MEMORANDUM FOR PATRICIA W. SILVEY  
Deputy Assistant Secretary for Mine Safety and Health Administration

THROUGH: KEVIN G. STRICKLIN  
Acting Administrator for Metal and Nonmetal Mine Safety and Health

FROM: THOMAS W. CHARBONEAU  
Director, Office of Assessments

SUBJECT: Mine Safety and Health Administration (MSHA)  
Office of Accountability Review, Metal and Nonmetal Southeast District, Birmingham, Alabama Field Office,

Introduction

This memorandum summarizes the Office of Accountability (OA) review of the subject District Office, Field Office, and mine. This review included MSHA field activities; level of enforcement; conditions and practices at the mine; Field Accompanied Reviews (FARs); Office Reviews (ORs) and MSHA supervisory and managerial oversight. The accountability review also involved evaluations to determine if there were any issues in areas commonly identified during Agency internal reviews of MSHA’s actions following past mine disasters.

Purpose

The purpose of this accountability review is to determine whether MSHA enforcement policies, procedures and guidance are followed consistently; and to assess whether mission critical enforcement activities are accomplished effectively. The accountability review also identifies areas for improvement and the subsequent implementation of effective corrective actions to address any identified issues.
Overview

The OA Specialists Jerry Kissell and Mark Odum (Review Team) conducted this review of Metal and Nonmetal's Southeast District and the Birmingham, Alabama Field Office in accordance with the annual accountability review plan schedule. The Review Team conducted the on-site portion of the review from [date]. The review focused on inspection activities conducted in FY 2016 and the inspection activities conducted in the first quarter of FY 2017 and included supervisory oversight activities, FARs and ORs and Hazard Complaints for FY 2016. The review concentrated on two Regular Safety and Health Inspections (E01), Event Nos. [redacted] and [redacted] of the [redacted], ID No. [redacted].

The OA selected the [redacted] for review due to it being a large surface operation and had received five hazardous condition complaints during FY 2016.

Mine Visit (ID No. [redacted])

The Review Team accompanied the Field Office Supervisor, the Assistant District Manager (Enforcement) and two inspectors to the mine on [date], as part of a Spot Safety and Health Inspection (E16). During this visit, the Review Team evaluated general conditions at the mine; assessed whether conditions at the mine correspond with enforcement levels documented in the inspection reports reviewed; and observed work practices at the mine site.

The operation is a surface crushed and broken [redacted] mine located in [redacted] [redacted]. The mine employs approximately [redacted] miners working three production shifts per day, eight-hours per shift, seven days per week producing an average of [redacted] annually. Crushed [redacted] is mined with drilling and blasting techniques. The material is then loaded into haul trucks and transferred to the Optical Sorter. After sorting, the raw material is transferred by conveyers to the processing plants where it is processed and made ready for commerce.

The inspection group observed the quarry operations and areas of the number two processing plant. Observations in the quarry included:

- the mining cycle;
- high wall conditions;
- haul road conditions; and
- the berms along the roadways and warning and traffic signage.
Additional observations in the quarry included:

- the contractor conducting the overburden stripping process;
- the stripping area and material dump area;
- the vehicle maintenance area; and
- the quarry laydown area (storage).

Equipment observed in the quarry included:

- the Caterpillar 390-F Excavator;
- 2 - Caterpillar 775-G Haul Trucks;
- Caterpillar 773-G Haul Truck;
- Caterpillar D-8 Dozer; and
- the Optical Sorter and conveyors.

The observations in the number two processing plant included:

- the turntable ore sorter tower;
- 4 conveyor belts;
- the screw grade feeder;
- the #5 rock dryer area;
- the #26 Raymond Mill;
- the ACT Mill room;
- travelways;
- audible warning system for conveyor start up; and
- the wet plant and slurry plant control room.

Other observations included:

- housekeeping;
- equipment guarding;
- walkway maintenance;
- communications;
- break rooms;
- examination records;
- safety talks with miners; and
- inspectors' pre and post inspection discussions with the operator and miners' representatives.

As a result of the inspection, the inspectors issued seven enforcement actions. (See Attachment D)
Review Results

This accountability review revealed positive findings in several areas, including the following:

1. For the E01 inspection reports, notes and documentation were organized, clear and concise, and included pictures of violations.
2. Inspection notes documented observations of work practices, mining cycles observed, and safety talks conducted with miners.
3. The supervisor exceeded the minimum FARs required by completing three additional FARs and three additional ORs for the period reviewed.
4. The supervisor conducted regular staff meetings with inspectors and documented topics covered. The meetings provided inspectors with pertinent enforcement information and updates and reviews of MSHA policy and procedures.
5. During the mine visit, inspectors conducted safety talks with miners.

This accountability review identified one issue cited below that required a corrective action plan. A corrective action plan from the District Manager addressing the identified issue is attached to this report. (See Attachment A – District Corrective Action Plan and Attachment B – Issues)

Issue:

- [Issue Description]

The District and the Review Team analyzed the findings identified during this review to determine the root causes of the issue.

- Root Cause:

The Review Team identified and discussed with the District personnel inspection and procedural best practices as described in the Metal and Nonmetal General Inspection Procedures Handbook. A general outline of discussion topics is included in an attachment to this memorandum. (See Attachment E)

The OA compared enforcement levels of the mine with the Field Office, District, and national averages. The mine had a significant and substantial (S&S) rate of 21 percent during FY 2016, compared to the Field Office S&S rate of 21 percent; a district S&S rate of 27 percent; and the national S&S rate of 24 percent in FY 2016. Based on the review
and observations made during the mine visit, enforcement levels were appropriate for the existing mining conditions and work practices.
Attachments

A. District Corrective Action Plan

B. Issues

C. Office of Accountability Checklist

D. Citations issued during this review
   - 56.11001
   - 56.11001
   - 56.20003(a)
   - 56.14107(a)
   - 56.14201(b)
   - 56.20003(a)
   - 56.20003(a)

E. Discussion Topics
MEMORANDUM FOR: TED SMITH  
Supervisor, Office of Accountability

THROUGH: Marvin Lichtenfeld  
Deputy Administrator for Metal and Nonmetal  
Mine Safety & Health  
Arlington, VA

FROM: Samuel Pierce  
District Manager, Southeast District  
Birmingham, AL

SUBJECT: District Corrective Action Plan for Office of  
Accountability Review Birmingham, AL

This is a response to the review conducted by the Office of Accountability from  
[redacted] at the Birmingham Alabama field office. The results of the  
review identified one deficiency which is required to be addressed by the District.

ISSUE 1: [redacted]
• **ROOT CAUSE:**

• **PROPOSED CORRECTIVE ACTIONS:**

• **OFFICE OR POSITION RESPONSIBLE FOR IMPLEMENTING THE CORRECTIVE ACTION(S):**
  - Supervisor for Special Investigations

• **TIMEFRAME FOR COMPLETION OF EACH CORRECTIVE ACTION:**

  Training for all inspectors and supervisors has been conducted through a conference call with the District Manager.

• **METHOD FOR DETERMINING SUCCESS:**

  One quarter after the implementation of the corrective actions the SE District will export the PKW log from MSIS and conduct a thorough review of all PKW's and determine if compliance with guidelines, policies, and procedures have been achieved.
A DESCRIPTION OF THE DOCUMENTATION THAT WILL DEMONSTRATE CLOSURE OF THE CORRECTIVE ACTION:

The District Manager will send a memorandum to Ted Smith, Supervisor, Office of Accountability, through Marvin Lichtenfels, Deputy Administrator for Metal Non-Metal Mine Safety and Health.
Attachment B - Issues

Issue:

- [Issue Details]

Findings showed:

Requirements: Special Investigations Procedures Handbook, PH05-1-4, page 4-2, states that for "each citation and/or order required by MSHA Policy to be reviewed, a Possible Knowing/Willful Violation Review Form, MSHA Form 7000-20, shall be completed." Page 4-3 states that "within 30 calendar days of the date of issuance of the citation/order a determination must be made by the DM (with the assistance of the SSI) whether to initiate an investigation or take no further action."
Attachment C – Office of Accountability Checklist

1. Determine if complete and thorough E01 inspections are being conducted and/or if policies and procedures were properly followed.
   Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]

2. Determine if documentation for inspections is complete and thorough.
   Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]

3. Determine if citations and orders issued during previous inspections were properly evaluated for gravity, negligence, level of enforcement, number of persons affected, and supported by documentation.
   Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]

4. Evaluate inspector(s) examination of required records and postings for compliance with applicable standards.
   Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]

5. Evaluate the inspector(s) physical examination of the active working areas of the mine and inspection of all mining cycles.
   Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]

6. Evaluate the inspector(s) on-site contaminant assessment and documentation.
   Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]
7. Evaluate inspector(s) examination of electrical equipment, transformer stations, and/or electrical circuits.
   Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]

8. Determine if adequate close-out conferences are being conducted at the end of each inspection.
   Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]

9. Determine if Possible Knowing/Willful (PKW) Forms are processed according to agency policy and procedures.
   Evaluate 103(i) spot inspection (E02) reports for the office/district being reviewed for compliance with agency policies and procedures, including compliance with time frames and separating E02 inspections from other events.
   Adequate [ ]  Corrective Action Needed [ ]  Comments Below [X]
   Not reviewed as a part of this review. The Field Office does not have any mines in 103(i) status.

10. Determine if supervisors are monitoring inspector time and activity to ensure proper use of time, including off-shift and weekend work, by all inspectors.
   Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]
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<tr>
<td>13.</td>
<td>Are required Field Accompanied Reviews (FARs), Office Reviews (ORs) and supervisory follow-up reviews being conducted and documented according to agency policy and procedures?</td>
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<td></td>
<td>Determine if a 104(d) tracking system is in place and being kept current at the office being reviewed.</td>
<td>Adequate [X]</td>
<td>Corrective Action Needed [ ]</td>
<td>Comments Below [ ]</td>
<td></td>
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<td>15.</td>
<td>Determine if the Mine Files are legible, up to date, and reviewed by supervisors.</td>
<td>Adequate [X]</td>
<td>Corrective Action Needed [ ]</td>
<td>Comments Below [ ]</td>
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<td>16.</td>
<td>Determine if supervisors are visiting active mines.</td>
<td>Adequate [X]</td>
<td>Corrective Action Needed [ ]</td>
<td>Comments Below [ ]</td>
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<td>17.</td>
<td>Review documentation of staff meetings/safety meetings to determine their effectiveness and relevance to current issues and the Agency's mission.</td>
<td>Adequate [X]</td>
<td>Corrective Action Needed [ ]</td>
<td>Comments Below [ ]</td>
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Determine if Assistant District Manager is conducting the required second level reviews and holding supervisors accountable for oversight of Office Reviews and Field Accompanied Activity Reviews.
19. Determine if district management personnel are reviewing work products and reports for accuracy and completeness.
Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]

20. Determine if managers and supervisors are using required standardized reports to review critical data relevant to inspections and investigations.
Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]

21. Determine if Districts, when required, are conducting in-depth accountability reviews in compliance with agency policy and procedures including follow-up to determine the effectiveness of corrective actions.
Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]

22. Is information, including methane liberation, being entered into the MSHA Standardized Information System (MSIS) accurately and in a timely manner?
Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]

23. Determine if inspectors have sufficient equipment and supplies to conduct thorough inspections.
Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]

24. Evaluate the overall condition of the mine relative to the level of enforcement documented in previously completed inspections.
Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]
<table>
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<tr>
<th>Determine if inspectors have an understanding of when a violation of Section 103(a) for Advance Notice occurs and whether appropriate citations are issued for Advance Notice.</th>
<th>Adequate X</th>
<th>Corrective Action Needed □</th>
<th>Comments Below □</th>
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<tr>
<td>Determine if the management resource tracking tool is being used to track resources regarding Special Investigations.</td>
<td>Adequate X</td>
<td>Corrective Action Needed □</td>
<td>Comments Below □</td>
</tr>
<tr>
<td>Determine if retraining of supervisors, inspectors, and specialists is being tracked.</td>
<td>Adequate X</td>
<td>Corrective Action Needed □</td>
<td>Comments Below □</td>
</tr>
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<td>Determine if supervisors are rotating the mine assignments annually among inspectors assigned to their field office.</td>
<td>Adequate X</td>
<td>Corrective Action Needed □</td>
<td>Comments Below □</td>
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The ladder access to the S-9 Conveyor catwalk was covered up by rock spillage and blocked by a water hose. This condition created a slip or trip hazard to persons which can lead to serious injury.
Rock build up in excess of 20" was observed on the S-16 Headpulley work platform, in excess of 18" on the access platform below and on over the toe boards at the S-1 Cone Feed Conveyor catwalk. This condition creates an unsafe access hazard in which rock can fall onto persons on the platform below the S-16 headpulley platform and a slip, trip or fall hazard to persons accessing the area. Serious injuries can be received from falling rock and/or slip, trip or fall. Maintenance personnel access this area to perform routine maintenance activities.

See Continuation Form (MSHA Form 7000-3a)
Housekeeping is not being maintained in the walkways on the 2nd deck of the turntable. An approximate 20 by 20 foot area is covered with an accumulation of rock and fine spillage up to approximately 6 inches deep. The area is access to the tail pulleys of 3 different conveyors that require lubrication approximately twice per month. The condition exposes miners to a slip and fall hazard likely to result in strains, sprains and contusions.

Standard 56.20003a was cited

Gravity:
- A. Injury or illness (has) (is) not likely: [ ]
- B. Injury or illness could reasonably be expected to be:
  - No Lost Workdays [ ]
  - Lost Workdays: [ ]
  - Workdays Or Restricted Duty [ ]
  - Permanently Disabling [ ]
  - Fatal [ ]

- C. Significant and Substantial: [ ]

Negligence (check one):
- A. None [ ]
- B. Low [ ]
- C. Moderate [ ]
- D. High [ ]
- E. Reckless Disregard [ ]

Type of Action:
- A. Citation [ ]
- B. Order [ ]
- C. Safety Order [ ]
- D. Written Notice [ ]

Area of Equipment:

Section III - Termination Action

Housekeeping has been performed, abating the citation.
No guard is provided for the end of the rotating counterweight shaft for the BC07 conveyor. The end of the shaft is approximately 4 feet high and within approximately 1 foot of the railing. There is a grease point on the adjacent walkway that requires lubrication approximately twice per month. This condition exposes miners to an entanglement hazard likely to result in crushing/amputation injuries to the fingers or hands.

Standard 56.14107a was cited.

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### Section I - Violation Date

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<th>Date</th>
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<th>Yr</th>
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<tr>
<td>Time</td>
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### Condition or Practice

No guard is provided for the end of the rotating counterweight shaft for the BC07 conveyor. The end of the shaft is approximately 4 feet high and within approximately 1 foot of the railing. There is a grease point on the adjacent walkway that requires lubrication approximately twice per month. This condition exposes miners to an entanglement hazard likely to result in crushing/amputation injuries to the fingers or hands.

### Standard 56.14107a

See Continuation Form (MSHA Form 7500-5a)

### Section II - Inspector's Evaluation

- **Gravity:**
  - A. Injury or illness (has it): No Likelihood
  - B. Injury or illness could reasonably be expected to be: No Lost Workdays
  - C. Significant and Substantial: Yes
- **Likelihood:**
  - Unlikely
- **Occurrence:**
  - Unlikely
- **Number of Persons Affected:** 001

### Section III - Type of Action

- **Type of Action:** 104a
- **Type of Inspection:**
  - E16
- **Enforcement Action:**
  - Citation
  - Order
  - Safeguard
  - Written Notice

### Section IV - Action to Terminate

- **Action to Terminate:** The shaft was guarded, abating the citation.

### Section V - Date of Termination

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<th>Yr</th>
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<tr>
<td>Time</td>
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No visible or audible warning is provided for the BC06 and BC07 conveyors. The audible alarm at the head pulley of BC06 was not functioning and no other alarm could be seen or heard from this area before the conveyors went into motion. The conveyors are controlled by the system stop and start automatically. This condition exposes miners that may be working on or around the conveyor to an entanglement hazard likely to result in crushing/dismemberment injuries should the conveyor start unexpectedly.
Housekeeping is not being maintained in the walkway around the head pulley of the BC12 conveyor and the ladder way landing below. 1 to 3 inch rock and fine material has built up on the walkways up to 27 inches high. Spillage is near the entry way to the conveyors and ladder ways that provide access for miners to do lubrication approximately once per month. This condition exposes miners to a slip and fall hazard likely to cause injuries such as strains, sprains, and contusions.

Standard 56.20003a was cited

<table>
<thead>
<tr>
<th>Section I - Violation Data</th>
<th>U.S. Department of Labor</th>
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<tbody>
<tr>
<td>1. Date</td>
<td>2. Time (24 Hr. Clock)</td>
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<tr>
<td>4. Served To</td>
<td>5. Operator</td>
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<tr>
<td>8a. Written Notice (103g)</td>
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<tr>
<th>9. Violation</th>
<th>A. Health/ Safety</th>
<th>B. Section of Act</th>
<th>C. Part/Section of Title 30 CFR</th>
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<tr>
<td>10. Gravity</td>
<td>A. Injury or illness has (has) (is): No Likelihood</td>
<td>Unlikely</td>
<td>Reasonably Likely</td>
</tr>
<tr>
<td>B. Injury or illness could reasonably be expected to be:</td>
<td>No Lost Workdays</td>
<td>Lost Workdays Or Restricted Duty</td>
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<tr>
<td>C. Significant and Substantial</td>
<td>Yes</td>
<td>No</td>
<td></td>
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<td>11. Negligence (check one)</td>
<td>A. None</td>
<td>B. Low</td>
<td>C. Moderate</td>
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<td>12. Type of Action</td>
<td>104a</td>
<td>13. Type of issuance (check one)</td>
<td>Citation</td>
</tr>
<tr>
<td>14. Initial Action</td>
<td>A. Citation</td>
<td>B. Order</td>
<td>C. Safeguard</td>
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<td>15. Area or Equipment</td>
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<tr>
<th>16. Termination Due A. Date</th>
<th>B. Time (24 Hr. Clock)</th>
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| 17. Action to Terminate | Housekeeping has been performed, abating the citation |

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<th>18. Terminated A. Date</th>
<th>B. Time (24 Hr. Clock)</th>
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<th>19. Type of Inspection (activity code)</th>
<th>20. Event Number</th>
<th>21. Primary or Mill</th>
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</table>

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<tr>
<th>22. AR Name</th>
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Housekeeping is not being maintained in the area below the #26 Raymond mill. The floor of the workplace has a cone of fine material spilled approximately 4 feet deep as well as muddy areas and standing water throughout the workplace. There are visible foot prints in the spillage. The material is extremely slick when wet on top of the concrete floor. This condition exposes the miners traveling through the area to a slip hazard likely to result in strains, sprains, and contusions.

Standard 56.20003a was cited
Attachment E – Discussion Topics

Topics discussed with the district that do not require a corrective action plan:

- Documentation of Enforcement Actions: In rare cases, for the enforcement actions issued during the E01s reviewed, negligence determinations documented in the notes could include more information to justify the determination. See Citation and Order Writing Handbook For Coal Mines and Metal and Nonmetal Mines, PH13-I-1(1), pages 16-18 and Metal and Nonmetal General Inspection Procedures Handbook, PH13-IV-1 (GIPH), pages 64-65 for reference.

- Arrival and departure times for the E01 events reviewed were not always documented. See GIPH, page 60 for reference.