

DEPARTMENT OF LABOR

Mine Safety and Health Administration

30 CFR Part 75

RIN 1219-AB85

Request for Information to Improve the Health and Safety of Miners and to Prevent Accidents in Underground Coal Mines

AGENCY: Mine Safety and Health Administration, Labor.

ACTION: Request for information.

SUMMARY: The Mine Safety and Health Administration (MSHA) is requesting information on mine ventilation and roof control plans; atmospheric monitoring systems and new technology for remote monitoring systems; methods to suppress the propagation of coal dust explosions; and criteria and procedures for certification, recertification, and decertification of persons qualified to conduct mine examinations. These issues were raised in reports on the coal dust explosion that occurred at the Upper Big Branch Mine on April 5, 2010. After reviewing the recommendations in these reports and related National Institute for Occupational Safety and Health research, MSHA is seeking information and data that will help improve the health and safety of underground coal miners. Submitted information

will assist MSHA in determining appropriate regulatory actions.

DATES: Comments must be received by midnight Eastern Standard Time on [Insert date 60 days after the date of publication in the FEDERAL REGISTER].

ADDRESSES: Submit comments, identified by "RIN 1219-AB85", by any of the following methods:

- *Federal E-Rulemaking Portal:*
<http://www.regulations.gov>. Follow the on-line instructions for submitting comments for Docket Number MSHA-2014-0029.
- *Electronic mail:* zzMSHA-comments@dol.gov. Include "RIN 1219-AB85" in the subject line of the message.
- *Mail:* MSHA, Office of Standards, Regulations, and Variances, 1100 Wilson Boulevard, Room 2350, Arlington, Virginia 22209-3939.
- *Hand Delivery/Courier:* MSHA, Office of Standards, Regulations, and Variances, 1100 Wilson Boulevard, Room 2350, Arlington, Virginia, between 9:00 a.m. and 5:00 p.m. Monday through Friday, except Federal holidays. Sign in at the receptionist's desk on the 21st floor.

Instructions: All submissions received must include the Agency name "MSHA" and Docket Number "MSHA-2014-0029" or "RIN 1219-AB85." All comments received will be posted without change to <http://www.regulations.gov>, under Docket Number MSHA-2014-0029, and on <http://www.msha.gov/currentcomments.asp>, including any personal information provided.

Docket: For access to the docket to read background documents or comments received, go to <http://www.regulations.gov> or <http://www.msha.gov/currentcomments.asp>. Review comments in person at the Office of Standards, Regulations, and Variances, 1100 Wilson Boulevard, Room 2350, Arlington, Virginia, between 9:00 a.m. and 5:00 p.m. Monday through Friday, except Federal Holidays. Sign in at the receptionist's desk on the 21st floor.

FOR FURTHER INFORMATION CONTACT: Sheila A. McConnell, Acting Director, Office of Standards, Regulations, and Variances, MSHA, at mcconnell.sheila.a@dol.gov (e mail); 202-693-9440 (voice); or 202-693-9441 (facsimile). These are not toll-free numbers.

SUPPLEMENTARY INFORMATION

Availability of Information.

MSHA maintains a mailing list that enables subscribers to receive an e-mail notification when the Agency publishes rulemaking documents in the *Federal Register*. To subscribe, go to

<http://www.msha.gov/subscriptions/subscribe.aspx>.

I. Background

On April 5, 2010, a coal dust explosion occurred at the Upper Big Branch Mine-South (UBB) in Montcoal, West Virginia. MSHA initiated an accident investigation on April 7, 2010 under the authority of the Federal Mine Safety and Health Act of 1977 (Mine Act). MSHA issued an accident investigation report on December 11, 2011, titled, "A Report of Investigation, Fatal Underground Mine Explosion, April 5, 2010, Upper Big Branch Mine-South, Performance Coal Company, Montcoal, Raleigh County, West Virginia, ID No. 46-08436."

In addition to MSHA's accident investigation report, MSHA announced on May 4, 2010, a separate internal review of MSHA's actions prior to the explosion at the Upper Big Branch Mine. On March 6, 2012, MSHA issued the Internal Review (IR) report of the Agency's enforcement actions titled "Internal Review of MSHA's Actions at the Upper Big

Branch Mine-South, Performance Coal Company, Montcoal, Raleigh County, West Virginia". The IR report compared MSHA's actions with the requirements of the Mine Act and MSHA's standards, regulations, policies, and procedures. The report recommended changes to regulations and standards that would improve the health and safety of underground coal miners by protecting them from the hazards that caused or contributed to the explosion. The IR report included recommendations to improve regulations and standards regarding mine ventilation; atmospheric mine monitoring systems; rock dusting; and certification, re-certification, and decertification of persons certified to conduct mine examinations in underground coal mines. Both the IR and Accident Investigation (AI) reports recommended that the Assistant Secretary consider rulemaking to improve mine health and safety. The combined recommendations were listed in the IR report.

Following the explosion at UBB, the Secretary of Labor, on April 16, 2010, requested that NIOSH independently assess MSHA's internal review of its enforcement actions at UBB. NIOSH identified and appointed a panel to conduct an independent assessment (the Independent Panel). On March 22, 2012, the Independent Panel issued its report titled "An Independent Panel

Assessment of an Internal Review of MSHA Enforcement Actions at the Upper Big Branch Mine South Requested by The Honorable Hilda L. Solis, Secretary, U.S. Department of Labor" (IP Assessment). In its report, the Independent Panel recommended that MSHA address the technical deficiencies in current mining practices that could compromise safety.

II. Information Request

This request for information is based on recommendations in the AI, IR, and IP Assessment reports. MSHA seeks input from industry, labor, and other interested parties to assist the Agency in determining whether regulatory action is needed and, if so, what type of regulatory changes would be appropriate to improve health and safety in underground coal mines. The reports on the UBB mine explosion identified several areas where additional rulemaking could be used to improve health and safety in underground coal mines.

In section A, MSHA is requesting information on issues related to the requirements for developing and implementing roof control and mine ventilation plans in underground coal mines. In section B, MSHA is requesting information on issues related to the use, calibration, and maintenance of atmospheric monitoring systems (AMS) and new technology for

remote monitoring systems. In section C, MSHA is requesting information on whether specifications contained in the definition of rock dust could be changed to improve its effectiveness in suppressing the propagation of coal dust explosions. In section D, the Agency is seeking information on whether surface moisture should be excluded from the determination of total incombustible content (TIC) of mixed dust. In section E, MSHA is requesting information on mine operator experiences with the coal dust explosibility meter (CDEM), the cleanup program under 30 CFR 75.400-2, and rock dusting. MSHA is also requesting information on the experiences of mine operators who have used other methods of testing for the explosibility of the dust in their mines. In section F, the Agency is seeking information on the use of active and passive explosion barriers. Finally, in section G, MSHA is requesting information on criteria and procedures for certification, recertification, and decertification of certified persons. MSHA is particularly interested in information regarding persons who conduct examinations and tests in accordance with MSHA's ventilation standards.

When responding, please address your comments to the topic and question number. For example, the response to section A. Requirements for Developing and Implementing

Roof Control and Mine Ventilation Plans, Question 1, would be identified as "A.1." Please explain the rationale supporting your views and, where possible, include specific examples to support your rationale. Provide sufficient detail in your responses to enable proper Agency review and consideration. Identify the information on which you rely and include applicable experiences, data, models, calculations, studies and articles, standard professional practices, availability of technology, and costs.

MSHA invites comment in response to the specific questions posed below and encourages commenters to include any related cost and benefit data, and any specific issues related to the impact on small mines.

A. Requirements for Developing and Implementing Roof Control and Mine Ventilation Plans.

MSHA standards require the submission and approval of roof control and ventilation plans prior to their implementation, but do not require the operator to designate a person to be responsible for the mine's plans. The IP Assessment recommended that mine operators hire in-house plan specialists who would be certified roof control and ventilation officers to oversee plan implementation and to coordinate day-to-day actions.

MSHA is considering changes to regulatory requirements to improve roof control plans (30 CFR 75.220 and 75.223) and mine ventilation plans (30 CFR 75.370 and 75.371). These changes could add requirements that would provide mine operators, miners, and MSHA personnel with increased assurance that plans are developed, implemented, and maintained according to the conditions at the mine. These changes could improve roof control and ventilation plans, and in conjunction with additional requirements for mine monitoring, would give mine operators information needed to evaluate mine conditions. To assist MSHA in determining how the ventilation and roof control standards could be improved, please respond to the following questions.

1. What health and safety benefit could result from requiring mine operators to designate a mine management employee, who is a credentialed professional, to be responsible for development and implementation of approved roof control and ventilation plans?

2. What knowledge, skills, abilities, or licensure would this credentialed professional need in order to develop, implement, and monitor roof control and ventilation plans?

The following recommendations were made in MSHA's reports to improve the ventilation in underground coal mines:

- Consider rulemaking to require that the minimum quantity of air be at least 75,000 cubic feet per minute (cfm) reaching the working face of each longwall mechanized mining unit (MMU).
- Establish progressive increases in the minimum quantity of air according to the mine methane liberation rate or the established schedule for spot inspections at 103(i) mines, such as 15, 10, and 5-day spot inspections. A 103(i) mine is a mine that has experienced, within the last 5 years, an ignition or explosion of methane or other gases that resulted in a fatality or in a permanently disabling injury.
- Consider respirable dust compliance as an additional factor for increasing the intake air quantity approved in the ventilation plan.
- Consider rulemaking to require the use of equipment doors in lieu of permanent stoppings, or to control ventilation within an air course, subject to approval in the mine ventilation plan.

- To maintain the separation of air courses, consider rulemaking to require that all equipment doors installed in travelways use an interlock system to ensure that only one door can be opened at a time.

3. Please comment on the recommendation to increase the minimum quantity of air. What are the advantages, disadvantages, impact on miner health and safety, and costs associated with an increase in the minimum quantity of air for longwall mines? How could this minimum quantity of air be determined and where would it be measured?

4. What is the most effective way to control methane, oxygen, and respirable dust levels to assure the health and safety of miners?

5. Please comment on equipment doors: their use, location, approval, advantages, disadvantages and impact on miner health and safety. Also comment on the use of equipment doors in travelways, including the use of an interlock system. What are the advantages, disadvantages, impact on miner health and safety, and costs of using interlock systems on equipment doors?

B. Atmospheric Monitoring Systems and New Technology for Remote Monitoring Systems.

Atmospheric Monitoring Systems (AMS) are a reliable method for early detection of fires along belt conveyors

and for monitoring several other mine-ventilation-related parameters. Hand-held and machine-mounted gas detectors are used extensively underground, primarily to monitor methane and oxygen concentrations. MSHA is exploring the expanded use of coordinated monitoring systems to monitor methane and carbon monoxide levels, air velocities and directions, pressure differentials, and other parameters at critical locations to help mine operators maintain effective ventilation and diagnose system failures or deficiencies.

The following recommendations were in the IR report:

- Modify 30 CFR 75.342(a)(2) to require additional methane sensors to be installed along the longwall face and to be tied into an AMS for the mine. These sensors should be placed along the face at various distances and heights to aid in the detection of methane during normal mining and in the event of a methane inundation. These additional sensor locations should be approved by the District Manager in the mine ventilation plan; and
- Require an AMS to provide real-time monitoring of methane and carbon monoxide levels and airflow direction, and to record the quality and quantity of air at specific points in the mine. For example,

monitor where air reversals are likely to impact the ventilation system, outby loading points, where air courses split, and at certain intervals along the belt.

6. Continuous remote monitoring systems, such as AMS and tube bundle systems, can be used to detect unexpected ventilation system changes or methane inundations. Please comment, including rationale, on whether and under what circumstances MSHA should require the use of a continuous remote monitoring system. Please include impact on miner health and safety, impact on mining method, and any other related impact. What would be the costs to add monitoring systems or to extend existing systems in mines?

7. Where should continuous remote monitoring systems be installed in underground coal mines? Please be specific as to locations and provide rationale, including the impact on miner health and safety.

8. Under what conditions should additional gas monitoring sensors and sensors that measure air velocity and direction be used to monitor the longwall face and its tailgate corner to minimize accumulations of methane, other gases, and dust? Where should these sensors be located?

9. What are the advantages, disadvantages, and costs of continuously monitoring the underground coal mine

environment for accumulations of gases, air velocity, and airflow direction?

10. How could continuous remote monitoring technology be linked to communication and tracking technology to form an integrated monitoring system? Please explain.

11. How can integrated monitoring systems be linked to machine-mounted monitors? What are the advantages, disadvantages, impact on miner health and safety, and costs of integrated monitoring systems?

12. What types of continuous remote monitoring systems can continue to safely operate and function after an explosion, fire, or any other mine accident? How long can such systems operate after an explosion or fire, since power is likely to be deenergized due to the emergency? What can be done to improve the survivability and reliability of continuous remote monitoring systems after an explosion or fire?

13. What types of technologies exist to remotely determine methane-air mixtures and other gas, dust, and fume levels in bleeders and bleederless ventilation systems, other than traditional AMS and tube-bundle systems? Please be specific and note if this technology is practical and feasible.

14. MSHA is aware that fiber optic systems are being developed that would transmit data to a central location on the surface of the mine. Please provide system capabilities, specifications, and cost information on these systems, as well as any other relevant technologies.

15. If fiber optic technology is capable of operation when electrical power is deenergized underground, how long can such systems remain operable after power is deenergized? What is the maximum distance such technology is capable of transmitting data to the mine surface?

16. Please describe how fiber optic technology can be used in areas of the mine that require the use of permissible or intrinsically safe equipment.

C. Rock Dust.

Mine operators are required to use rock dust that meets the definition of rock dust in 30 CFR 75.2. This standard specifies that rock dust material be pulverized limestone, dolomite, gypsum, anhydrite, shale, adobe, or other inert material, preferably light colored. In addition, 100 percent of the particles must pass through a sieve having 20 meshes per linear inch and 70 percent or more must pass through a sieve having 200 meshes per linear inch. The definition specifies that rock dust particles, when wetted and dried, will not cohere to form a cake that

is not dispersed into separate particles by a light blast of air. In addition, the definition specifies that rock dust must not contain more than 5 percent combustible matter or more than a total of 4 percent free and combined silica or, where the Secretary finds that such silica concentrations are not available, must not contain more than 5 percent of free and combined silica.

MSHA has worked cooperatively with NIOSH on rock dust research and on the development and field testing of the CDEM. NIOSH completed development of the CDEM and field-tested it with MSHA's assistance beginning in December 2009. NIOSH researchers published a report, titled "MSHA CDEM Survey and Results," that summarized the results of this CDEM field study (Harris et al., 2011). MSHA inspectors used the NIOSH-developed prototype CDEM in conjunction with routine dust compliance surveys (conducted under 30 CFR 75.403) to collect the data shown in the report. MSHA inspectors also collected rock dust samples as part of the CDEM field study.

NIOSH analyzed the rock dust samples and reported in Hazard ID 16 - Non-Conforming Rock Dust (October 2011), that the investigation of rock dust revealed two significant concerns with the supply of rock dust used in U.S. mines: insufficient quantity of particles finer than

200 mesh (75 µm) and the tendency of rock dust to form a cake when wetted and subsequently dried.

MSHA issued PIB No. P11-50 on October 27, 2011, titled "Rock Dust Composition, 30 CFR 75.2" that reiterated information contained in NIOSH Hazard ID 16 (October 2011). MSHA stated in PIB No. P11-50 that the particle size issue and the caking issue indicate a possible lack of product quality control.

To assist MSHA in making determinations with respect to rock dust, please respond to the following questions.

17. What specific tests should be performed to monitor the quality of rock dust to assure that the rock dust will effectively suppress an explosion in the mine environment?

18. What materials produce the most effective rock dust?

19. What are the advantages, disadvantages, impact on miner health and safety, and costs of limiting rock dust to light-colored inert materials, such as limestone and dolomite?

20. Please provide information on the types of impurities that could degrade rock dust performance. What tests or methods can be used to detect the presence of impurities?

21. What particle size distribution for rock dust would most effectively inert coal dust? What should be the maximum particle size? What should be the minimum particle size? Please explain and provide the rationale for your answer.

22. Determination of fine particle size of rock dust by sieving may be complicated by static agglomeration. What test methods should be used to measure the size distribution of rock dust to ensure consistent quality? What are the advantages, disadvantages, and costs of these test methods?

23. How can the potential of rock dust to cake be minimized? Are objective and practical tests available to determine the caking potential of rock dust? If so, please explain and provide documentation.

24. Please provide information on how fine particles (less than 10 μm) may increase the likelihood of caking in rock dust.

25. Can rock dust be treated with additives that would reduce caking? Would the additive enhance or diminish the ability of the rock dust particles to quench a coal dust explosion and, therefore, impact the effectiveness of the rock dust to inert coal dust? Please provide information on the chemical composition of any

suggested additives, the quantities needed, costs, and potential impact on miner health and safety. If available, what areas of an underground coal mine would need to be treated with non-caking rock dust? Please explain and provide the rationale for your answer.

26. Applied rock dust must be dispersible to inert an explosion. What in-mine tests can be used to determine the caking resistance (i.e., dispersibility) of applied rock dust?

27. How does combustible material degrade the performance of rock dust? How should MSHA modify the existing specification in the definition of rock dust? Please explain and provide documentation.

28. How should MSHA modify the existing requirement for free and combined silica in the definition of rock dust? Please explain and provide documentation.

29. How can the respirable particle size fraction of rock dust, i.e., less than 10 μm , be limited, while maintaining the effectiveness of the dust to suppress the propagation of a coal dust explosion? Please explain.

D. Surface Moisture and Total Incombustible Content.

The IR report recommended that MSHA amend existing standards to exclude surface moisture from the determination of TIC. (See 30 CFR 75.403 and 75.403-1).

In addition, Harris *et al.* (2010) recommended that surface moisture be excluded from the measurement of TIC due to the potential variability in moisture content of the combined coal dust, rock dust, and other dust within a mine.

30. What are the advantages, disadvantages, and costs of excluding surface moisture from the definition of TIC?

E. Operator Experiences with the Coal Dust Explosibility Meter (CDEM), Cleanup Program, and Rock Dusting.

MSHA has worked cooperatively with NIOSH on the development and field testing of the CDEM. NIOSH completed development of the CDEM and field-tested it with MSHA's assistance beginning in December 2009. NIOSH researchers published a report, titled "MSHA CDEM Survey and Results," that summarized the results of this CDEM field study (Harris *et al.*, 2011). MSHA inspectors used the NIOSH-developed prototype CDEM in conjunction with routine dust compliance surveys (conducted under 30 CFR 75.403) to collect the data shown in the report.

MSHA stated in the final rule on "Maintenance of Incombustible Content of Rock Dust in Underground Coal Mines," published on June 21, 2011 (76 FR 35968, at 35972), that—

... [t]he CDEM is intended to be used by mine operators and MSHA as a screening tool inside the mine to assess the explosion hazard potential in

real time and take prudent actions to mitigate the hazard. The CDEM is not intended to replace the current MSHA laboratory analysis of coal mine dust samples for incombustible content, but to serve as a supplemental device for enhancing mine safety through improved rock dusting practices.

In addition, the IR report recommended that MSHA should consider rulemaking to require mine operators to regularly determine the adequacy of rock dusting using a method approved by the Secretary. The IR report stated that this could be achieved by requiring mine operators to sample mine dust for analysis or conduct CDEM testing at sufficient locations and intervals to determine if any area of the mine needs re-dusting. The IR report further recommended that the rule should consider requirements for certification, recordkeeping (including a map of sample locations), and corrective actions similar to examination standards.

In light of this recommendation, MSHA requests the following information from mine operators:

31. What experience do you have with CDEMs, including use, maintenance, calibration, and costs? Based on your experience, how can CDEMs be used to help prevent coal dust explosions? What benefits have you experienced? What limitations have you encountered?

32. To what extent are mine operators using other methods to assess explosibility (i.e., laboratory TIC or volumeter testing)? How long does it take to get results from these test methods?

33. What are the advantages, disadvantages, and costs of these methods? What are the benefits and limitations of each of these methods?

34. How often should mine operators test for explosibility? Where should mine operators test for explosibility in mines?

35. How should mine operators assess their rock dust applications?

36. What records should mine operators be required to retain to verify that they have tested for explosibility?

The IR report also recommended that MSHA consider rulemaking to revise 30 CFR 75.402 to require the use of:

- High-pressure rock-dusting machines to continuously apply rock dust into the air stream at the tailgate end of the longwall face whenever cutting coal; and
- Rock-dusting machines to regularly apply rock dust at the outby edges of active pillar lines on retreating continuous mining machine sections and at approaches to inaccessible areas downwind of coal dust generating sources.

In light of these recommendations, MSHA requests the following information from mine operators:

37. In what additional areas of underground coal mines should the operator apply rock dust continuously or regularly?

38. What conditions necessitate the reapplication of rock dust to previously treated areas?

F. Active and Passive Explosion Barriers Used to Suppress the Propagation of a Coal Dust Explosion.

The IP Assessment recommended that MSHA determine the relative merits of applying passive or active explosion barriers in specific circumstances. Explosion barriers remove heat from an explosion by engulfing the area of the barrier in an incombustible cloud of inert material like rock dust or water. These barriers are not used in underground coal mines in the United States. However, other countries allow the use of explosion barriers in underground coal mines.

These explosion barriers are designed to be activated by the pressure wave in front of a coal dust explosion. The barriers flood the area with either water or rock dust which renders any suspended coal dust inert (Cain 2003). Passive barriers quench coal dust explosions when the explosion shock wave traveling in advance of the explosion

flame disturbs the barrier. Active barriers contain sensors that detect the approach of the flame and trigger a positive pressure system to flood the area with water or rock dust to quench the flame (Cain 2003).

39. What types of active or passive explosion barriers could be used and where could they be used in underground coal mines? How does the movement of equipment and personnel affect the effectiveness of explosion barriers to quench a coal dust explosion?

40. What are the advantages, disadvantages, impact on miner health and safety, and costs of installing and maintaining active and passive explosion barriers?

G. Certification, Recertification, and Decertification of Persons Certified to Conduct Mine Examinations in Underground Coal Mines.

MSHA's standards at 30 CFR 75.360, 75.361, 75.362, and 75.364 require that preshift, on-shift, supplemental, and weekly examinations be performed by persons who have been certified by MSHA or a State. A certified person, defined in 30 CFR 75.2 and addressed in 30 CFR 75.100, is a person who has been certified as a mine foreman (mine manager), an assistant mine foreman (section foreman), or a preshift examiner (mine examiner). Under 30 CFR 75.100, a person can become certified through an MSHA-administered program

or a State-administered program. A person must satisfy the criteria specified in 30 CFR 75.100 to obtain an MSHA certification.

Most State certifications are conditional on age and mining experience, specified training, and an examination. The criteria for certification and the types of certification, however, vary across States. The IR report recommended that MSHA supplement the recent rulemaking on Examinations of Work Areas in Underground Coal Mines, published on April 6, 2012 (77 FR 20700), as follows:

... to require federal certification requirements, procedures, and time limits for re-certification of certified persons (including mine superintendents). ... [and] provide procedures and criteria for the revocation of certifications (decertification of certified persons) for certain violations, including knowing and willful violations, advance notice of inspections, making any false statement, and smoking or carrying smoking materials.

In response to these recommendations, MSHA is considering changing existing certification criteria and establishing criteria and procedures for renewal, decertification, and recertification of persons certified under 30 CFR 75.100 to conduct mine examinations in underground coal mines.

If your State administers a program to certify persons to conduct mine examinations in underground coal mines, please respond to the following questions:

41. What criteria and procedures does the State use for certifying persons to perform mine examinations?

42. If the State requires that certified persons renew their certifications, what procedures are used for a renewal of a certification? Does the State recognize or accept other State certifications? Please provide examples.

43. If the State also has a decertification program, what criteria and procedures are used to suspend or decertify a person's certification? What procedures are used to recertify a person after a suspension or decertification?

44. How does the State notify mine operators and other States that it has decertified or recertified a person to conduct mine examinations? What types of actions are taken by other States based on your State's decertification?

In addition, MSHA requests the following information:

45. What criteria should a miner meet to be a certified person to conduct mine examinations under 30 CFR

75.100, e.g., minimum age, years of experience, education, knowledge, training, and other skills?

46. What criteria and procedures would you recommend for the suspension or decertification (revocation) of a person's certification? What criteria and procedures would you recommend for recertification? Please, include time frames for recertification.

47. What are the advantages, disadvantages, and administrative costs of having uniform criteria and procedures for the certification, decertification, and recertification of persons to conduct mine examinations in underground coal mines?

III. Request for Information

Please provide any other data or information that you think would be useful to MSHA in evaluating the effectiveness of its regulations and standards as they relate to the recommendations included in the IR and AI reports and those contained in the IP Assessment report.

List of Subjects

30 CFR Part 75

Coal mines, Mine safety and health, Reporting and recordkeeping requirements, Safety, Underground mining.

Authority: 30 U.S.C. 811.

February 23, 2015

Joseph A. Main
*Assistant Secretary of Labor for
Mine Safety and Health*

*[FR Doc. 2015-03982 Filed 02/25/2015 at 8:45 am;
Publication Date: 02/26/2015]*