enforcement
d. Inspection documentation
e. Comparison of approved plans to mine conditions
f. Inspector time distribution
g. Supervisory oversight
At the conclusion of each review, the team discusses the team’s findings with the field and a set of corrective actions and time lines are established. As of the date of this follow-up audit, there have been two Enhanced Work-Product Reviews conducted in District 6.

Uniform Mine File

The UMF books were up to date and contained all applicable plans.

1. Inspector certification and supervisory reviews sheets were up to date.

2. Obsolete or outdated materials had been removed from the files.

Neither the Uniform Mine File Retention Schedules (MSHA Forms 2000-166 and 2000-167), nor the Uniform Mine File Handbook have been revised at this time. However, the district does not have the authority to correct either of these issues.

Digitizing of Mine Plans

District 6 has completed the first phase of digitizing approved mine plans for mines within the district. Space has been set aside on the district’s “T:/drive,” with plans located in folders arranged by mine ID number. These folders are available to all inspection personnel within the district. Inspectors are encouraged to copy the appropriate folders to their laptop computers prior to traveling to the mine, so they will have instant access to them during the inspection process.

The second phase of the project will involve digitizing all approved mine maps into the appropriate folders. The district has requested additional hard drive space on their T:/drive for this purpose.

Attachments

A. Citations issued during follow-up audit

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>75.400</td>
</tr>
<tr>
<td>b.</td>
<td>75.211(d)</td>
</tr>
<tr>
<td>c.</td>
<td>75.400</td>
</tr>
<tr>
<td>d.</td>
<td>75.1100-2(b)</td>
</tr>
<tr>
<td>e.</td>
<td>75.400</td>
</tr>
<tr>
<td>f.</td>
<td>75.202(a)</td>
</tr>
<tr>
<td>g.</td>
<td>75.202(a)</td>
</tr>
<tr>
<td>h.</td>
<td>75.1502</td>
</tr>
<tr>
<td>i.</td>
<td>75.400</td>
</tr>
<tr>
<td>j.</td>
<td>75.372(b)(9)</td>
</tr>
</tbody>
</table>
k. 75.1722(a)
l. 75.1502

Attachment A - Citations Issued During Follow-Up Audit
Located on the 001 MMU in the #1 entry and #2 left crosscut, loose coal has been allowed to accumulate. Ranging from 1 inch to 12 inches in depth. (1) Starting in #1 entry at the last open crosscut and extending for 80 feet in by to the face area. (2) Starting in the #2 entry and extending 40 foot into the 2 left crosscut to the #1 entry.

<table>
<thead>
<tr>
<th>9. Violation</th>
<th>A. Health</th>
<th>B. Section of Act</th>
<th>C. Part/Section of Title 30 CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>75.400</td>
</tr>
</tbody>
</table>

| 10. Gravity: | A. Injury or illness (has) (es): | No Likelihood | Unlikely | Reasonably Likely | Highly Likely | Occurred |
|             | B. Injury or illness could reasonably be expected to be | No Lost Workdays | Lost Workdays Or Restricted Duty | Permanently Disabling | Fatal |
|             | C. Significant and Substantial: | Yes | No | | |

<table>
<thead>
<tr>
<th>11. Negligence (check one)</th>
<th>A. None</th>
<th>B. Low</th>
<th>C. Moderate</th>
<th>D. High</th>
<th>E. Reckless Disregard</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>010</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>12. Initial Action:</th>
<th>A. Citation</th>
<th>B. Order</th>
<th>C. Safeguard</th>
<th>D. Written Notice</th>
<th>E. Citation</th>
<th>Order Number</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>13. Type of Issuance (check one)</th>
<th>Citation</th>
<th>Order</th>
<th>Safeguard</th>
<th>Written Notice</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>14. Type of Action</th>
<th>104(a)</th>
</tr>
</thead>
</table>

| 15. Area or Equipment |

<table>
<thead>
<tr>
<th>16. Termination Due:</th>
<th>A. Date</th>
<th>B. Time (24 Hr. Clock)</th>
</tr>
</thead>
</table>

| 17. Action to Terminate | The affected area has been clean and rock dusted. |

<table>
<thead>
<tr>
<th>18. Terminated:</th>
<th>A. Date</th>
<th>B. Time (24 Hr. Clock)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>19. Type of Inspection (activity code)</th>
<th>E01</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>20. Event Number</th>
<th></th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>21. Primary or Mill</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>22. Signature</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>23. AR Number</th>
</tr>
</thead>
</table>

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**Attachment A - Citations Issued During Follow-Up Audit**
A bar for taking down loose material shall be available in the working place or on all face equipment for taking down loose material shall be of a length and design that will allow the removal of loose material from a position that will not expose the person performing this work to injury from falling material.

The Fletcher roof bolter located on the left side of the 001 MMU was not provided with a slate bar to take down loose material.
Located at the #3 west # 2 head drive, accumulation of gray and black float coal dust was present on the fresh water line, tail piece, mine floor and the discharge roller frame. Ranging in depth from paper thin to 3/8 of an inch in depth.
Belt conveyors. In all coal mines, waterlines shall be installed parallel to the entire length of belt conveyors and shall be equipped with firehose outlets with valves at 300-foot intervals along each belt conveyor and at tailpieces. At least 500 feet of firehose with fittings suitable for connection with each belt conveyor waterline system shall be stored at strategic locations along the belt conveyor.

Located on the 3 west # 1 head drive. The fire fighting hose was inadequate, in that only 400 feet of fire fighting hose was available for use.

Another 100 foot of fire fighting hose was provided for the 3 west # 1 head drive.
Accumulation of combustible materials have been allowed to accumulate in the left return of the 004 MMU. Starting at survey spad 220 and extending for 3 crosscuts. (1) Loose coal at brattice # 3 (2) Glue boxes at brattice # 2 (3) Glue boxes and pallets at brattice # 1.
The roof, face and ribs of areas where persons work or travel shall be supported or otherwise controlled to protect persons from hazards related to falls of the roof.

The mine roof in the left return of the 004 MMU at crosscut #2 survey spad 456 has 2 bearing plates that sloughing has occurred and 1 bearing plate sheared at the same area. Exposing a area of 96 inches wide by 108 inches length of un-supported mine roof.

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### Mine Citation/Order

<table>
<thead>
<tr>
<th>U.S. Department of Labor</th>
</tr>
</thead>
</table>

#### Section I - Violation Data

<table>
<thead>
<tr>
<th>Date</th>
<th>Time (24 Hr. Clock)</th>
<th>Citation/Order Number</th>
</tr>
</thead>
</table>

#### Section II - Inspector's Evaluation

<table>
<thead>
<tr>
<th>A. Health</th>
<th>B. Section of Act</th>
<th>C. Part/Section of Title 30 CFR</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>B. Violation</th>
<th>A. Health</th>
<th>B. Section of Act</th>
<th>C. Part/Section of Title 30 CFR</th>
</tr>
</thead>
</table>

#### Section III - Termination Action

<table>
<thead>
<tr>
<th>A. Date</th>
<th>B. Time (24 Hr. Clock)</th>
</tr>
</thead>
</table>

#### Section IV - Automated System Data

<table>
<thead>
<tr>
<th>19. Type of Inspection (activity code)</th>
<th>20. Event Number</th>
<th>21. Primary or Mill</th>
</tr>
</thead>
</table>

#### Section V - Written Notice (103g)

<table>
<thead>
<tr>
<th>8a. Written Notice (103g)</th>
</tr>
</thead>
</table>

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**Attachment A - Citations Issued During Follow-Up Audit**

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The approved roof control plan for the 004 MMU is not being complied with. Located in the face area of the #1 entry. Spacing between 2 permanent rows of roof support measured 52 inches to 56 inches in wide.

<table>
<thead>
<tr>
<th>Violation</th>
<th>Section of Act</th>
<th>Part/Section of Title 30 CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>75.202(a)</td>
</tr>
</tbody>
</table>

**Section II - Inspector's Evaluation**

10. Gravity:
   - A. Injury or illness has occurred: No Likelihood ☐ Unlikely ☐ Reasonably Likely ☑ Highly Likely ☐ Occurred ☑
   - B. Injury or illness could reasonably be expected to be: No Lost Workdays ☐ Lost Workdays or Restricted Duty ☑
   - C. Significant and Substantial: Yes ☑ No ☐

11. Negligence (check one):
   - A. None ☐ B. Low ☐ C. Moderate ☑ D. High ☐ E. Reckless Disregard ☐

12. Type of Action:
   - A. Citation ☑ B. Order ☐ C. Safeguard ☐ D. Written Notice ☐

14. Initial Action:
   - A. Citation ☑ B. Order ☐ C. Safeguard ☐ D. Written Notice ☐

15. Area or Equipment
   - Additional roof support was installed to the affected area.

**Section III - Enforcement Actions**

16. Termination Due:
   - A. Date ☒ B. Time (24 Hr. Clock) ☐

17. Action to Terminate
   - Additional roof support was installed to the affected area.

**Section IV - Written Notice**

19. Type of Inspection (activity code)
   - E02

20. Event Number

21. Primary or Minor

23. AR Number
The Carbon Monoxide Monitoring System of Operation section of the Emergency Evacuation and Fire Fighting Plan which requires that the CO sensor be located down wind of a belt drive or tail pulley is not complied with at the number 3 west 2 conveyor tail pulley. The sensor is located 30 ft. upwind of the tail pulley and the 001 section belt drive. This condition can delay detecting a belt fire which exposes persons to fire and smoke hazards. Accumulations of loose coal and coal fines in contact with the 2150 hp electric drive motors of the 001 section belt exist in this area.

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**Mine Citation/Order**

<table>
<thead>
<tr>
<th>Section</th>
<th>Violation Date</th>
<th>Time (24 Hr. Clock)</th>
<th>Citation Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Date</td>
<td>Mo Da Yr</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Time</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Condition of Practice**

- 6a. Written Notice (103a)

**Notes:**
- The sensor is moved 15 ft. down wind of the tail pulley and the belt drive.

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**Attachment A - Citations Issued During Follow-Up Audit**
Loose coal coal fines, and belt drippings are allowed to exist on the frame of the 001 section belt drive where they are in contact with the 2 150 hp 575 volt electric drive motors. A 3 1/2 X 5 ft. section of conveyor belt which is fire resistant but not fire proof is on top of the motors with coal fines and belt drippings on top of the belt. The motors are air cooled and the accumulations 10 inches deep against the motors can impair the cooling. The CO sensor in this area is located up wind where a fire could not be detected. This condition exposes persons to serious fire and smoke hazards.

<table>
<thead>
<tr>
<th>Date</th>
<th>Time (24 Hr. Clock)</th>
<th>Citation/Order Number</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<table>
<thead>
<tr>
<th>Section A - Inspector's Evaluation</th>
</tr>
</thead>
</table>

**9. Violation**
- A. Health Safety **✓**

**B. Section of Act**
- C. Part/Section of Title 30 CFR 75.400

**10. Gravity:**
- A. Injury or Illness (a) (b) No Likelihood **✓**
- B. Injury or Illness could reasonably be expected to be:
  - Lost Workdays **✓**
- C. Significant and Substantial:
  - Yes **✓**
  - No

**11. Negligence (check one)**
- A. None **✓**
- B. Low
- C. Moderate **✓**
- D. High
- E. Reckless Disregard

**12. Type of Action**
- 104(a)

**13. Type of Issuance (check one)**
- Citation **✓**
- Order
- Safeguard
- Written Notice

**14. Initial Action**
- A. Citation
- B. Order **✓**
- C. Safeguard
- D. Written Notice

**15. Area or Equipment**
- Belt Drive

**16. Termination Due**
- A. Date
- B. Time (24 Hr. Clock)

**17. Action to Terminate**
- The accumulations are removed from the belt drive.

**18. Terminated**
- A. Date
- B. Time (24 Hr. Clock)

**19. Type of Inspection (activity code)**
- 20. Event Number
- 21. Primary or Minor

**22. Signature**
- [Redacted]

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**Attachment A - Citations Issued During Follow-Up Audit**

14
The air flow direction on the 001 section conveyor belt entry does not comply with the direction shown on the approved mine ventilation map. The air flow in shown on the map to be moving outby but the air is moving in an inby direction towards the tail piece.

**Mine Citation/Order**

<table>
<thead>
<tr>
<th>Section I - Violation Date</th>
<th>U.S. Department of Labor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Date</td>
<td>Mine Safety and Health Administration</td>
</tr>
<tr>
<td>2. Second To</td>
<td></td>
</tr>
<tr>
<td>3. Citation/Order Number</td>
<td></td>
</tr>
<tr>
<td>8a. Written Notice (103g)</td>
<td></td>
</tr>
</tbody>
</table>

The air flow direction does not comply with the direction shown on the approved mine ventilation map. The air flow in shown on the map to be moving outby but the air is moving in an inby direction towards the tail piece.

**Section II - Inspector's Evaluation**

- **9. Violation**
  - a. Health [Safety ✓]
  - b. Section of Act
  - c. Part/Section of Title 30 CFR: 75.372(b)(9)

- **10. Gravity:**
  - a. Injury or Illness (has) [a]
    - No Likelihood ✓
    - Unlikely ✓
    - Reasonably Likely ✓
    - Highly Likely ✓
    - Occurred ✓
  - b. Injury or Illness could reasonably be expected to be:
    - No Lost Workdays ✓
    - Lost Workdays Or Restricted Duty ✓
    - Permanently Disabling ✓
    - Fatal ✓
  - c. Significant and Substantial:
    - Yes ✓
    - No ✓
  - d. Number of Persons Affected: 002

- **11. Negligence (check one):**
  - a. None ✓
  - b. Low ✓
  - c. Moderate ✓
  - d. High ✓
  - e. Reckless Disregard ✓

- **12. Type of Action:**
  - 104(a)

- **13. Type of Issuance (check one):**
  - Citation ✓
  - Order ✓
  - Safeguard ✓
  - Written Notice ✓

- **14. Initial Action**
  - a. Citation ✓
  - b. Order ✓
  - c. Safeguard ✓
  - d. Written Notice ✓
  - e. Citation/Order Number
  - f. Dated: Mo Da Yr

- **15. Area or Equipment**

- **16. Termination Due**
  - a. Date: Mo Da Yr
  - b. Time (24 Hr. Clock): 0000

- **Section III - Termination Action**

- **17. Action to Terminate**
  - Adjustments are made to the ventilation controls and the air flow is now moving in an outby direction in the belt entry.

- **18. Terminated**
  - a. Date: Mo Da Yr
  - b. Time (24 Hr. Clock): 0000

- **Section IV - Automated System Data**

- **19. Type of Inspection**
  - a. Date: Mo Da Yr
  - b. Time (24 Hr. Clock): 0000

- **20. Event Number**
  - a. Date: Mo Da Yr
  - b. Time (24 Hr. Clock): 0000

- **21. Primary or Minor**
  - a. Date: Mo Da Yr
  - b. Time (24 Hr. Clock): 0000

- **22. Signature**
  - a. Date: Mo Da Yr
  - b. Time (24 Hr. Clock): 0000

**Attachment A - Citations Issued During Follow-Up Audit**

15
A guard is not provided for the 6 inch diameter X 5 ft. long idler roller installed on the 001 belt drive to prevent the return belt from contacting the frame of the drive. The roller is located 8 inches from the mine floor with a 5 ft. opening under the top belt where persons can make contact or fall into the rotating roller. The mine floor is uneven with turn buckles and anchor pins and other rock and debris where persons can fall over and into the pinch point area created. Serious injury can result.

### Mine Citation/Order

**U.S. Department of Labor**

**Mine Safety and Health Administration**

<table>
<thead>
<tr>
<th>Section I - Violation Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Date:</td>
</tr>
</tbody>
</table>

**Condition or Practice**

- An adequate guard is installed to prevent contact by persons.

**Section II - Inspector's Evaluation**

- **Gravity:**
  - **A. Injury or illness (has) (is):**
    - No Likelihood □
    - Unlikely □
    - Reasonably Likely ✔
    - Highly Likely □
    - Occurred □
  - **B. Injury or illness could reasonably be expected to be:**
    - No Lost Workdays □
    - Lost Workdays Or Restricted Duty ✔
    - Permanently Disabling □
    - Fatal □
  - **C. Significant and Substantial:**
    - Yes ✔
    - No □

**Section III - Termination Action**

- **Action to Terminate:**
  - An adequate guard is installed to prevent contact by persons.

**Section IV - Automated System Data**

- **Type of Inspection (activity code):**
  - EW

**Signature:**

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**Attachment A - Citations Issued During Follow-Up Audit**

16
The Carbon Monoxide Monitoring System of Operation section of the Approved Mine Emergency Evacuation and Fire Fighting Plan which requires the minimum air velocity in conveyor belt entries to be at least 50 ft per minute where CO monitoring systems are used is not complied with. Beginning 60 ft. inby the 2 west belt drive and extending 2800 ft. inby in the 3 west 1 belt entry the air flow cannot be measured with an anemometer or smoke. This condition can delay fire detection exposing persons to fire and smoke hazards.