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

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

FROM: THOMAS W. CHARBONEAU
Director, Office of Assessment

SUBJECT: Mine Safety and Health Administration (MSHA)
Office of Accountability Review
Metal and Nonmetal Western District, Vacaville, California Field Office

Introduction

This memorandum summarizes the Office of Accountability’s 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 being followed consistently; assess whether mission critical enforcement activities are accomplished effectively and to evaluate and improve the overall performance of MSHA’s enforcement program. The major outcome expected from the Office of Accountability’s review program is the identification of potential or actual areas for improvement and the subsequent implementation of effective corrective actions to address any identified issues.

You can now file your MSHA forms online at www.MSHA.gov. It's easy, it's fast, and it saves you money!
Overview

Office of Accountability (OA) Specialists Jerry Kissell and Mark Odum (Review Team) conducted the review of Metal and Nonmetal’s (MNM) Western District and the Vacaville, California Field Office (FO), from [redacted] in accordance with the annual accountability review plan schedule. The review focused on inspection activities conducted in FY 2015 (October, 2014 through September 2015) and the first half of FY 2016 (October 2015 through March 2016). The review included supervisory oversight activities, Field Accompanied Reviews (FARs) and Office Reviews (ORs) for FY 2016. The review concentrated specifically on two regular E01 inspections, Event Nos. [redacted], conducted by the Vacaville, CA Field Office of the [redacted], ID No. [redacted].

The OA selected [redacted] for review due to its elevated S&S rate for citations, the high number of elevated negligence violations, and the elevated VPIH rate. The mine received [redacted] 104(a) enforcement actions and [redacted] 104(d) enforcement actions in FY 2015. In the first half of 2016 the mine received [redacted] 104(a) enforcement actions and [redacted] 104(b) orders, [redacted] 104(d)(2) orders and [redacted] 104(g) orders.

The OA conducted a mine visit to evaluate general conditions at the mine; assess whether conditions at the mine are commensurate with enforcement levels documented in the inspection reports reviewed; and to observe work practices at the mine site.

Mine Visit

OA Specialist Jerry Kissell, accompanied the Vacaville Field Office Supervisor and an inspector to the [redacted] mine on [redacted] as part of a Regular Safety and Health Inspection (E01).

The [redacted] is a [redacted] mine located in [redacted]. The mine employs approximately [redacted] miners working one nine-hour production shift, five days per week. The mine produces an average of [redacted] annually. The [redacted] is mined by pushing material with a dozer and a front end loader which then is loaded onto a dump truck. The raw material is transported to a stock pile area where a front end loader moves materials from the stock piles to the primary crusher. The crushed material is transferred by conveyers to sizing screens. Once processed the final products are prepared for commerce.

The inspection group observed the screening plant, the wet plant, the pit areas, the oil storage area, the tool and parts storage area and the welding area.

Equipment inspected and observed included: a John Deere 633 K front end loader, a Komatsu WA 450 front end loader, a Case CK 290 excavator, a JCB Forklift, the Primary Feeder, the Cedar Rapids primary screen plant, the P-1 power screen, the P-2 power screen, 16 conveyor belts, guarding practices, electrical conditions, roadway maintenance and berms.
Other observations included: the primary crusher dump point and dumping practices, raw material stockpiles, housekeeping, walkway maintenance, communications, break rooms, training records and the inspector's pre- and post- inspection discussions with the operator and safety talks with miners. As a result of the inspection, the inspector issued seven enforcement actions.

Review Results

Positive Findings:

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

1. For the E01 inspection reports reviewed, notes and documentation were organized, clear and concise, and included pictures of violations.
2. Inspection notes reviewed showed inspectors documented observations of work practices, mining cycles observed, and safety talks conducted with miners in detail.
3. 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.
4. During the mine visit, the inspector conducted safety talks with every miner encountered with topics specific to the tasks they were involved with at the time.
5. The review did not identify any issues that require a Corrective Action Plan.

The Review Team identified and discussed with the district one lessor issue which did not require a corrective action plan.

As a part of the review, 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 41 percent during FY 2015 compared to the FO S&S rate of 22 percent, a district S&S rate of 23 percent and the national S&S rate of 26 percent. In the first half of FY 2016 the mine had an S&S rate of 50 percent compared to the FO S&S rate of 19 percent; a district S&S rate of 24 percent; and the national S&S rate of 24 percent during the same period.

This comparison of FY 2015 and FY 2016 showed the S&S rate for the mine was higher than the average S&S rates of the field office, district and nation, and had increased in FY 2016. Based on the review and observations made during the mine visit, the Review Team determined that the enforcement levels for the are commensurate with existing mining conditions and work practices.
Attachments

A. Office of Accountability Checklist

B. Citations issued during this review

- 56.9300a
- 56.11001
- 56.12004
- 56.14107a
- 56.14101a2
- 56.14107a
- 46.5a

C. Discussion Topics
## Attachment A: Office of Accountability Checklist

<table>
<thead>
<tr>
<th></th>
<th>Determine if complete and thorough E01 inspections are being conducted and /or if policies and procedures were properly followed.</th>
<th>Adequate</th>
<th>Corrective Action Needed</th>
<th>Comments Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>![X]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Determine if documentation for inspections is complete and thorough.</th>
<th>Adequate</th>
<th>Corrective Action Needed</th>
<th>Comments Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
<td>![X]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>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.</th>
<th>Adequate</th>
<th>Corrective Action Needed</th>
<th>Comments Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
<td>![X]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Evaluate inspector(s) examination of required records and postings for compliance with applicable standards.</th>
<th>Adequate</th>
<th>Corrective Action Needed</th>
<th>Comments Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td></td>
<td>![X]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Evaluate the inspector(s) physical examination of the active working areas of the mine and inspection of all mining cycles.</th>
<th>Adequate</th>
<th>Corrective Action Needed</th>
<th>Comments Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td></td>
<td>![X]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Evaluate the inspector(s) on-site contaminant assessment and documentation.</th>
<th>Adequate</th>
<th>Corrective Action Needed</th>
<th>Comments Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td></td>
<td>![X]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. Evaluate inspector(s) examination of electrical equipment, transformer stations, and/or electrical circuits.

<table>
<thead>
<tr>
<th>Adequate: X</th>
<th>Corrective Action Needed:</th>
<th>Comments Below:</th>
</tr>
</thead>
</table>

8. Determine if adequate close-out conferences are being conducted at the end of each inspection.

<table>
<thead>
<tr>
<th>Adequate: X</th>
<th>Corrective Action Needed:</th>
<th>Comments Below:</th>
</tr>
</thead>
</table>

9. Determine if Possible Knowing/Willful (PKW) Forms are documented and processed according to agency policy and procedures.

<table>
<thead>
<tr>
<th>Adequate: X</th>
<th>Corrective Action Needed:</th>
<th>Comments Below:</th>
</tr>
</thead>
</table>

10. 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.

<table>
<thead>
<tr>
<th>Adequate:</th>
<th>Corrective Action Needed:</th>
<th>Comments Below: X</th>
</tr>
</thead>
</table>

Not reviewed as a part of this review. The Field Office does not have any mines in a 103(i) status.

11. Determine if Hazard Complaint inspections/investigations are being conducted according to policy and procedures.

<table>
<thead>
<tr>
<th>Adequate: X</th>
<th>Corrective Action Needed:</th>
<th>Comments Below:</th>
</tr>
</thead>
</table>

12. Determine if supervisors are monitoring inspector time and activity to ensure proper use of time, including off-shift and weekend work, by all inspectors.

<table>
<thead>
<tr>
<th>Adequate: X</th>
<th>Corrective Action Needed:</th>
<th>Comments Below:</th>
</tr>
</thead>
</table>
13. Are required Field Accompanied Reviews (FARs), Office Reviews (ORs) and supervisory follow-up reviews being conducted and documented according to agency policy and procedures?
   (OR’s - One E-01/Inspector/every six months/FY - minimum; FAR’s - one/inspector/year - minimum)

14. Determine if a 104(d) tracking system is in place and being kept current at the office being reviewed.

   Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]

15. Determine if the Mine Files are legible, up to date, and reviewed by supervisors.

   Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]

16. Determine if supervisors are visiting active mines.

   Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]

17. Review documentation of staff meetings/safety meetings to determine their effectiveness and relevance to current issues and the Agency’s mission.

   Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]

18. 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.
United States Department of Labor
Mine Safety and Health Administration
Office of Accountability

District [Western]  Field Office [Vacaville, CA]  Mine ID [ ]  Date [ ]

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 methane liberation information being entered into the MSHA Standardized Information System (MSIS) accurately and in a timely manner?
   Adequate [X]  Corrective Action Needed [ ]  Comments Below [X]
   No 103i mines/other mine information is updated as needed.

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 [ ]
<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 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. |
| Adequate | Corrective Action Needed | Comments Below |

| Determine if the management resource tracking tool is being used to track resources regarding Special Investigations. |
| Adequate | Corrective Action Needed | Comments Below |

| Determine if retraining of supervisors, inspectors, and specialists is being tracked. |
| Adequate | Corrective Action Needed | Comments Below |

| Determine if supervisors are rotating the mine assignments annually among inspectors assigned to their field office. |
| Adequate | Corrective Action Needed | Comments Below |
Attachment B: Citations issued during the review

<table>
<thead>
<tr>
<th>Mine Citation/Order</th>
<th>U.S. Department of Labor</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Servered To</td>
<td>9. Condition of Practice</td>
</tr>
</tbody>
</table>

There were no berms or guardrails provided at the feed ramp and harvesting hole area of the mine. The feed ramp was approximately 30 feet in length and had a drop estimated at 6 feet on both the left and right sides of the ramp. The harvest directly to the right rear of the ramp was approximately 150 feet around with an estimated depth of 4 feet at the deepest area of the hole. This condition creates a rollover hazard to miners traveling the area in mobile equipment which could result in serious injury to the miner. The area is traveled on a daily basis by front end loaders feeding the plant up to 8 hours a day 5 days a week.

Standard 56.9300a was cited

<table>
<thead>
<tr>
<th>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>10. Negligence</td>
<td>Check-&gt; B. Low [ ]</td>
<td>C. Moderate [ ]</td>
<td>D. High [ ]</td>
</tr>
</tbody>
</table>

Berms were constructed on the feed ramp and around the perimeter of the harvest area terminating the citation.

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

Note: For more information, please refer to the OSHA Form 3000-3a or visit the OSHA website. This form is used to record injuries and illnesses that occur at a workplace, and it is required to be completed by all employers. If you work at a facility covered by OSHA and need more information, please contact the OSHA Enforcement Program at 1-800-321-OSHA (7622) or visit the OSHA website at www.osha.gov.
United States Department of Labor  
Mine Safety and Health Administration  
Office of Accountability  

District: Western  
Field Office: Vacaville, CA  
Mine ID: [Redacted]  
Date: [Redacted]  

Mine Citation/Order  
U.S. Department of Labor  
Mine Safety and Health Administration  

Section 1 - Violation Date  
1. Date: Mo Da Yr  
2. Time (24 Hr Clock)  
3. Citation/Order Number: [Redacted]  

4. Serviced To: [Redacted]  
5. Operator: [Redacted]  
6. Mine: [Redacted]  
7. Mine ID: [Redacted]  
8. Written Notice (103p)  

Safe access to the tail pulley of the C-7 conveyor and feed conveyor located at the primary plant area of the was not being maintained. The passageway had a build up of material approximately 12 feet in length 39 inches wide and 24 inches in height. There were also large rocks of varying size with some approximately 20 inches in length and 6 inches thick. Footprints through the material were clearly evident. This condition creates numerous different slip, trip, and fall hazards to the miners which could result in injury to the miner. Miners access this area of the mine at least one time per shift for inspection, clean up, and greasing of the bearings.  

Standard 56.11001 was cited  

9. Violation: A. Health / Safety / Other  
10. Section of Act: [Redacted]  
11. Order Number: [Redacted]  

12. Type of Action: 104a  
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: [Redacted]  
F. Dated: Mo Da Yr  

15. Area or Equipment  

16. Termination Due: A. Date: Mo Da Yr  
B. Time (24 Hr Clock)  

17. Action to Terminate  

18. Terminated: A. Date: Mo Da Yr  
B. Time (24 Hr Clock)  

19. Type of Inspection (activity code): E01  
20. Event Number: [Redacted]  
21. Primary or Mill Plant:  
22. AR Name: [Redacted]  
23. AR Number: [Redacted]  

MSHA Form 1000-2, Apr 03 (revised)  
In accordance with the provisions of the Small Business Regulatory Enforcement Fairness Act of 1996, the Small Business Administration has established a National Small Business and Agriculture Regulatory Enforcement Ombudsman and 10 Regional Ombudsmen to receive comments from small businesses about federal agency enforcement actions. The Ombudsman evaluates enforcement actions and rates each agency's responsiveness to small business. If you wish to comment on the enforcement actions of MSHA, you may call 1-866-RED P偶A (1-866-733-7629), or write to the Ombudsman of Small Business Administration, Office of the National Ombudsman, 409 3rd Street, SW, MC 2140, Washington, DC 20418. Please note, however, that your right to file a comment with the Ombudsman is in addition to any other rights you may have, including the right to contest citations and proposed penalties and obtain a hearing before the Federal Mine Safety and Health Review Commission.
There was a 100 volt s/o cord located at the junction box adjacent the C-8 conveyor that had been pulled from its retaining nut in the junction box and was being exposed to mechanical damage. The s/o cord supplied power to conveyor C-14. There was approximately 1.5 inches of exposed inner insulated conductor outside of the box. This condition creates an electrocution hazard to the miners which could result in fatal injuries to a miner. Miners work and travel this area on a regular basis for clean up on the nearby conveyor tail pulleys and for greasing of the bearings.

Standard 56.12004 was cited.
The fluted tail pulley on the C-6 conveyor located at the primary plant area of the mine was not fully guarded to prevent accidental or inadvertent contact with the moving machine parts. The tail pulley had an exposed area approximately 6 inches wide and 17 inches in height and was located 46 inches above the current ground level. The tail pulley was located an estimated 12 inches past the guard. This condition exposes the miners to an entanglement hazard which could result in serious injury to the miner. Miners work and travel this area of the mine on a frequent basis for routine cleanup and inspection around the plant area.

Standard 56.14107a was cited.
The park brake provided on the Kenworth water truck serial No. [redacted] was not capable of holding the truck on the typical grade it traveled. When the brake was applied little to no resistance was noted and free rolling did occur. This condition exposes the miners to a hazard of the truck unexpectedly rolling which could result in serious injury to the miner. The truck operates around the plant and on the haul roads in proximity to miners on foot and with other mobile equipment.

The truck was immediately removed from service and tagged therefore an extended period of time is granted to complete the repair or adjustments to the braking system.
Continuation of Section I.

Standard 56.14101(a)(2) was cited.

<table>
<thead>
<tr>
<th>Time (24 Hr. Clock)</th>
<th>C. Vacated</th>
<th>D. Terminated</th>
<th>E. Modified</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The fluted tail pulley, pulley shaft, drive pulley and belts, and the gear box coupler on the primary feed conveyor located at the primary plant area of the mine were not guarded to prevent contact with moving machine parts. The fluted tail pulley had an exposed area approximately 5 inches wide and was located 67 inches above the current ground level and was only 6 inches past the frame of the feeder. The key way shaft had an exposed area approximately 2.5 inches wide and was located 61 inches above the current ground level. The coupler is approximately 5.5 inches in height and has protruding bolt heads and was located 67 inches above the current ground level. The drive pulley is approximately 1 inch in height and directly adjacent 2.75 inch wide opening in the current guard and was located approximately 59 inches above the current ground level. These conditions

### Violation

<table>
<thead>
<tr>
<th>A. Violation</th>
<th>B. Section of Act</th>
<th>C. Code/Section of Title 30 CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>56.14107a</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Gravity

<table>
<thead>
<tr>
<th>A. Injury or Illness (has) (is):</th>
<th>B. Injury or Illness could reasonably be expected to be:</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Likelihood</td>
<td>Unlikely</td>
</tr>
<tr>
<td>No Lost Workdays</td>
<td>Lost Workdays Or Restricted Duty</td>
</tr>
<tr>
<td>C. Significant and Substantial:</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

### Number of Persons Affected:

001

### Type of Action

<table>
<thead>
<tr>
<th>A. Action</th>
<th>B. Type of Action:</th>
</tr>
</thead>
<tbody>
<tr>
<td>104a</td>
<td>Citation</td>
</tr>
</tbody>
</table>

### Action to Terminate

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

### Action to Terminate

<table>
<thead>
<tr>
<th>A. Date</th>
<th>B. Time (24 Hr. Clock)</th>
</tr>
</thead>
</table>
create numerous entanglement hazards to the miners which could result in and up to fatal type injuries. Miners work and travel this area of the mine site on a regular basis for clean up, inspection, and greasing of the bearings.

The mine operator has locked out the conveyor therefore an extended period of time is granted to allow for the construction and installation of guards.

Standard 56.14107a was cited
The new miner who had began work or about September 21, 2016 has not received all of the training in the required seven subjects prior to beginning work at the mine site. According to training records the miner only received training in one subject under 46.5a for five hours. The remaining six subjects have no documentation for any training being given to the miner. The Mine Act of 1977 states that an untrained miner is a hazard to himself and to others. The miner is ordered withdrawn until they have received all of training required in the remaining six required subjects.

Standard 46.5a was cited

The area or equipment [ ] is hereby ordered withdrawn.
Attachment C: Discussion Topics

The MSHA 4000-125 (Photo Mounting Sheet) - The most current form (dated 2009) should be used to document photographs taken on inspections and investigations. This was determined not to be a major issue and was discussed with the field office and the district. (Metal and Nonmetal GIPH, PH13-IV-1, Chapter 7, section E, pg. 65)