

**Supporting Statement for
Paperwork Reduction Act Submissions**

Dec. 2012

OMB Control Number: 1219 - 0054

Title: Fire Protection (Underground Coal Mines)

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| Authority: | § 75.1100-3 | Condition and examination of fire fighting equipment. |
| | § 75.1103-5(a)(2)(ii) | Automatic fire warning devices; actions and response. |
| | §§ 75.1103-8(b) & (c) | Automatic fire sensor and warning device systems; examination and test requirements |
| | § 75.1103-11 | Tests of fire hydrants and fire hose; record of tests. |
| | § 75.1501(a)(3) | Emergency evacuations. |
| | § 75.1502(a) & (b) | Mine emergency evacuation and firefighting program of instruction. |

General Instructions

A Supporting Statement, including the text of the notice to the public required by 5 CFR § 1320.5(a)(i)(iv) and its actual or estimated date of publication in the Federal Register, must accompany each request for approval of a collection of information. The Supporting Statement must be prepared in the format described below, and must contain the information specified in Section A below. If an item is not applicable, provide a brief explanation. When Item 17 or the OMB Form 83-I is checked "Yes", Section B of the Supporting Statement must be completed. OMB reserves the right to require the submission of additional information with respect to any request for approval.

Specific Instructions

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 § 75.1103-5(a)(2)(ii) requires that a map or schematic be updated within 24 hours of any change in the locations of automatic fire warning sensors and the intended air flow direction at these locations. This map or schematic would be kept at a manned surface location where personnel have an assigned post of duty. This provision is added to this information collection from 1219-0145.

30 CFR § 75.1103-8 (a) 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 every seven days. Section 75.1103-8(b) requires that a record of the weekly automatic fire sensor functional tests be maintained by the mine operator and kept for a period of one year. 30 CFR 75.1103-8(c) requires that sensors be calibrated in accordance with the manufacturer's calibration instructions at intervals not to exceed 31 days. Records of the sensor calibrations must be maintained by the operator and kept for a period of one year. These last two provisions are added to this information collection from 1219-0145.

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 firefighting 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 1219-0054 October 2009 2 (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-I), 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:

(a) Requiring respondents to report information to the agency more often than quarterly.

(b) Requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it.

(c) Requiring respondents to submit more than an original and two copies of any document.

(d) Requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years.

(e) 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.

(f) Requiring the use of a statistical data classification that has not been reviewed and approved by OMB.

(g) 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.

(h) 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.

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 Federal Register notice on September 19, 2012 (77FR 58170). Two commenters submitted comments. One comment supported the continued collection of the information and suggested no changes. The other comment supported the collection and suggested an increase to the examination frequency from 6 months to quarterly. MSHA will make no changes at this time however. MSHA's experience has shown that 6 month inspection intervals of chemical extinguishers are adequate and do not result in diminished safety.

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 2011, there were approximately 945 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 – 2010 Survey Results, MSHA estimates that it takes a miner earning \$36.92 per hour approximately 2 minutes (0.033 hour) to check each fire extinguisher and record the results on the tag. All wages used are fully-loaded.

Hour Burden:

37,800 (945 MMUs x 20 fire extinguishers/MMU x 2 exams/yr)
x 0.033 hour/exam = 1,247 hours

Hour Burden Cost:

1,247 hours x \$36.92 = \$ 46,039

Under 30 CFR § 75.1103-5(a)(2)(ii), a notation must be made on a map or schematic to show the locations of sensors and the intended direction of air flow. The map or schematic must also be updated within 24 hours of any changes. MSHA expects that these notations will be added to the mine map required under existing §§ 75.1200 and

75.372 (approved OMB control number 1219-0073). MSHA estimates, for the 479 non-AMS mines, that it will take an engineer, earning a wage of \$62.87 per hour, 5 minutes (0.0833 hours) to update the map monthly.

Hour Burden:

5,748 (479 non AMS mines x 12 monthly notations)
x 0.0833 hour/notation = 479 hours

Hour Burden Cost:

479 hours x \$62.87 = \$ 30,115

Under 30 CFR § 75.1103-8, a functional test of the complete automatic fire sensor and warning device systems must be made every seven days. Records of the tests must be made by qualified persons and maintained by the mine operator. MSHA estimates that there are approximately 549 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 \$84.69 per hour, approximately 15 minutes (0.25 hours) to conduct the weekly functional test of the automated fire sensor system. and approximately 3 minutes (0.05 hours) to certify the weekly test records.

Hour Burden:

114,192 (549 mines x 4 systems/mine x 52 weekly tests) x (0.25 hour/test + 0.05 hour/record) = 34,258 hours

Hour Burden Cost:

34,258 hours x \$84.69/hour = \$ 2,901,310

Under 30 CFR § 75.1103-8(c), the calibration of carbon monoxide sensors is required at intervals of no more than 31 days. The operator must keep a record of the carbon monoxide sensor calibrations for one year. MSHA estimates that 8,451 carbon monoxide sensors will be affected and that it will take 1 minute (0.016 hours) of a supervisor's time (at an hourly wage of \$84.69) to record each calibration.

Hour Burden:

101,412 (8,451 sensors x 12 monthly calibrations) x 0.016 hour/certification = 1,623 hours

Hour Burden Cost:

1,623 hours x \$84.69/hour = \$ 137,452

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 549 underground coal mines that have an average of 30 fire hydrants per mine, and that it would take a mine

supervisor earning \$84.69 per hour approximately 30 minutes (0.5 hour) to conduct the tests and make a record of the results.

Hour Burden:

32,940 (549 mines x 30 hydrants/per mine
x 2 tests) x 0.5 hour = 16,470 hours

Hour Burden Cost:

16,470 hours x \$84.69/hour = \$ 1,394,844

§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 \$84.69 per hour, approximately 2 minutes (0.033 hours) to certify and file each training certification.

Hour Burden:

2,196 (549 mines x 2 shifts x 2 certifications)
x 0.033 hours/certification = 72 hours

Hour Burden Cost:

72 hours x \$84.69/hour = \$ 6,098

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 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 \$84.69 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 \$28.67 per hour, approximately one hour to copy and prepare the PI for mailing to the district manager.

Hour Burden:

(Program of Instruction Development):

165 (549 mines x 0.30)
x 3 hours/PI = 495 hours

(Program of Instruction Copying and Mailing):

165 (549 mines x 0.30)
x 1 hours/PI = 165 hours

Subtotal = 660 hours

Hour Burden Cost:

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|----------------------------|----------|
| 495 hours x \$84.69/hour = | \$41,922 |
| 165 hours x \$28.67/hour = | \$ 4,731 |
| Total Hour Burden Cost = | \$46,653 |

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TOTAL BURDEN HOURS: = 54,809
TOTAL BURDEN COSTS: =\$ 4,562,511

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

$(549 \text{ mines} \times 0.30) \times (8 \text{ pages/PI} \times \$0.15/\text{page}) = \$ 198$

$(549 \text{ mines} \times 0.30) \times \$ 3.00 \text{ Postage} = \$ 495$

TOTAL BURDEN COST: = \$ 693

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.

Two provisions, §75-1103-5 and 75-1103-8c, added from 1219-0145 to this collection added approximately 2,100 hours to the previously approved collection. Due to a decrease in the number of mines overall, the number of respondents changed from 622 mines to 549. The number of burden hours decreased from 75,729 to 54,809 primarily due to the reduction in the number of mines and an update of the estimate for the recording time for the examination of the automatic fire sensor and warning device

systems (§75.1103-8) from ten minutes to three minutes. The number of responses decreased from 339,768 to 294,618 primarily due to the decrease in the number of mines.

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.

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 it applies to the methods proposed:

There is no statistical methodology involved in this collection.

**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.