

Supporting Statement  
Safety Standards for Roof Bolts in Metal and Nonmetal Mines and  
Underground Coal Mines

| <u>OMB<br/>Control</u> | <u>30 CFR<br/>Citations</u> | <u>Title</u>  |
|------------------------|-----------------------------|---------------|
| 1219-0121              | § 56.3203                   | Rock fixtures |
|                        | § 57.3203                   | Rock fixtures |
|                        | § 75.204(a) & (f)(6)        | Roof bolting  |

**A. Justification**

**1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.**

Accidents involving falls of roof, face, and rib in underground mines or falls of highwall in surface mines, historically, have been among the leading causes of injuries and deaths. Prevention or control of falls of roof, face, and rib is uniquely difficult because of the variety of conditions encountered in mines that can affect the stability of various types of strata and the changing nature of the forces affecting ground stability at any given operation and time. Roof and rock bolts and accessories are an integral part of ground control systems and are used to prevent the fall of roof, face, and rib. Advancements in technology of roof and rock bolts and accessories have aided in reducing the hazards associated with falls of roof, face, and rib.

The American Society for Testing and Materials (ASTM) publication "Standard Specification for Roof and Rock Bolts and Accessories" is a consensus standard used throughout the United States. It contains specifications for the chemical, mechanical, and dimensional requirements for roof and rock bolts and accessories used for ground support systems. The ASTM standard for roof and rock bolts and accessories is updated periodically to reflect advances in technology. The Mine Safety and Health Administration (MSHA) published a final rule on April 28, 1998, replacing the references to outdated ASTM F432-83 and ASTM F432-88 with a new reference to ASTM F432-95.

Title 30 Code of Federal Regulations (30 CFR), Parts 56 and 57 Subpart B-Ground Control, § 56.3203 and § 57.3203, and Part 75 Subpart C-Roof Support, § 75.204, address the quality of roof and rock bolts and accessories and their installation. MSHA's objective in these regulations is to ensure the quality and effectiveness of roof and rock bolts and accessories and, as technology evolves, to allow for the use of new

materials which are proven to be reliable and effective in controlling the mine roof, face, and rib.

30 CFR 56.3203(a), 57.3203(a), and 75.204(a) require: (1) that mine operators obtain a certification from the manufacturer that roof and rock bolts and accessories are manufactured and tested in accordance with the applicable ASTM specifications, and (2) that the manufacturer's certification is made available to an authorized representative of the Secretary of Labor (Secretary).

30 CFR 56.3203(h) and 57.3203(h) require that if the mine operator uses other tensioned and nontensioned fixtures and accessories for ground control that are not addressed by the applicable ASTM standard listed in §§ 56.3203(a) and 57.3203(a), test methods must be established by the mine operator and used to verify their ground control effectiveness. 30 CFR 56.3203(i) and 57.3203(i) require that the mine operator certify that the tests developed under §§ 56.3203(h) and 57.3203(h) were conducted and such certifications be made available to an authorized representative of the Secretary.

30 CFR 75.204(f)(6) requires that the mine operator or a person designated by the operator certify by signature and date the measurements required by paragraph (f)(5) of this section have been made. Paragraph (f)(5) requires that in working places from which coal is produced during any portion of a 24-hour period, the actual torque or tension on at least one out of every ten previously installed mechanically anchored tensioned roof bolts is measured from the outby corner of the last open crosscut to the face in each advancing section. This certification shall be maintained for at least one year and shall be made available to an authorized representative of the Secretary and representatives of the miners.

MSHA has found that the certification requirements have been successful in maintaining compliance with requirements for roof and rock bolts and accessories. Collections of such information are authorized under Section 103(h) of the Federal Mine Safety and Health Act of 1977 (Mine Act).

**2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.**

The manufacturer's certification assures mine operators that the material they use meets technical requirements established to promote safety and eliminates the concern that mine operators need to have the same engineering knowledge of the ASTM standard as manufacturers. The certifications also are made available to an authorized representative of the Secretary to attest to the appropriate testing and manufacture of the rock bolts and accessories.

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection**

**techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.**

No improved information technology has been identified that would reduce the burden.

**4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Item 2 above.**

No similar or duplicate information exists. The certifications are a result of the purchase of roof or rock bolts and accessories from a specific manufacturer by the mine operator. Whereas a single mine operator may collect unique certification statements from each roof and rock bolt manufacturer, the manufacturers are able to use the same certification statement for all mine operators purchasing their products. The § 75.204(f)(6) certification of torque measurements taken under § 75.204(f)(5) are necessarily unique to each mine.

**5. If the collection of information impacts small businesses or other small entities (Item 5 of OMB Form 83-I), describe any methods used to minimize burden.**

This information does not have a significant impact on small businesses or other small entities.

**6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.**

MSHA believes that these information collection requirements are the minimum necessary to ensure that mine roof, face, and rib are adequately supported and that ground control systems are effective. Reduction in these requirements may result in unsafe conditions developing in the mine, thus jeopardizing miners' safety. Section 101(a)(9) of the Mine Act forbids the Agency to reduce the protection given miners by any existing regulation.

MSHA's existing regulations require mine operators to obtain a certification from the manufacturer that rock bolts and accessories are manufactured and tested in accordance with the applicable ASTM standard or, as an alternative for roof and rock bolts and accessories not addressed in the ASTM standard, to show that they have been successful in supporting the roof, face, or rib under similar ground strata, dimensions, and stresses.

**7. Explain any special circumstances that would cause an information collection to be conducted in a manner:**

**\* requiring respondents to report information to the agency more often than**

quarterly;

- \* requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;
- \* requiring respondents to submit more than an original and two copies of any document;
- \* requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years;
- \* in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;
- \* requiring the use of a statistical data classification that has not been reviewed and approved by OMB;
- \* that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or
- \* requiring respondents to submit proprietary trade secrets, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

The information collection is consistent with the requirements in 5 CFR 1320.5.

**8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.**

**Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.**

**Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years - even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.**

In accordance with 5 CFR 1320.8 (d), MSHA will publish the proposed information collection requirements in the Federal Register, notifying the public that these information collection requirements are being reviewed in accordance with the Paperwork Reduction Act of 1995, and giving interested persons 60 days to submit comments.

**9. Explain any decision to provide any payment or gift to respondents, other than**

**remuneration of contractors or grantees.**

MSHA does not provide payments or gifts to respondents.

**10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.**

There is no assurance of confidentiality provided to respondents.

**11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.**

There are no questions of a sensitive nature.

**12. Provide estimates of the hour burden of the collection of information. The statement should:**

**\* Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.**

**\* If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens in Item 13 of OMB Form 83-I.**

**\* Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included in Item 13.**

30 CFR 56.3203(a)(1), 57.3203(a)(1), and 75.204(a)(1) require mine operators to obtain a manufacturer's certification that the material was manufactured and tested in accordance with the specifications of ASTM F432-95. 30 CFR 56.3203(h) and 57.3203(h) allow mine operators to use other tensioned and nontensioned fixtures as long as test methods are established to verify their effectiveness. Certification of these tests are required under §§ 56.3203(i) and 57.3203(i). Metal and Nonmetal mine operators have not exercised this option and use exclusively ASTM-compliant materials.

In general, the manufacturers of roof and rock bolts and accessories provide certification documents with each shipment of those items to mine operators or to vendors of their products. In some instances the certifications may be packed in the shipment; in other instances, the certification documents may be sent with the billing or as a separate communications to the purchaser. Since, in most, if not all cases, the manufacturer provides the required certifications at the time of shipment; the burden experienced in acquiring certification documents is minimal.

Similarly, the certification documents are required to be available for examination by authorized representatives of the Secretary and representative of miners. They are usually only reviewed when a new rock bolting appliance or accessory is being introduced into the mine or an anomalous condition is observed which raises questions about the design of the appliance in use. As a consequence, the number of instances (responses) for receiving and filing certification documents and the number of instances those documents are examined by MSHA inspectors or miners representatives will vary greatly with the size of the mine and the rate at which the appliances are consumed and repurchased. MSHA has provided estimates of the number of responses consistent with and for each of the mine types and standards.

Complete inspections are required under Section 103(a) of the Mine Act four times per year for underground mines and two times per year for surface mines. MSHA estimates that it takes about three minutes (0.05 hour) to obtain, file, and show a certification form. The hourly wage for a supervisor is about \$62.60 per hour in metal and nonmetal (MNM) surface mines and \$66.98 MNM underground mines. It is \$84.69 per hour in coal underground mines (based on figures from the U.S. Coal Mine and Metal and Mineral Industrial Mine Salaries, Wages, & Benefits Survey Results, 2010).

#### **§ 56.3203(a)(1) MNM Surface Mines**

MSHA estimates that 1 MNM surface mine obtains two certifications annually. In addition, the mine operator shows these certifications to authorized representatives twice a year.

Burden Hours:

$$1 \text{ mine} \times 2 \text{ times a year} \times 0.05 \text{ hour/mine} = 0.1 \text{ hours}$$

Hour Burden Cost:

$$0.1 \text{ hour} \times \$62.60/\text{hour} = \$6$$

#### **§ 57.3203(a)(1) MNM Underground Mines**

MSHA estimates that about 229 metal and nonmetal underground mines obtain four certifications annually and that they show these certifications to Authorized Representatives four times per year.

Burden Hours:

$$229 \text{ mines} \times 4 \text{ times/yr} \times 0.05 \text{ hour/mine} = 46 \text{ hours}$$

Hour Burden Cost:  
 46 hours x \$66.98 /hour = \$3081

**§ 75.204(a)(1) Underground Coal Mines**

MSHA estimates that in 2011 about 543 underground coal mines obtained four certifications annually and that they showed these certifications to authorized representatives four times per year.

Burden Hours:  
 543 mines x 4 times/yr x 0.05 hour/mine = 109 hours

Hour Burden Cost:  
 109 hours x \$84.69 = \$9,197

**§ 75.204(f)(6) Underground Coal Mines**

§ 75.204(f)(6) requires that the mine operator or a person designated by the operator certify by signature and date the measurements required by paragraph (f)(5) of this section have been made. In 2011 the average number of active producing underground coal mines over a 12 month period was 442. The average number of days per year these mines operated was 285. MSHA estimates that a person earning a supervisors wage of \$84.69 per hour would take 30 seconds (0.005 hours) to certify by signature and date that the required inspection was done (2010 U.S. Metal and Industrial Mineral Mine Salaries, Wages, and Benefits, Info Mine USA).

Burden Hours:  
 442 mines x 285 days a year x 0.005 hrs. = 630 hours

Hour Burden Cost:  
 630 hours x \$84.69 = \$53,355

**Summary of Burden Hours and Hour Burden Costs**

| Provision                     | Respondents  | Responses      | Hours per Response | Hours      | Total Cost      |
|-------------------------------|--------------|----------------|--------------------|------------|-----------------|
| 56.3203 M/NM Surface          | 1            | 2              | 0.05               | 0.1        | \$6             |
| 57.3203 M/NM Underground      | 229          | 916            | 0.05               | 46         | \$3,081         |
| 75.204(a)(1) Coal Underground | 543          | 2,172          | 0.05               | 109        | \$9,197         |
| 75.204(f)(6) Coal Underground | 442          | 125,970        | 0.005              | 630        | \$53,355        |
| <b>TOTAL</b>                  | <b>1,215</b> | <b>129,060</b> |                    | <b>785</b> | <b>\$65,639</b> |

**13. Provide an estimate for the total annual cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the**

cost of any hour burden shown in Items 12 and 14).

\* The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life) and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.

\* If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collections services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.

\* Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.

MSHA does not anticipate that there will be any costs associated with this information collection other than those designated under number 12 above.

**14. Provide estimates of annualized costs to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information. Agencies may also aggregate cost estimates from Items 12, 13, and 14 in a single table**

The inspecting of roof and rock bolts is just one aspect of a mine inspection. Complete inspections are required under § 103(a) of the Mine Act four times per year for underground mines and two times per year for surface mines. The review of the manufacturer's certification is estimated to take about 3 minutes (0.05 hour) per mine per inspection. The average salary, including benefits, of an inspector is \$61.32 per hour (based on 2010 data from the Office of Personnel Management).



The recurring cost to the Federal Government is estimated to be:

**MNM Surface Mines**

1 mine x 2 inspections/year x 0.05 hour/inspection x \$61.32 /hour = \$ 6

**MNM Underground Mines**

229 mines x 4 inspection/year x 0.05 hour/inspection x \$61.32 /hour = \$2,808.

**Coal Underground Mines**

543 mines x 4 inspection/year x 0.05 hour/inspection x \$61.32 /hour = \$6,659.

Total Costs for Federal Mine Inspectors = \$9,473.

**15. Explain the reasons for any program changes or adjustments reported in Items 13 or 14 of the OMB Form 83-I.**

**Responses:** There was an increase of 125,768 responses (from 3,292 to 129,060). This was due to the additional responses from §75.204(f)(6).

**Respondents:** there was an increase of 382 respondents (from 833 to 1,215). This was due to the additional respondents from §75.204(f)(6).

**Burden Hours:** There was an increase of 620 burden hours (from 165 to 785). This was due to the additional burden hours from §75.204(f)(6) that were not included in the last update.

**Costs:** The cost of \$0 remains unchanged.

**16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.**

MSHA does not intend to publish the results of this information collection.

**17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.**

There are no forms associated with this information collection.

**18. Explain each exception to the certification statement identified in Item 19, "Certification for Paperwork Reduction Act Submissions," of OMB Form 83-I.**

There are no certification exceptions identified with this information collection.

## **B. Collections of Information Employing Statistical Methods**

**1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection methods to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.**

**2. Describe the procedures for the collection of information including:**

- \* Statistical methodology for stratification and sample selection,**
- \* Estimation procedure,**
- \* Degree of accuracy needed for the purpose described in the justification,**
- \* Unusual problems requiring specialized sampling procedures, and**
- \* Any use of periodic (less frequent than annual) data collection cycles to reduce burden.**

**3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.**

**4. Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of test may be submitted for approval separately or in combination with the main collection of information.**

**5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.**

As statistical analysis is not required by the regulation, questions 1 through 5 do not apply.

Federal Mine Safety & Health Act of 1977, Public Law 91-173,  
as amended by Public Law 95-164

MANDATORY SAFETY AND HEALTH STANDARDS

SEC. 101. (a) The Secretary shall by rule in accordance with procedures set forth in this section and in accordance with section 553 of title 5, United States Code (without regard to any reference in such section to sections 556 and 557 of such title), develop, promulgate, and revise as may be appropriate, improved mandatory health or safety standards for the protection of life and prevention of injuries in coal or other mines.

(1) Whenever the Secretary, upon the basis of information submitted to him in writing by an interested person, a representative of any organization of employers or employees, a nationally recognized standards-producing organization, the Secretary of Health, Education, and Welfare, the National Institute for Occupational Safety and Health, or a State or political subdivision, or on the basis of information developed by the Secretary or otherwise available to him, determines that a rule should be promulgated in order to serve the objectives of this Act, the Secretary may request the recommendation of an advisory committee appointed under section 102(c). The Secretary shall provide such an advisory committee with any proposals of his own or of the Secretary of Health, Education, and Welfare, together with all pertinent factual information developed by the Secretary or the Secretary of Health, Education, and Welfare, or otherwise available, including the results of research, demonstrations, and experiments. An advisory committee shall submit to the Secretary its recommendations regarding the rule to be promulgated within 60 days from the date of its appointment or within such longer or shorter period as may be prescribed by the Secretary, but in no event for a period which is longer than 180 days. When the Secretary receives a recommendation, accompanied by appropriate criteria, from the National Institute for Occupational Safety and Health that a rule be promulgated, modified, or revoked, the Secretary must, within 60 days after receipt thereof, refer such recommendation to an advisory committee pursuant to this paragraph, or publish such as a proposed rule pursuant to paragraph (2), or publish in the Federal Register his determination not to do so, and his reasons therefor. The Secretary shall be required to request the recommendations of an advisory committee appointed under section 102(c) if the rule to be promulgated is, in the discretion of the Secretary which shall be final, new in effect or application and has significant economic impact.

\* \* \* \* \*

INSPECTIONS, INVESTIGATIONS, AND RECORDKEEPING

SEC. 103. (a) Authorized representatives of the Secretary or the Secretary of Health, Education, and Welfare shall make frequent inspections and investigations in coal or other mines each year for the purpose of (1) obtaining, utilizing, and disseminating information relating to health and safety conditions, the causes of accidents, and the causes of diseases and physical impairments originating in such mines, (2) gathering information with respect to mandatory health or safety standards, (3) determining whether an imminent danger exists, and (4) determining whether there is compliance with the mandatory health or safety standards or with any citation, order, or decision

issued under this title or other requirements of this Act. In carrying out the requirements of this subsection, no advance notice of an inspection shall be provided to any person, except that in carrying out the requirements of clauses (1) and (2) of this subsection, the Secretary of Health, Education, and Welfare may give advance notice of inspections. In carrying out the requirements of clauses (3) and (4) of this subsection, the Secretary shall make inspections of each underground coal or other mine in its entirety at least four times a year, and of each surface coal or other mine in its entirety at least two times a year. The Secretary shall develop guidelines for additional inspections of mines based on criteria including, but not limited to, the hazards found in mines subject to this Act, and his experience under this Act and other health and safety laws. For the purpose of making any inspection or investigation under this Act, the Secretary, or the Secretary of Health, Education, and Welfare, with respect to fulfilling his responsibilities under this Act, or any authorized representative of the Secretary or the Secretary of Health, Education, and Welfare, shall have a right of entry to, upon, or through any coal or other mine. ...

(h) In addition to such records as are specifically required by this Act, every operator of a coal or other mine shall establish and maintain such records, make such reports, and provide such information, as the Secretary or the Secretary of Health, Education, and Welfare may reasonably require from time to time to enable him to perform his functions under this Act. The Secretary or the Secretary of Health, Education, and Welfare is authorized to compile, analyze, and publish, either in summary or detailed form, such reports or information so obtained. Except to the extent otherwise specifically provided by this Act, all records, information, reports, findings, citations, notices, orders, or decisions required or issued pursuant to or under this Act may be published from time to time, may be released to any interested person, and shall be made available for public inspection.

\* \* \* \* \*

30 CFR Part 56 Subpart B – Ground Control

§ 56.3203 Rock fixtures.

(a) For rock bolts and accessories addressed in ASTM F432-95, "Standard Specification for Roof and Rock Bolts and Accessories," the mine operator shall

- (1) Obtain a manufacturer's certification that the material was manufactured and tested in accordance with the specifications of ASTM F432-95; and

- (2) Make this certification available to an authorized representative of the Secretary and to the representative of miners.

(b) Fixtures and accessories not addressed in ASTM F432-95 may be used for ground support provided they

- (1) Have been successful in supporting the ground in an area with similar strata, opening dimensions and ground stresses in any mine; or

- (2) Have been tested and shown to be effective in supporting ground in an area of the affected mine which has similar strata, opening dimensions, and ground stresses as the area where the fixtures are expected to be used. During the test process, access to the test area shall be limited to persons necessary to conduct the test.

\* \* \*

- (h) When other tensioned and nontensioned fixtures are used, test methods shall be established to verify their effectiveness.

- (i) The mine operator shall certify that tests were conducted and make the certification available to an authorized representative of the Secretary.

30 CFR Part 57 Subpart B – Ground Control

§ 57.3203 Rock fixtures.

(a) When rock bolts and accessories addressed in ASTM F432-83, "Standard Specification for Roof and Rock Bolts and Accessories", are used for ground support, the mine operator shall--

- (1) Obtain a manufacturer's certification that the material was manufactured and tested in accordance with the specifications of ASTM F432-83; and,

- (2) Make this certification available to an authorized representative of the Secretary.

(b) Fixtures and accessories not addressed in ASTM F432-83 may be used for ground support provided they--

(1) Have been successful in supporting the ground in an area with similar strata, opening dimensions and ground stresses in any mine; or

(2) Have been tested and shown to be effective in supporting ground in an area of the affected mine which has similar strata, opening dimensions, and ground stresses as the area where the fixtures are expected to be used. During the test process, access to the test area shall be limited to persons necessary to conduct the test.

\* \* \*

(h) When other tensioned and nontensioned fixtures are used, test methods shall be established and used to verify their effectiveness.

(i) The mine operator shall certify that tests were conducted and make the certification available to an authorized representative of the Secretary.

### 30 CFR PART 75 Subpart C – Roof Support

#### § 75.204 Roof bolting.

(a) For roof bolts and accessories addressed in ASTM F432-95, "Standard Specification for Roof and Rock Bolts and Accessories," the mine operator shall--

(1) Obtain a manufacturer's certification that the material was manufactured and tested in accordance with the specifications of ASTM F432-95; and

(2) Make this certification available to an authorized representative of the Secretary and to the representative of miners.

(b) Roof bolts and accessories not addressed in ASTM F432-95 may be used, provided that the use of such materials is approved by the District Manager based on

(1) Demonstrations which show that the materials have successfully supported the roof in an area of a coal mine with similar strata, opening dimensions and roof stresses; or

(2) Tests which show the materials to be effective for supporting the roof in an area of the affected mine which has similar strata, opening dimensions and roof stresses as the area where the roof bolts are to be used. During the test process, access to the test area shall be limited to persons necessary to conduct the test.

\* \* \*

(5) In working places from which coal is produced during any portion of a 24-hour period, the actual torque or tension on at least one out of every ten previously installed mechanically anchored tensioned roof bolts shall be measured from the outby corner of the last open crosscut to the face in each advancing section. Corrective action shall be taken if the majority of the bolts measured--

(f)(5)(i) Do not maintain at least 70 percent of the minimum torque or tension specified

in the roof control plan, 50 percent if the roof bolt plates bear against wood; or

(f)(5)(ii) Have exceeded the maximum specified torque or tension by 50 percent.

(6) The mine operator or a person designated by the operator shall certify by signature and date that measurements required by paragraph (f)(5) of this section have been made. This certification shall be maintained for at least one year and shall be made available to an authorized representative of the Secretary and representatives of the miners.

\* \* \* \* \*