

Appendix D

MSHA Response to Draft Report

U.S. Department of Labor

Mine Safety and Health Administration
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MAR 28 2013

MEMORANDUM FOR ELLIOT P. LEWIS
Assistant Inspector General
for Audit

FROM: JOSEPH A. MAIN 
Assistant Secretary of Labor
for Mine Safety and Health

SUBJECT: MSHA Response to OIG Draft Report – “MSHA Has Improved Its
Roof Control Plan Review and Monitoring Process But Could Do
More” No. 05-13-002-06-001

MSHA reviewed your Draft Report *MSHA Has Improved Its Roof Control Plan Review and Monitoring Process But Could Do More* (05-13-002-06-001). We appreciate the opportunity to provide comments to the draft report.

The “Results in Brief” section of the Report states that, “MSHA’s processes for reviewing, approving, and overseeing coal mine roof control plans have improved since our 2008 report...” To put the Report in a proper context, MSHA believes it is important that the Report reflect the proactive actions the Agency has taken since the Crandall Canyon tragedy, which have improved roof/rib control safety for miners. It should also state these actions have resulted in a dramatic decline in roof/rib fatalities, roof/rib injuries, and roof falls. Your audit addressed administrative and record keeping issues and did not analyze or address the substance of the specific actions MSHA has undertaken since the 2007 Crandall Canyon tragedy and the improvements in miner safety that have resulted, which were significant. That should be noted in the report so that readers have a better understanding of the report and the context of the findings. MSHA believes it needs to continue to stay focused on the implementation of actions it has undertaken to protect the nation’s miners and to sustain the improvements made, and intends to do so.

MSHA compared the injury and fatality data associated with roof control hazards for the most recent five-year period, 2008-2012, to the previous two five-year periods. The comparison shows:

- There was one retreat mining roof-rib fatality in an underground bituminous coal mine during 2008-2012, compared with 13 during 2003-2007. During the five-year period prior to that, 1998-2002, there were 12 roof/rib fatalities during retreat mining.
- There were 19 roof/rib fatalities during 2008-2012, compared with 37 during 2003-2007.

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- Comparing the 2003-2007 and the 2008-2012 periods, the number of roof fall injuries was reduced by 24% (a 38% reduction in the rate), and the number of reportable non-injury roof falls was reduced by 24% (a 38% reduction in the rate).

These numbers reflect dramatic improvements in miner safety. The reduction in retreat mining roof fall fatalities is a particularly historic accomplishment because prior to 2007, roof fall fatalities typically occurred each year. See chart below:

Year	Retreat Roof Fall Fatal	Roof/Rib Fatal	Roof Fall Injuries	Non-Injury Roof Falls	Underground Hours Worked
1998-2002	12	48	3542	7454	377,312,796
2003-2007	13	37	2430	6806	392,844,874
2008-2012	1	19	1852	5144	481,896,089
% Reduction in Numbers 2003-2007 vs. 2008-2012	92%	49%	24%	24%	23% increase
% Reduction in Rate 2003-2007 vs. 2008-2012	94%	58%	38%	38%	
% Reduction in Numbers 1998-2002 vs. 2008-2012	92%	60%	48%	31%	
% Reduction in Rate 1998-2002 vs. 2008-2012	93%	69%	59%	46%	

In response to the OIG 2008 Report, MSHA took a number of actions to respond to the Crandall Canyon mine disaster that contributed to these improvements. These actions included: use of checklists for reviewing roof control plans, with a particular focus on retreat mining; improved evaluations of roof control plans; monthly inspections of all retreat mining sections; and involvement of MSHA Technical Support in review of complex and non-typical plans, primarily deep cover retreat mining plans.

Other actions MSHA has taken include:

1. The increased enforcement of roof control regulations: 30 CFR §§75.200 and 75.220(a)(1):

Year	Violations of 75.220(a)(1)	75.200 Violations
2003	1,260	3,842
2004	1,583	4,547
2005	1,631	4,631
2006	1,913	5,463
2007	1,895	5,551
2008	2,616	7,594
2009	2,826	7,771
2010	2,350	7,328
2011	2,102	6,433
2012	1,891	5,855
2003-2007	8,282	24,034
2008-2012	11,785	34,981
% Reduction (-) / Increase (+) in Numbers	+ 42 %	+ 46 %

2. MSHA took proactive efforts by including roof control specific training for inspectors and continuing training for roof control specialists on an annual basis, holding stakeholder outreach meetings, and raising the awareness of miners regarding roof control plans and roof/rib conditions. During the past two years, MSHA conducted eight seminars as part of its annual Preventive Roof / Rib Outreach Program (PROP). These seminars focused on preventing rib injuries, preventing roof bolter equipment related injuries, and reducing the number of roof falls related to issues such as weak roof in the Midwest and multiple seam mining in central Appalachia. In addition, MSHA conducted six hands-on computer training sessions on coal pillar design in a variety of coalfield locations.
3. MSHA issued policy directives that improved the quality of roof control plans and inspections. For example, in 2012 MSHA issued guidance for MSHA personnel in assessing the quality and potential safety risk associated with roof control plans, including evaluating the pillar design, mining technologies, and mining procedures for pillar recovery. Most recently, the Coal Mine Safety and Health General Inspection Procedures Handbook was revised to address recommendations identified by the Upper Big Branch Internal Review Report. The revised handbook now contains the requirements related to improved roof

control inspections and is scheduled to go into effect by April 2013. Appropriate inspector training has been conducted.

In your March 21, 2013, memorandum to me, you stated that the OIG performed this follow-up audit to answer the following question:

Have MSHA's actions in response to the OIG's 2008 audit report improved the coal mine roof control plan review, approval, and oversight processes?

As a result of the actions MSHA has taken and the significant improvements in mine safety for miners, the answer to that question is clearly yes.

In summary, MSHA believes that the substantial efforts it has made since Crandall Canyon have resulted in measurable improvements in roof control safety. MSHA does not believe that the OIG Draft Report presents a complete record of the progress the Agency has made since 2008.

MSHA's response to the Draft Report is attached.

Attachment

Attachment

MSHA's Response to Specific Items in the Draft Report

It is important to reiterate that the OIG audit addresses administrative and recordkeeping issues related to the approval of coal mine roof control plans. It did not review the performance results related to miner safety following Crandall Canyon.

Results in Brief

MSHA's response to all issues addressed in the Results in Brief section of the Draft Report is included in the Results and Findings section of this attachment.

RESULTS AND FINDINGS

Finding 1 – CMS&H Districts used incomplete coal mine roof control plan SOPs.

District SOPs did not always include the 20 controls required by the Manual

1. The Draft Report states on page 4:

"MSHA's Manual required that each District's SOPs address 20 controls necessary for proper administration of the roof control plan approval process. The Manual stated these 20 controls "must be developed and written for each District" and "accomplish the following [list of 20 controls]." Senior MSHA officials told us these 20 controls were optional because the Manual said they should be "accomplished." However, we believe MSHA was arguing semantics and that the 20 controls were mandatory."

MSHA Response: MSHA disagrees with the OIG's characterization that "MSHA was arguing semantics" about whether the 20 controls are mandatory in SOPs. MSHA believes that a regulatory agency has the responsibility to interpret its policies. It is MSHA's position that the 20 controls are not mandatory. Section 111 Policy Manuals of the Administrative Policy and Procedures Manual (APPM) states:

"MSHA's Program Policy Manual and Administrative Policy and Procedures Manual contain written policy and guidelines for Agency employees and compliance requirements for members of the mining community, such as operators, miners, and product manufacturers...The Program Policy Manual contains policy concerning technical and enforcement programs of the Agency." (see pages 7-8)

All of the 20 controls are in fact satisfied outside of the written SOPs that the OIG evaluated. For example, at least six of the controls relate to the "logging and tracking" of roof control plans. All of CMS&H Districts make use of MSHA's MSIS computerized tracking system, which satisfies the "logging and tracking" provision, whether or not it is

mentioned in their written SOPs. Twenty of the 20 controls are fulfilled through the consistent use of the Agency's checklists, transmittal sheet for roof control plan reviews and approvals and Mine Plan Approval System which provides for systematic administration of the District plan approval process.

MSHA acknowledges that the OIG's interpretation on the 20 management controls and district SOPs differs from the Agency's. To avoid any future misunderstanding, the Agency will clarify this guidance to CMS&H District Managers.

2. The Draft Report states on Page 4:

"However, in this follow-up audit, we found only 2 of the 12 Districts' SOPs included all 20 controls. On average, the Districts addressed only 16 of the 20 minimum controls. MSHA issued a memorandum on June 6, 2008⁵, setting forth the roof control plan approval process. The memorandum included various checklists for roof control plan reviews. MSHA told us these checklists addressed 12 of the 20 controls and partially met the Manual's 20-control requirement when used.⁶ While this was true, the SOPs remained incomplete and did not comply with MSHA's Manual since it required District SOPs to include all 20 controls. Moreover, MSHA considered the June 6, 2008, memorandum as optional guidance, not requiring compliance by the Districts."

MSHA Response: MSHA's analysis of the same data reveals that 5 of the 12 districts, rather than 2, included all 20 controls in district SOPs or other management systems. On average, Coal districts addressed 19 of the 20 management controls. MSHA previously provided the OIG with Coal's Re-Analysis of the OIG's Exhibit A on management controls with the Agency's justification for suggested changes.

The OIG states that "MSHA considered the June 6, 2008, memorandum as optional guidance, not requiring compliance by the Districts" and misinterpreted MSHA's intent. On November 24, 2008, the Administrator for Coal Mine Safety and Health issued a clarification to the June 6 memo to District Managers.

"Regulatory requirements, safety precautions, and best practices are included in the checklists and not intended to be a "one size fits all" approach. Consequently, not all the items are applicable to each and every mine and not mandatory. Please refer to CMS&H Memo No. HQ-08-059-A (PRT-75)."

District SOPs did not always include new or revised policies

1. The Draft Report states on page 5:

"Each District developed its own SOPs for reviewing roof control plans; however, MSHA Headquarters did not review or approve these District SOPs. Without Headquarters oversight, the various Districts' SOPs were often improperly

drafted because they were inconsistent, did not include all 20 controls, and relied on outdated criteria."

MSHA Response: We do not agree with the OIG's assertion that all district SOPs need to be consistent, need to include all 20 controls, and need to be reviewed by MSHA Headquarters. Please see the discussion that follows.

Districts develop SOPs to guide district work processes in the handling, review, and approval of roof control plans. However, each District is unique due to its geographic size and the predominant type of mines that it inspects. District organizational structures vary to reflect these differences. District Managers implement SOP's and management systems that address their specific needs, and not all 20 controls/elements are applicable to every District. District Managers, not Headquarters, are responsible for the processing, review and approval of roof control plans as outlined in 30 CFR §§ 75.220 – 75.223, Roof Control Plans.

MSHA Headquarters did provide necessary and appropriate oversight regarding how each District evaluated the technical adequacy and completeness of roof control plans. Headquarters guidance required each District, in approving plans, to: use the Best Practice checklists; request assistance from Technical Support when appropriate; use the MSIS logging and tracking system; and use standard plan transmittal routing sheets. Use of this guidance has made roof control plans far more effective in keeping miners safe, as evidenced by the data in the table on page 2 of this memorandum. MSHA agrees that District SOPs and management systems should be updated to incorporate new guidance, policies, and procedures on roof control. The Roof Control Plan Approval Handbook, will be implemented by December 31, 2013, and the Manual will serve as a central policy repository to govern the approval process, and provide clarity so as to avoid confusion.

Finding 2 – District Managers could not support their rationale for all roof control plan decisions.

1. The Draft Report states Finding 2 on page 5:

MSHA Response: This finding as stated does not accurately convey the audit's findings, that is, that "District Managers' rationale not always documented" as stated in the Results in Brief section on page 2 of the draft report. MSHA believes that the OIG analysis and audit report does not support this finding and mischaracterizes the type of documentation that was determined to be either incomplete or missing, i.e. missing checklists, transmittal sheets, and as noted in Footnote 9 on page 6: "Incomplete documentation consisted of items such as checkboxes not completed, missing signatures, or other administrative controls." To support the rationale behind the approval of the plan requires more than transmittal sheets and checklists and involves more than checking a box on a checklist or signing a review. MSHA recommends that, to avoid any confusion or inconsistency, the finding be changed and more accurately

stated as “District Managers’ rationale not always documented”. Please see MSHA’s comments in response in the next section.

2. The Draft Report states on page 5:

“Despite MSHA’s efforts, the conditions we identified in 2008 still existed during the course of this audit. Of the 176 coal mine roof control plan decision files we reviewed, 31 (18 percent) had incomplete or missing transmittal sheets or checklists, meaning they lacked supporting documentation for the rationale behind roof control plan decisions. Three of the files we reviewed had 2 issues each, for a total of 34 exceptions.”

MSHA Response: As the OIG acknowledged, they did not review the roof control plans to determine their effectiveness in controlling roof/rib fall hazards. The most important objective MSHA focused on was implementing effective plans and proactive actions to prevent mining deaths and injuries. MSHA believes that plans approved by the Agency since the 2008 OIG audit have accomplished this desired objective.

Of the 176 coal mine roof control plan decision files that the OIG reviewed in this audit, they state that 31 had incomplete or missing transmittal sheets or checklists. Six of the 31 had incomplete documentation consisting of missing signatures or initials, unmarked checkboxes, or other missing documentation:

- In three files, the signatures and dates were all there; however one box was not checked for the recommended action by one person.
- In one file, the field office supervisor did not sign the 2000-204 form; however no deficiencies were reported by the inspector.
- In one file, the extended cut checklist was missing for a plan; however, the plan contained all the necessary precautions and had no deficiencies.
- Some districts were unable to locate six files missing documentation related to checklists. However, the districts went back into their files and confirmed that the evaluation of extended cuts and quarterly and six-month reviews had been performed.
- One district used checklists to support the roof control plan addendum decisions, however, did not maintain checklists for 21 files. This practice has been corrected.

3. The Draft Report states on page 6:

“Additionally, of the 176 roof control plan submissions we reviewed, mine operators withdrew 13 and CMS&H Districts disapproved 20 (not included in the table above). CMS&H did not require District Managers to maintain supporting documentation for plans that had been withdrawn or disapproved. However, the Districts did not apply this policy consistently. We found documentation in about half (9 out of 20) of the disapproved cases. While we agree MSHA does not need to maintain documentation when an operator voluntarily withdraws its plan and while we make no formal recommendation to this effect, we believe

maintaining a written record of the decision-making process in disapproved cases would be beneficial. MSHA has no official record of the disapproval other than the letter it sends to the mine operator and no way to audit the decision-making process if the documentation is discarded after review."

MSHA Response: MSHA agrees that there is no requirement, in regulation or policy, to document withdrawn or disapproved plans and we are pleased that the OIG did not recommend documentation in 2008 and is not recommending documentation in this draft report for these plans. It is important to note that MSHA guidance only requires that records be retained for approved plans. CMS&H Memo No.HQ-08-059-A states "all documentation (MSHA Form 2000-204, checklists, drawings, sketches, etc.) explaining the rationale and supporting the decision of the roof control plan approval and associated six-month plan review will be maintained as part of the roof control file for that mine." Districts do not maintain copies of checklists and forms if operator roof control plans are either withdrawn or disapproved, nor are they required to do so. We do think it is important to emphasize that plans are sometimes withdrawn by the mine operators prior to an MSHA review. It is unreasonable to expect MSHA to maintain any written record other than an initial tracking sheet if there was no review conducted. For disapproved plans, MSHA specifically lists the reasons in the disapproval letter to the operator as to why the plan is being denied. That is considered the written record and is maintained in the files. The regulations mandate in 30 CFR 75.220(b)(2) that "When approval of a proposed plan or revision is denied, the deficiencies of the plan or revision and recommended changes will be specified and the mine operator will be afforded an opportunity to discuss the deficiencies and changes with the District Manager."

Finding 3 – MSHA Enforcement Personnel Did Not Document All Required Roof Control Plan Monitoring Activities.

1. The Draft Report states on page 7:

"We found enforcement personnel were not always documenting discussions with miners in their field notes. Of the 123 E01 inspection notes we reviewed, two-thirds did not document the enforcement personnel's discussion with miners about roof control plan training. Other issues included no documentation of discussions with miners regarding current mining activities and conditions; no evidence of supervisory reviews; and no evidence of the enforcement personnel's roof/rib observations. To its credit however, MSHA reviewed roof control plans during E01 inspections twice as often as are required by law--four times per year."

MSHA Response: Based on the Agency's past enforcement practices, MSHA believes that the OIG has stated a very literal interpretation of what is required in inspector notes regarding questioning miners on roof control conditions and training. Based on that interpretation, and the information that the OIG accepted, two-thirds of the inspectors' notes reviewed did not explicitly document discussions with miners.

When MSHA inspects a mining section, an inspector observes: roof conditions; the mining cycle; cites violations observed (including roof control); and discusses concerns miners may have with any plans, including the roof control plan and work practices. MSHA believes that these actions by the inspector adequately address the OIG recommendation dealing with questioning miners and addressing the adequacy of roof control plans and the miners' training. Inspectors also mention in their notes whether miners were knowledgeable about the roof control plan – again this is to reflect whether the training was adequate. If the inspector's assessment is that the miner's training is inadequate, an enforcement order is issued, and the miner is withdrawn, in accordance with the Mine Act, until the operator is able to produce evidence that the withdrawn miner has been trained. There are also instances where MSHA may not talk to miners regarding roof control due to the nature of the inspection and the availability of miners. Some of the required MSHA inspections occur in areas where no miners are working on that particular day. In addition, the CMS&H memorandum of June 30, 2008 does not require the level of specificity in the notes that the OIG recommends.

MSHA believes that additional clarification on E20 Technical Investigations is necessary. An E20 investigation is similar to a spot inspection because the investigation is directed to a specific purpose or area of the mine. E20 investigations are directed specifically to roof control. Contrary to the OIG footnote 1 on page 3, an E20 is not conducted on an *ad hoc* basis. Due to the fact that these investigations are directed to a specific purpose or area of the mine, they are usually short in duration with most being completed in one day. It is not uncommon, because of the defined nature of these investigations, that E20s occur in areas of the mine where miners do not normally work or travel. Examples of these types of investigations would be the evaluation of the support system utilized in a longwall tailgate entry or bleeder system, or an investigation of a roof fall. During these investigation activities, the inspector may not generally come in contact with anyone, and thus not be able to either discuss or question miners to determine whether the roof control plan is adequate or to question miners to determine whether their training on the roof control plan is complete and adequate.

MSHA acknowledges that there are instances where the questioning of miners and documentation has not occurred. MSHA recently updated the Coal Mine Safety and Health General Inspection Procedures Handbook and will implement the revised handbook on April 1, 2013. The handbook has been updated to include the June 30, 2008 memorandum and coal mine inspectors were retrained on the requirements.

MSHA acknowledges that the June 30, 2008 guidance was unclear on E01 and E20 and the Agency will clarify this guidance, particularly as to E20 investigations.

RECOMMENDATIONS

1. The Draft Report includes three recommendations on page 10:

"We recommend the Assistant Secretary for Mine Safety and Health:

1. *Develop a centralized policy and procedure process for all program areas that:*
 - *requires Districts to update SOPs for all new or revised guidance;*
 - *includes a review of new or updated District-issued SOPs; and*
 - *incorporates a periodic review of all Districts' SOPs to ensure they include all mandated policies;"*
2. *Require Districts to immediately implement steps that ensure:*
 - *roof control plan files contain complete documentation to support the rationale for roof control plan decisions;*
 - *E01 and E20 documentation includes all required activities; and*
3. *Ensure future training for roof control personnel involved in reviewing, approving, and monitoring roof control plans includes file documentation requirements and documentation of required discussions with miners.*

MSHA Response: MSHA has undertaken a major overhaul of the agency's directives system and reestablished, effective March 22, 2013, the centralized directives management functions for maintaining and overseeing the Directives System in MSHA's Office of Program Evaluation and Information Resources. MSHA will assess the best approach to address district SOP's so as to streamline the guidance and not create unnecessary burdens that detract from the Agency's mission and support improved mine safety.

MSHA has expressed disagreement with the OIG that these management controls must be included in district SOPs. As the Agency has discussed with the OIG, the management controls are included in other written management systems in addition to SOPs, such as the plan tracking system, plan transmittal sheets, and checklists. A review of all district SOPs, as recommended by the OIG, is a major undertaking in a time of limited resources. At the field level, SOPs are implemented for workflow and can be as varied as certifying timesheets to plan reviews. This recommendation does not make mines safer or the Agency's procedures more effective and efficient. Rather, it diverts valuable Headquarters and field resources from mission-critical work-- that can make mines safer-- to address administrative procedures. As noted, district SOPs are the domain of the District Manager and do not require oversight of Headquarters staff. However, in light of the concerns that OIG has raised, the Agency will revise the Manual to clarify guidance on management controls and district SOPs.

MSHA agrees with Recommendation 2. To address this recommendation, the Agency will revise instructions to the Districts to clarify the roof control documentation guidance on E01 inspections and E20 technical investigations. The new Roof Control Handbook and the revisions to the Program Policy Manual will be incorporated in the new MSHA centralized administrative policy and procedures review system for directives. Ongoing work to address the recommendations of the Upper Big Branch Internal Review Report will also address some of the items in the OIG follow-up audit on Crandall Canyon.

Recommendation 3. MSHA agrees with the spirit of this recommendation and, on an annual basis, provides training to individuals who are involved in roof control plan review and approval. The Agency will assess the best way to implement this recommendation so as not to create unnecessary burdens that detract from the Agency's mission and supports improved mine safety. The Agency has already provided training to address the documentation requirements discussed in the OIG report on roof control files and questioning miners.