Introduction

This memorandum summarizes the Office of Accountability’s review of the North Central District, Duluth, Minnesota Field Office. The review focused on enforcement activities at the North Central District, Duluth, Minnesota Field Office. This review included MSHA field activities, level of enforcement, conditions and practices at the mine, Field Accompanied Reviews, Office Reviews and MSHA supervisory and managerial oversight.

Purpose

The purpose of this accountability review is to determine whether MSHA enforcement policies, procedures and guidance are being 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

Office of Accountability (OA) Specialists Jerry Kissell and Mark Odum (Review Team) conducted the review in accordance with the annual accountability review plan schedule. The review concentrated on one Regular Safety and Health Inspection (EO 1), of the -

The mine was selected because it is a large surface operation and had an elevated Violation Per Inspection Hour (VPIH) ratio of 0.41, compared to the Field Office VPIH rate of 0.25; a District VPIH rate of 0.23; and the national VPIH rate of 0.22. Specialists Kissell and Odum conducted the on-site review from The review focused on enforcement activities during FY 2017 and included review of supervisory oversight activities.

Mine Visit

Specialist Odum accompanied the Field Office Supervisor and inspector to the mine on - on a Spot Inspection (E16). The mine is a surface operation located in - The mine employs approximately - miners working two twelve-hour shifts per day, seven days per week. - is mined off location and sent by rail to - where it is crushed and processed and made ready for commerce. During the visit, Specialist Odum 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 mine visit included inspections and observations of the following:

- pre-inspection conference
- workplace examination records
- work practices
- concentrator building basement and main floors
- pellet plant building and conveyor belts
- #12 furnace area
- walkways, railings, electrical, housekeeping, and fire protection

During this site visit, the inspector issued four enforcement actions. (Attachment B)

Review Results

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

1. The inspection reports were organized and notes were clear and concise.
2. Inspection reports included pictures of violations.
3. Inspectors documented observations of mining cycles and work practices.
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. No issues requiring a corrective action were identified during this review. (Attachment A for Office of Accountability Checklist Items)

The Review Team identified and discussed with District personnel some 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. (Attachment C)

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 8 percent in FY 2017 compared to the Field Office S&S rate of 19 percent; a District S&S rate of 20 percent; and the national S&S rate of 23 percent.

While the S&S rate for the mine was lower than the average S&S rates of the Field Office, District and nation, the enforcement levels were appropriate with existing mining conditions and work practices based on the review and observations made during the mine visit.
Attachments

A. Office of Accountability Checklist

B. Citations issued during site visit

- 56.20003b
- 56.14112b
- 56.14112b
- 56.14112b

C. Discussion Topics
<table>
<thead>
<tr>
<th></th>
<th>1. 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>
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<td>Adequate</td>
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<td>2. Determine if documentation for inspections is complete and thorough.</td>
<td>Adequate</td>
<td>Corrective Action Needed</td>
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<td>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.</td>
<td>Adequate</td>
<td>Corrective Action Needed</td>
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<td>Corrective Action Needed</td>
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<td>4. Evaluate inspector(s) examination of required records and postings for compliance with applicable standards.</td>
<td>Adequate</td>
<td>Corrective Action Needed</td>
<td>Comments Below</td>
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<td>5. Evaluate the inspector(s) physical examination of the active working areas of the mine and inspection of all mining cycles.</td>
<td>Adequate</td>
<td>Corrective Action Needed</td>
<td>Comments Below</td>
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<td>Adequate</td>
<td>Corrective Action Needed</td>
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<td>6. Evaluate the inspector(s) on-site contaminant assessment and documentation.</td>
<td>Adequate</td>
<td>Corrective Action Needed</td>
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<td>Adequate</td>
<td>Corrective Action Needed</td>
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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 documented and processed according to agency policy and procedures.
   Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]

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.
    Adequate [ ]  Corrective Action Needed [ ]  Comments Below [X]
    Not Applicable - 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.
    Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]

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.
    Adequate [X]  Corrective Action Needed [ ]  Comments Below [ ]
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 [ ]
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 (mine status, methane liberation number of employees, etc.) being entered into the MSHA Standardized Information System (MSIS) accurately and in a timely manner?
   - Adequate [X]
   - Corrective Action Needed [ ]
   - Comments Below [ ]
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<td><strong>23.</strong> Determine if inspectors have sufficient equipment and supplies to conduct thorough inspections.</td>
<td>Adequate [X] Corrective Action Needed [ ] Comments Below [ ]</td>
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<td><strong>24.</strong> Evaluate the overall condition of the mine relative to the level of enforcement documented in previously completed inspections.</td>
<td>Adequate [X] Corrective Action Needed [ ] Comments Below [ ]</td>
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<td><strong>25.</strong> 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.</td>
<td>Adequate [X] Corrective Action Needed [ ] Comments Below [ ]</td>
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<td><strong>26.</strong> Determine if the management resource tracking tool is being used to track resources regarding Special Investigations.</td>
<td>Adequate [X] Corrective Action Needed [ ] Comments Below [ ]</td>
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<td><strong>27.</strong> Determine if retraining of supervisors, inspectors, and specialists is being tracked.</td>
<td>Adequate [X] Corrective Action Needed [ ] Comments Below [ ]</td>
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<td><strong>28.</strong> Determine if supervisors are rotating the mine assignments annually among inspectors assigned to their Field Office.</td>
<td>Adequate [X] Corrective Action Needed [ ] Comments Below [ ]</td>
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Attachment B – Citations Issued During the Site Visit

<table>
<thead>
<tr>
<th>Mine Citation/Order</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. Time (24 Hr. Clock)</td>
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</tr>
<tr>
<td>3. Citation/Order Number</td>
<td></td>
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<tr>
<td>4. Served To</td>
<td>Operator</td>
</tr>
<tr>
<td>5. Operator</td>
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<td>6. Mine ID</td>
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<td>7. Mine ID</td>
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<tr>
<td>8. Condition or Practice</td>
<td>CONCENTRATOR</td>
</tr>
<tr>
<td>9. Violation</td>
<td>A. Health</td>
</tr>
<tr>
<td>10. Gravity</td>
<td>A. Injury or Illness (has)</td>
</tr>
<tr>
<td>11. Negligence (check one)</td>
<td>A. None</td>
</tr>
<tr>
<td>12. Type of Action</td>
<td>A. Citation</td>
</tr>
<tr>
<td>13. Type of Issuance (check one)</td>
<td>A. Citation</td>
</tr>
<tr>
<td>14. Initial Action</td>
<td>E. Citation/Order Number</td>
</tr>
<tr>
<td>15. Area or Equipment</td>
<td></td>
</tr>
<tr>
<td>16. Termination Date</td>
<td>Mo Da Yr</td>
</tr>
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<td>17. Action to Terminate</td>
<td></td>
</tr>
<tr>
<td>18. Terminated</td>
<td>Mo Da Yr</td>
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<tr>
<td>19. Type of Inspection (activity code)</td>
<td>E1.6</td>
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<tr>
<td>20. Event Number</td>
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<td>21. Primary or Minor</td>
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<tr>
<td>22. AR Name</td>
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<td>23. AR Number</td>
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</table>

An accumulation of a slippery, oily substance was on the floor on the south side of the 1988 Primary Hydro Tank which was coming from a barrel which was filled with oily pads. The slippery substance was covering an area approximately 42 inches wide by 16 inches long within a 42 inch wide walkway. Foot prints were observed traversing the area to go to the stairwell accessing the lower level. The operator was unaware how long this condition had existed. This condition exposes miners traversing the area to slip/trip/fall hazards resulting in serious injury.
The guard on the electric motor powering the #18 windbox on the #54 belt below Furnace #11 was not in place. A bolt securing the guard was not present allowing the top of the guard to rotate open approximately 2 inches exposing the rotating fan blades within. The guard is approximately 5 feet high off of the walkway and 1 foot away. The operator is not aware of how long the condition has existed. This condition exposes miners working in this area to entanglement hazards which would result in serious injury.

Standard 56.14112b was cited
The approximately 38 by 58-inch guard was removed from the West side of the Furnace #12 Greasing station on the Grate Floor while the furnace was running. The area is utilized for greasing, maintenance as needed and clean-up is performed in the area. This condition was cited during the last regular inspection. The pallets are greased automatically as they move by and are in continuous motion while the furnace is running.

Standard 56.14112b was cited

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**Section I - Violation**

- **Date:**
- **Time:**
- **Operator:**
- **Mine ID:**
- **Date:**

**Standard Cited:** 56.14112b

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**Section II - Inspector's Evaluation**

- **Gravity:**
  - A. Injury or Illness (has) [s]: 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: [ ]

- **Initial Action:**
  - A. Citation □
  - B. Order □
  - C. Safeguard □
  - D. Written Notice □

- **Type of Issuance:**
  - E. Citation □
  - Order □
  - Safeguard □
  - Written Notice □

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**Section III - Termination Action**

- **A. Date:**
- **B. Time:**

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**Section IV - Automated System Data**

- **Type of Inspection:**
- **Event Number:**
- **Promulgator or Miner:**
- **AF Name:**
- **AF Number:**

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*Adapted from the MSHA Form 7000-2, "Small Business Regulatory Enforcement Fairness Act of 1996"*
PELLET PLANT

The approximately 12 by 40 inch guard was not in place on the south east side of the Grate Floor of Furnace #12 just North of the block station while the furnace was running. The guard was sitting on the side of the walkway. The pallets are in continuous motion while the furnace is running. The operator is not aware how long the condition has occurred. This condition exposes miners working in the area to entanglement/pinch-between hazards resulting in serious injury. Access to the work platform this is located at was barricaded from access until the guard can be replaced.

Standard 56.14112b was cited

See Coordination Form (MSHA Form 7000-24) □
Attachment C – Discussion Topics

- Enforcement Action Review – Discussed citation documentation, standards, justification of gravity, likelihood, and negligence.