

## SUPPORTING STATEMENT

Fire Protection (Underground Coal Mines): 30 CFR 75.1100-3: Condition and examination of fire fighting equipment; 30 CFR 75.1103-8: Automatic fire sensor and warning device systems; inspection and test requirements; 30 CFR 75.1103-11: Tests of fire hydrants and fire hose; record of tests; 30 CFR 75.1501(a)(3): Emergency evacuations; 30 CFR 75.1502: Mine emergency evacuation and firefighting program of instruction.

### 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.**

30 CFR 75.1100, which codifies section 311(a) of the Federal Mine Safety and Health Act of 1977 (Mine Act) requires that each coal mine be provided with suitable firefighting equipment adapted for the size and conditions of the mine, and that the Secretary of Labor shall establish minimum requirements of the type, quality, and quantity of such equipment.

30 CFR 75.1100-3 requires that chemical fire extinguishers be examined every 6 months and that the date of the examination be recorded on a permanent tag attached to the extinguisher.

30 CFR 75.1103-8 requires that a qualified person examine the automatic fire sensor and warning device systems on a weekly basis and conduct a functional test of the complete system at least once a year. The mine operator is required to maintain a record of the annual functional test, and such mine operator is also required to keep a record card of the weekly examination at each belt drive.

30 CFR 75.1103-11 requires that each fire hydrant and hose be tested at least once a year and the records of those tests be maintained at an appropriate location.

30 CFR 75.1501(a)(3) requires the operator to certify that each responsible person is trained and that the certification is maintained at the mine for at least one year.

30 CFR 75.1502 requires each mine operator to adopt and follow a mine evacuation and fire fighting program of instruction that addresses all mine emergencies created as a result of a fire, an explosion, or a gas or water inundation. In addition, this section requires mine operators to submit this program of instruction, and any revisions, to MSHA for its approval and to train miners regarding the use of the program of instruction, and any revisions to such program of instruction, after it is approved by MSHA

**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.**

Fire suppression equipment tests are conducted on a regular basis to ensure that all equipment, i.e. §75.1100-3 (chemical fire extinguishers); §75.1103-8 (sensor and warning devices); and §75.1103-11

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(hydrants and their hoses), is in working order and ready for use. MSHA uses the programs, the fire drill and the firefighting equipment certifications to determine whether a mine operator has adequate procedures and equipment to protect miners in the event of a fire.

**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; however, in order to comply with the Government Paperwork Elimination Act, miner operators may retain the records in whatever method they choose, which may include utilizing computer technology.

**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.**

Programs are unique and specific according to the needs of each mine. If similar programs or records are required by States or other organizations, their application as a means of satisfying MSHA's requirements would be acceptable.

**5. If the collection of information impacts small businesses or other small entities (Item 5 of OMB Form 83-1), describe any methods used to minimize burden.**

This information collection does not have a significant impact on a substantial number of small businesses or other small entities. However, MSHA makes available various sources of information to assist our stakeholders. For example, searches can be conducted on MSHA's web-site based on category (e.g. "fire") or mine type (e.g. "coal") to find information on fire extinguishers, fire suppression systems, evacuations, and fire detection systems. In addition, MSHA's web-site also has links related to these issues, such as "Accident Prevention" and "Technical Support."

**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.**

Regular examinations of fire suppression equipment ensure that the equipment is operational and ready for use should a fire occur. Records of these examinations are necessary to ensure that this fire suppression equipment is adequately maintained and available for use in an emergency. Certification of the training for the responsible persons is necessary and is similar to other MSHA training certification requirements. The mine evacuation and firefighting program of instruction is crucial for training miners to respond to mine emergencies, successfully evacuate the mines under dangerous conditions and occupy the refuge alternatives when evacuation is not possible. Variations in mining methods, geology and other conditions require a mine-specific firefighting and evacuation plan. There is no effective substitute for the mine evacuation and firefighting program of instruction. Inadequate training on emergency evacuation techniques and strategies has been a root-cause in several recent mine

disasters.

**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 secret, 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.**

While there is no specific retention requirement for fire suppression examination records, underground coal mine operators are required to have such records during the time their mines are actively operating. There is a one-year retention requirement for the certification of the responsible person training. No records have to be maintained for over three years. This collection of information is otherwise consistent with the guidelines found in 5 CFR 1320.5 and does not contain any requirements for respondents to report more frequently than on a quarterly basis.

**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.**

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**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.**

MSHA published a 60-day preclearance Federal Register notice on July 6, 2009 (Volume 74, Number 127, Page 31977-31978), soliciting public comments regarding the extension of this information collection. One comment was received from the United Mine Workers of America regarding a change in rule making. MSHA's response advised that while we appreciate comments these were not related to paperwork reduction issues.

**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 the respondents identified by this collection.

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

There is no personal information requiring confidentiality. No assurance of confidentiality is provided.

**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 14.**

Under 30 CFR 75.1100-3, chemical fire extinguishers shall be examined every 6 months and the date of the examination recorded on a permanent tag attached to the extinguisher. MSHA records show that in 2009, there were approximately 968 mechanized mining units (MMU's) in operation, each requiring approximately 20 fire extinguishers. Based on data from the U.S. Coal Mine Salaries, Wages & Benefits - 2007 Survey Results, MSHA estimates that it takes a miner earning \$33.70 per hour approximately 2 minutes (0.033 hour) to check each fire extinguisher and record the results on the tag.

Hour Burden:

$$38,720 \text{ (968 MMUs} \times 20 \text{ fire extinguishers/MMU} \times 2 \text{ exams/yr)} \\ \times 0.033 \text{ hour/exam} = 1,278 \text{ hours}$$

Hour Burden Cost:

$$1,278 \text{ hours} \times \$33.70 = \$ 43,069$$

Under 30 CFR 75.1103-8, automatic fire sensor and warning device systems must be inspected weekly, and a functional test of the complete system must be made annually. Records of the inspections and tests must be made by qualified persons and maintained by the mine operator. MSHA estimates that there are approximately 622 underground coal mines equipped with an average of 4 automatic fire sensor and warning device systems per mine. MSHA estimates that it takes a mine supervisor, who is paid \$85.14 per hour, approximately 15 minutes (0.25 hours) to examine each system and approximately 10 minutes (0.17 hour) to certify the weekly examination records.

Hour Burden:

(Weekly Examinations):

$$129,376 \text{ (622 mines} \times 4 \text{ systems/mine} \times 52 \text{ weekly} \\ \text{inspections)} \times 0.25 \text{ hour/inspection} = 32,344 \text{ hours}$$

(Weekly Certification):

$$129,376 \text{ (622 mines} \times 4 \text{ systems/mine} \times 52 \text{ weekly} \\ \text{certifications)} \times 0.17 \text{ hour/certification} = 21,994 \text{ hours}$$

Hour Burden Cost:

$$54,338 \text{ hours} \times \$85.14/\text{hour} = \$ 4,626,337$$

MSHA estimates that it takes a mine supervisor approximately 15 minutes to conduct the annual functional test of the automated fire sensor system.

Hour Burden (Annual Test):

$$2,488 \text{ (622 mines} \times 4 \text{ systems/mine)} \times 0.25 \text{ hour/test} = 622 \text{ hours}$$

Hour burden Cost:

$$622 \text{ hours} \times \$85.14/\text{hour} = \$ 52,957$$

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Under 30 CFR 75.1103-11, each fire hydrant must be tested by opening, and each hose must also be tested. Both tests are to be conducted annually and a record made of each test. MSHA estimates that there are approximately 622 underground coal mines that have an average of 30 fire hydrants per mine, and that it would take a mine supervisor earning \$85.14 per hour approximately 30 minutes (0.5 hour) to conduct the tests and make a record of the results.

Hour Burden:

$$37,320 (622 \text{ mines} \times 30 \text{ hydrants/per mine} \\ \times 2 \text{ tests}) \times 0.5 \text{ hour} = 18,660 \text{ hours}$$

Hour Burden Cost:

$$18,660 \text{ hours} \times \$85.14/\text{hour} = \$ 1,588,712$$

§75.1501(a)(3) requires that the mine operator certify that the responsible persons have been trained annually in mine emergency response coordination and communication. MSHA believes that there would be a backup responsible person for each mine shift because there would be times when the primary responsible person could not be at the mine site. MSHA estimates that the average underground coal mine operates two shifts per day. The operator must certify by signature and date after each responsible person has completed the training and keep the certification at the mine for one year. MSHA estimates that it would take a mine supervisor, who is paid \$85.14 per hour, approximately 90 seconds (0.025 hours) to certify the training, and it would take a clerical employee, who earns \$26.37 per hour, approximately 30 seconds (0.00833 hours) to file each certification.

Hour Burden:

(Certification of Training of Responsible Person):

$$2,488 (622 \text{ mines} \times 2 \text{ shifts} \times 2 \text{ certifications}) \\ \times 0.025 \text{ hours/certification} = 62 \text{ hours}$$

(Filing of Training Certificate):

$$2,488 (622 \text{ mines} \times 2 \text{ shifts} \times 2 \text{ certifications}) \\ \times 0.00833 \text{ hours/certification} = 21 \text{ hours}$$

$$\text{Subtotal} = \underline{83 \text{ hours}}$$

Hour Burden Cost:

$$62 \text{ hours} \times \$85.14/\text{hour} + 21 \text{ hours} \times \$26.37/\text{hour} = \$ 5,833$$

### 30 CFR 75.1502 - Mine Emergency Evacuation and Firefighting Program of Instruction

Each operator of an underground mine shall adopt and follow a mine emergency evacuation and firefighting program that instructs all miners in the procedures they must follow if a mine emergency occurs. Approved mine emergency evacuation and firefighting programs of instruction (PI) should not require regular updates and approvals since these programs should generally be applicable for extended periods. New mines will require the development of mine emergency evacuation and firefighting PI and

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the submission of these programs to the district manager for approval. Considering an estimated average underground coal mine life of four to five years, MSHA believes that approximately 30% of the underground coal mines will develop and submit a mine emergency evacuation and firefighting PI to the district manager for approval annually. This includes a limited number of revisions to existing PI. MSHA estimates that a mine supervisor, who is paid \$85.14 per hour, will require an average of 3 hours to prepare a PI. MSHA also estimates that it would take a clerical worker, who earns \$26.37 per hour, approximately one hour to copy and prepare the PI for mailing to the district manager.

Hour Burden:

(Program of Instruction Development):

187 (622 mines x 0.30 PI/year		
x 3 hours/PI	=	561 hours

(Program of Instruction Copying and Mailing):

187 (622 mines x 0.30 PI/year		
x 1 hours/PI	=	187 hours

Subtotal	=	<u>748 hours</u>
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Hour Burden Cost:

561 hours x \$85.14/hour + 187 hours x \$26.37/hour	= \$	52,695
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<b>TOTAL BURDEN HOURS:</b>	=	<b>75,729</b>
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<b>TOTAL BURDEN COSTS:</b>	=	<b>\$ 6,369,043</b>
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13. Provide an estimate of 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 collection 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.

30 CFR 75.1502 - Mine Emergency Evacuation and Firefighting Program of Instruction

Approved mine emergency evacuation and firefighting programs of instruction (PI) should not require regular updates and approvals since these programs should generally be applicable for extended periods. New mines will require the development of mine emergency evacuation and firefighting PI and the submission of these programs to the district manager for approval. Considering an estimated average underground coal mine life of four to five years, MSHA believes that approximately 30% of the underground coal mines will develop and submit a mine emergency evacuation and firefighting PI to the district manager for approval annually. This includes a limited number of revisions to existing PI.

The average mine emergency evacuation and firefighting PI is estimated to be approximately eight pages in length. Copying costs are estimated at \$0.15 per page and postage and handling is estimated at \$3.00 per PI.

Copying

$$622 \text{ mines} \times 0.30 \text{ PI/year} \times (8 \text{ pages/PI} \times \$0.15/\text{page}) = \$ 784$$

$$622 \text{ mines} \times 0.30 \text{ PI} \times \$ 3.00 \text{ Postage} = \$ 560$$

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$$\text{TOTAL BURDEN COST:} = \$ 1,344$$

**14. Provide estimates of annualized cost 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 also may aggregate cost estimates from Items 12, 13, and 14 in a single table.**

There is no additional cost to the Federal government associated with the burden hours provided in response to question 12.

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

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The number of respondents changed from 634 mines to 622 mines. This change is due to removing a previous entry that was not a paperwork requirement and a slight increase in the number of mines overall. Burden hours increased from 51,580 to 75,729 and the number of responses increased from 324,500 to 339,768, both due to the slight increase in the number of mines. Due to previous rounding and a slight increase in postage, the cost increased from \$0 to \$1,344.

**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 the beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.**

The results from the information gathered from this collection will not be published.

**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.**

MSHA has no forms associated with this collection of information on which to display an expiration date.

**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**

The agency should be prepared to justify its decision not to use statistical methods in any case where such methods might reduce burden or improve accuracy of results. When Item 17 on the Form OMB 83-I is checked "Yes", the following documentation should be included in the Supporting Statement to the extent that it applies to the methods proposed:

1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method 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 tests 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 persons(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**

**FIRE PROTECTION**

SEC. 311. (a) Each coal mine shall be provided with suitable firefighting equipment adapted for the size and conditions of the mine. The Secretary shall establish minimum requirements for the type, quality, and quantity of such equipment, and the interpretations of the Secretary or the Director of the Bureau of Mines relating to such equipment in effect on the operative date of this title shall continue in effect until modified or superseded by the Secretary. After every blasting operation, an examination shall be made to determine whether fires have been started.