Supporting Statement for

Paperwork Reduction Act Submissions

NOTE TO REVIEWER: Per OMB Terms of Clearance this is a revision to OMB No. 1219-0144. OMB No. 1219-0144 and 1219-0078 (Expiring 2/29/2020) are being combined into 1219-0144 only. The 5000-3 Form, which currently belongs to both OMB No.’s, will then cover one OMB No. only after this combination occurs.

**OMB Control Number:** 1219 – 0144

**Information Collection Title:** Mine Rescue Teams; Arrangements for Emergency Medical Assistance and Transportation for Injured Persons; Agreements; Reporting Requirements; Posting Requirements

**Form Number(s):** MSHA Form 2000-224, Operator’s Annual Certification of Mine Rescue Team Qualifications

MSHA Form 5000-3, Certificate of Physical Qualification for Mine Rescue Work

**Authority: Coal** 30 CFR Sections:  
49.12 Availability of mine rescue teams;  
49.13 Alternative mine rescue capability for small and remote mines;  
49.16 Equipment and maintenance requirements;  
49.17 Physical requirements for mine rescue team;  
49.18 Training for mine rescue teams;  
49.19 Mine emergency notification plan;  
49.50 Certification of coal mine rescue teams;  
75.1713-1 Arrangements for emergency medical assistance and transportation for injured persons; agreements; reporting requirements; posting requirements; and  
77.1702 Arrangements for emergency medical assistance and transportation for injured persons; reporting requirements; posting requirements.

**Authority: Metal and Nonmetal** 30 CFR Sections:

49.2 Availability of mine rescue teams;

49.3 Alternative mine rescue capability for small and remote mines;

49.4 Alternative mine rescue capability for special mining conditions;

49.5 Mine rescue station;

49.6 Equipment and maintenance requirements;

49.7 Physical requirements for mine rescue team;

49.8 Training for mine rescue teams;

49.9 Mine emergency notification plan.

**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 the question “Does this ICR contain surveys, censuses or employ statistical methods” 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 of each regulation mandating or authorizing the collection of information.**

Section 103(h) of the Federal Mine Safety and Health Act of 1977 (Mine Act), 30 U.S.C. 813(h), authorizes the Mine Safety and Health Administration (MSHA) to collect information necessary to carry out its duty in protecting the safety and health of miners. Further, section 101(a) of the Mine Act, 30 U.S.C. 811, authorizes the Secretary of Labor (Secretary) to 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 and metal and nonmetal mines.

**Coal:**

Title 30 CFR Part 49, Mine Rescue Teams, Subpart B, Mine Rescue Teams for Underground Coal Mines, sets standards related to the availability of mine rescue teams including alternate mine rescue capability for small and remote mines, inspection and maintenance records of mine rescue equipment and apparatus, physical requirements for mine rescue team members and alternates, and experience and training requirements for team members and alternates.

Section 49.12 provides that each underground coal mine operator establish at least two mine rescue teams to be available at all times that miners are underground, or the operator must enter into an arrangement for mine rescue services to ensure that at least two teams are available at all times when miners are underground. The standard also requires each operator of an underground coal mine to send the District Manager a statement describing the mine's method of compliance with this subpart. The operator must post a copy of the statement at the mine and provide a copy of the statement to the miners’ representative.

Section 49.13 provides that operators of small and remote mines may submit an application to MSHA for approval of an arrangement for alternative mine rescue capability. Typically, a small and remote mine is one where the total underground employment of the mine is less than 36 employees and the travel time between the mine and any surrounding mine(s) is either equal to or greater than 1 hour ground travel time.

Section 49.16 includes a detailed listing of equipment that must be provided for each mine rescue station. This provision requires that the equipment be maintained to ensure that it is ready to use when needed and requires that a person trained in the use and care of the breathing apparatus inspect and test it at least every 30 days, certify by signature and date that the inspections and tests were done, and record any corrective action taken. This provision also requires that the certification and the record of corrective action be kept at the mine rescue station for a period of one year and made available to an authorized representative of the Secretary.

Section 49.17 requires that each member of a mine rescue team be examined annually by a physician who must certify that each person is physically fit to perform mine rescue and recovery work. The first physical examination must be completed within 60 days prior to the scheduled initial training. The operator must have MSHA Form 5000-3 certifying medical fitness completed and signed by the examining physician for each member of a mine rescue team and keep the forms on file at the mine rescue station for a period of one year.

Section 49.18 requires that prior to serving on a mine rescue team, each member must complete an initial 20-hour course of instruction in the use, care, and maintenance of the type of breathing apparatus that will be used by the mine rescue team. On completion of the initial training, all team members must receive at least 96 hours of refresher training annually, which shall include participation in local mine rescue contests and training at the covered mine. Training shall be given at least 8 hours every 2 months. A record must be made of the training received by each mine rescue team member and kept on file at the mine rescue station for a period of one year. The operator must provide the District Manager information concerning the schedule of upcoming training when requested.

Section 49.19 requires that each mine have a mine rescue notification plan outlining the procedures for notifying the mine rescue teams when there is an emergency that requires their service where a miners’ representative has been designated. The operator must also provide the miners’ representative with a copy of the plan. A copy of the plan must be posted at the mine.

Section 49.50 requires underground coal mine operators to certify that each designated coal mine rescue team meets the requirements of 30 CFR part 49, subpart B.

Sections 75.1713-1 and 77.1702 require operators to make arrangements for 24-hour emergency medical assistance and transportation for injured persons and to post this information at appropriate places at the mine, including the names, titles, addresses, and telephone numbers of all persons or services currently available under those arrangements.

**Metal:**

Section 115(e) of the Mine Act, 30 U.S.C. 825(e), requires the Secretary to publish regulations which provide that mine rescue teams be available for rescue and recovery work to each underground mine in the event of an emergency. In addition, the costs of making advance arrangements for such teams are to be borne by the operator of each mine.

Title 30 CFR 49.2 requires that a mine operator of an underground MNM mine establish that at least two mine rescue teams are available at all times that miners are underground, or the operator must enter into an arrangement for mine rescue services which assures that at least two teams are available at all times when miners are underground. Each mine rescue team must consist of five members and one alternate who are fully qualified, trained, and equipped for rescue service. In addition, each member must have been employed in an underground mine for a minimum of 1 year within the past 5 years. This standard also requires that each MNM underground mine operator send the MSHA District Manager a statement describing the method of compliance. The statement must disclose whether the operator has independently provided mine rescue teams or entered into an agreement for mine rescue services. The name of the provider and the location of the services must be included in the statement, a copy of the statement posted at the mine for miners’ information, and a copy provided to the miners’ representative if a representative has been designated.

With respect to alternative mine rescue capability for small and remote MNM mines and mines with special mining conditions, sections 49.3 and 49.4 provide that operators of those mines may submit to MSHA for approval alternative plans for assuring mine rescue capability. The intent of these requirements is to establish the best possible rescue response available given the mining conditions unique to each mine. Although small and remote mines are not statistically less hazardous than larger non-remote mines, they are distinguished by their size and location, which may effectively limit an operator’s ability to establish and equip two full mine rescue teams. An element in determining whether a mine is small and remote is its proximity to other underground mines or existing rescue teams and stations. Likewise, certain mining conditions and situations present significantly lower risks of entrapment to underground miners and may justify an alternative to the mine rescue team requirements contained in section 49.2.

Section 49.3 provides that if an underground MNM mine is small and remote, the operator may submit an application to MSHA for approval for an alternative mine rescue capability. Consideration for small and remote mines will be given where the total underground employment of the operator’s mine and any surrounding mine(s) within two hours ground travel time of the operator’s mine is less than 36 employees. Applications must contain the number of miners employed underground on each shift; the distance from the two nearest mine rescue stations; the total underground employment of mines within two hours ground travel time of the operator's mine; the operator's mine fire, ground, and roof control history; the operator's established escape and evacuation plan; an evaluation of the usefulness of additional refuge chambers to supplement those which may exist; the number of miners willing to serve on a mine rescue team; an alternative plan for assuring that a suitable mine rescue capability is provided at all times when miners are underground; and other relevant information.

Section 49.4 provides that if an underground mine is operating under special mining conditions, the mine operator may submit alternative plans to MSHA for approval as a means of achieving full compliance with the regulation. Applications must show that all of the following conditions are present: the mine has multiple adits or entries; the mined substance is noncombustible and the mining atmosphere nonexplosive; there are multiple vehicular openings to all active mine areas, sufficient to allow fire and rescue vehicles full access to all parts of the mine in which miners work or travel; roadways or other openings are not lined with combustible materials; the mine shall not have a history of flammable-gas emission or accumulations, and not have a history associated with flammable or toxic gas problems; and any reported gas or oil well or exploratory drill hole shall be plugged to within 100 feet above and below the horizon of the ore body or seam. In addition, the mine operator must provide the number of miners employed underground on each shift, the distance from the two nearest mine rescue stations, the operator's mine fire history, the operator's established escape and evacuation plan, the operator's alternative plan for assuring that a suitable mine rescue capability is provided at all times when miners are underground, and other relevant information.

Section 49.5 requires that where alternative compliance is permitted, every mine operator of an underground mine shall designate, in advance, the location of the mine rescue station serving the mine. The mine rescue station must provide a centralized storage location for the rescue equipment. This centralized storage location can be at the mine site, affiliated mines, or a separate mine rescue structure. In addition, the mine rescue stations shall provide a proper storage environment to assure equipment readiness for immediate use. Authorized representatives of the Secretary must be permitted access and right of entry to inspect any designated mine rescue station.

Section 49.6 provides a listing of the minimum equipment that is to be provided each mine rescue station. Section 49.6(b) states that rescue apparatus and equipment must be maintained and that a person trained in the use and care of breathing apparatus must inspect and test the apparatus at least every 30 days and must certify by signature and date that the inspections and tests were done. The certification and the record of corrective action taken, if any, must be maintained at the mine rescue station for a period of 1 year and made available to an authorized representative of the Secretary.

Section 49.7 requires that each team member and alternate be examined within 60 days of the beginning of the initial training, and annually thereafter by a physician who must certify the physical fitness of the team member to perform mine rescue and recovery work for prolonged periods under strenuous conditions. The operator must have MSHA Form 5000-3 on file for each team member certifying medical fitness and signed by the examining physician. These forms must be kept on file at either the mine or the mine rescue station for a period of 1 year.

Section 49.8 requires that prior to serving on a mine rescue team, each member must complete an initial 20-hour course of instruction in the use, care, and maintenance of the type of breathing apparatus which will be used by the mine rescue team. All team members are required to receive 40 hours of refresher training annually which includes: (1) sessions underground at least once each 6 months; (2) wearing and use of the breathing apparatus by team members for a period of at least 2 hours while under oxygen every 2 months; (3) where applicable, the use, care, capabilities, and limitations of auxiliary mine rescue equipment, or a different breathing apparatus; (4) advanced mine rescue training and procedures; and (5) mine map training and ventilation procedures. A record of the training received by each mine rescue team member is required to be on file at the mine rescue station for a period of 1 year.

Section 49.9 requires that each mine must have a mine rescue notification plan outlining the procedures to be followed in notifying the mine rescue teams when there is an emergency. In addition, a copy of the plan must be posted at the mine and a copy provided for the miners' representative, if applicable.

**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 respondents for this information collection are underground mine operators. The records will be used by mine operators, supervisors, miners, and State and Federal mine inspectors to ensure that each mine operator and mine rescue team is prepared for a mine emergency. The records show that the mine rescue team equipment has been examined and tested and is in good working order. The training records show that the mine rescue team members are trained to respond to a mine emergency involving a fire, an explosion, or a gas or water inundation. The records greatly assist those who use them to make decisions that ultimately may affect the safety of all persons working underground. Respondents for this information collection also include underground and surface mine operators required to make arrangements for 24-hour emergency medical assistance. Records are to be posted at appropriate places at the mine.

**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.**

The provisions contained in this collection do not specify how mine operators must keep records. Mine operators may retain the records by whatever method they choose. Mine operators may keep records in a bound book or store them electronically, provided they are secure and not susceptible to loss or alteration. Existing standards require some handwritten annotation in the form of a signature and date certifying the completion of mine rescue equipment inspections and tests.

MSHA requires that a Certificate of Physical Qualification for Mine Rescue Work (MSHA Form 5000-3) must be completed and signed by the examining physician for each team member. MSHA Form 5000-3 is available at <https://www.msha.gov/support-resources/forms-online-filing/2015/04/15/certificate-physical-qualification-mine-rescue-work>. Mine operators keep it on file at the mine rescue station for one year.

MSHA also has developed an optional use form, MSHA Form 2000-224, that aids in the electronic submission of this information that the mine operator may use for certification of mine rescue teams. This form is available at <https://www.msha.gov/support-resources/forms-online-filing/2015/11/18/operator%E2%80%99s-annual-certification-mine-rescue-teams> and MSHA estimates that respondents submit most 2000-224 forms electronically via email.

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

MSHA knows of no other Federal or State reporting requirements that duplicate the reporting requirements contained in this section. Plans are approved according to the individual characteristics of each mine.

**5. If the collection of information impacts small businesses or other small entities describe any methods used to minimize burden.**

**Coal:**

This information collection will not have a significant adverse economic impact on a substantial number of small entities. Nevertheless, the mine rescue team standards include alternatives for small anthracite coal mines to provide smaller mine rescue teams and less equipment. To minimize paperwork burden on small mines, MSHA developed an optional form for the mine operator to use for certification of mine rescue teams.

In certain states, small operators have gained relief through agreements through which state-sponsored teams and state-maintained mine rescue stations provide mine rescue capability. Where mines use state-sponsored teams, the mine operator does not bear the recordkeeping burden associated with sections 49.16 through 49.18 or the costs of training, equipping, and maintaining rescue teams or a rescue station.

**Metal:**

This information collection does not impact small businesses or other small entities. Provisions have been made for small and remote mines to submit alternative plans for mine rescue capability that will be considered on an individual basis. Also, in some States, small operators have gained relief through State plan agreements, whereby State maintained mine rescue stations are made available to the mine operator. Although the regulations are not directed to State and local governments, where State plan agreements exist, MSHA does conduct routine inspections of the records of the State maintained mine rescue stations for compliance with the regulations.

Although the information collection burden associated with applications for alternative mine rescue capability under sections 49.3 and 49.4 is greater than the burden of notification of the method of compliance under section 49.2, the overall economic impact is a reduced cost for small and remote mines or mines with special mining conditions when they are approved for using alternative means of providing mine rescue capabilities. Where those mines utilize State sponsored teams, the mine operator does not bear the record keeping burden associated with sections 49.6 through 49.8 or the costs of training, equipping, and maintaining rescue teams or a rescue station.

**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.**

If mine operators did not conduct this information collection, MSHA would be unable to ensure that mine rescue team members received the appropriate training, that arrangements for 24-hour emergency medical assistance and transportation for injured persons is posted, and that mine rescue equipment was properly maintained. A reduction in the frequency of inspections and tests could jeopardize the safety of mine rescue team members, as well as the trapped or injured miners whose lives they are trying to save.

Mine operators need only post or submit much of the information once. However, information must be current and, when changes in circumstances occur, mine operators must update the plan or notice and post or resubmit. Records of the inspection and testing of rescue equipment, physical examinations, and training sessions, are the minimum necessary to ensure the readiness and availability of mine rescue teams.

**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.**

There are no special circumstances listed above that are applicable to this information collection. This collection of information is consistent with the guidelines in 5 CFR 1320.5.

**8. If applicable, provide a copy and identify the data 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 December 5, 2019 (84 FR 66697). MSHA received no public 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 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 assurance of confidentiality provided to respondents. Mine rescue team records are maintained at the mine rescue station and MSHA inspectors review the records during inspections. Mine operators submit certifications of mine rescue teams to MSHA.

**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.**

This collection of information contains 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.**

**• 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 under Item 13.**

**Coal:**

As of August 31, 2019, there are approximately 206 active underground coal mines that are serviced by approximately 84 mine rescue stations, and there are 335 mine rescue teams.

Hourly wages are from Bureau of Labor Statistic (BLS), Occupational Employment Statistics (OES) May 2018 survey[[1]](#footnote-1). MSHA increased the OES hourly wage rates for benefits by a 1.49 benefit scaling factor[[2]](#footnote-2) and an inflation factor of 1.028[[3]](#footnote-3) to obtain fully loaded wages.[[4]](#footnote-4)

**Section 49.12 Availability of Mine Rescue Teams**

Under section 49.12, each operator of an underground coal mine must send the MSHA District Manager a statement describing the mine's method of compliance with 30 CFR Part 49. The statement must indicate whether the operator has independently provided mine rescue teams or entered into an agreement for the services of mine rescue teams. The statement must include the name and the location of the provider of the services. A copy of the statement must be posted at the mine for the miner’s information. Where a miner’s representative has been designated, the operator must also provide the representative with a copy of the statement. The statement needs to be submitted only once, and revised only when a change to the method of compliance occurs.

MSHA estimates that the method of compliance changes at 5 percent of the mines in any given year. MSHA estimates that it requires an average of 1 hour to prepare, mail, post, and provide a new or revised statement to the miners' representative, assuming the mine has a miner’s representative. This work is usually performed by a safety department manager earning $96.93 per hour for underground coal mines.[[5]](#footnote-5)

Respondents = 10 respondents (206 existing mines x 0.05 changes)

Responses

10 respondents/mine x 1 response = 10 Responses

Hour Burden (Third Party Disclosure)

10 responses x 1 h /statement = 10 h

Hour Burden Cost

10 h x $96.93/h = $969

**Section 49.13 Alternative Mine Rescue Capability for Small and Remote Mines**

Under section 49.13, the operator may provide for an alternative mine rescue capability if an underground mine is small and remote.

• The operator is required to submit an application for alternative mine rescue capability to the MSHA District Manager for review and approval. The mine operator must post a copy of their application at the mine. Where a miner’s representative has been designated, the operator also must provide the representative with a copy of the application.

• Where MSHA approves alternative compliance, the operator is required to adopt the alternative plan and post a copy of the approved plan at the mine for the miners' information. Where a miner’s representative has been designated, the operator must also provide the representative with a copy of the approved plan.

• The mine operator is required to notify the MSHA District Manager of any changed condition or factor materially affecting information submitted in the application for alternative mine rescue capability.

MSHA estimates that each year one new underground coal mine will submit an application under section 49.13 and one existing underground coal mine will submit a revised application. MSHA estimates that it takes an average of 2 hours to prepare, mail, post, and where a miner’s representative has been designated, provide a copy of a new or revised application for alternative mine rescue capability to the miners' representative, and to post and provide a copy of the approved plan to the miners' representative. This work is usually performed by a safety manager earning $96.93 per hour for underground coal mines.

Respondents = 2 respondents

Responses

2 respondents/mine x 1 response/application = 2 Responses

Hour Burden (Third Party Disclosure)

2 responses x 2 h /application = 4 h

Hour Burden Cost

4 h x $96.93/h = $388

**Section 49.16 Equipment and Maintenance Requirements**

Under section 49.16, a person trained in the use and care of mine rescue equipment must inspect and test the apparatus at intervals not exceeding 30 days and certify by signature and date that the inspections and tests were done. When the inspection or test indicates that a corrective action is necessary, the trained person must take corrective action and make a record of the corrective action taken. The mine operator must maintain certification and the record of corrective action at the mine rescue station for a period of one year and make it available on request to an MSHA inspector.

This requirement imposes paperwork burden on the 335 mine rescue teams located at 84 mine rescue stations. MSHA requires that each mine rescue station have at least 12 breathing apparatuses. MSHA estimates that it takes an average of 6 minutes to certify and file the certification for each apparatus. MSHA further estimates that, on average, each apparatus requires corrective action two times a year and that it would take approximately 15 minutes to record and file each corrective action. MSHA’s experience is that underground coal miners, earning $43.73 per hour, inspect, maintain, and certify the apparatus and record the corrective actions.[[6]](#footnote-6)

## Respondents = 84 respondents

## Responses

Inspect and Certify Apparatus

84 respondents (stations) x 12 apparatus/station

x 12 inspections/y = 12,096 Responses

Record Corrective Actions

84 respondents (stations) x 12 apparatus/station

x 2 defects/y = 2,016 Responses

Responses 14,112 Responses

## Hour Burden

Inspect and Certify Apparatus

12,096 responses x 6 minutes/inspection = 1,210 h

Record Corrective Actions

2,016 responses x 15 minutes/defect = 504 h

Hour Burden = 1,714 h

## Hour Burden Cost

1,080 h x $43.73/h = $52,896

450 h x $43.73/h = $22,040

Hour Burden Cost = $74,936

##### Section 49.17 Physical Requirements for Mine Rescue Team / MSHA Form 5000-3

Under section 49.17, each mine rescue team member must be examined by a physician annually, with the first examination being completed within 60 days prior to scheduled initial training. The examining physician must complete and sign MSHA Form 5000-3 for each team member. Mine operators must keep the forms on file at the mine rescue station for one year.

There are approximately 335 mine rescue teams with at least six members per team. MSHA estimates that, on average, each mine rescue team will have two new or replacement members each year. There are 308 mines who will changes to their mine rescue team in FY2018, including replacements and new members. The 308 mines will submit the revisions to MSHA in FY2018. Therefore it is estimated that 92 percent of the mine rescue teams will submit changes each year. The captains of the rescue teams gather and maintain the forms. This requires no more than 15 minutes per form. The hour burden cost for this recordkeeping requirement is based on an average hourly wage of $96.93 for an underground coal mine rescue team captain. MSHA addresses the cost for the physical in Item 13.

Respondents = 308 respondents

Responses

308 teams x 6 members/teams = 1,848 Responses

308 teams x 2 new member/teams = 616 Responses

Responses 2,464 Responses

Hour Burden

1,848 responses x 15 minutes/record = 462 h

616 responses x 15 minutes/record = 154 h

Hour Burden = 616h

Hour Burden Cost

462 h x $96.93/h = $44,782

154 h x $96.93/h = $14,927

Hour Burden Cost $59,709

**Section 49.18 Training for Mine Rescue Teams**

Under section 49.18, each team member must receive 20 hours of initial training before serving on a mine rescue team and an additional 96 hours of refresher training annually. The training must be conducted by an MSHA approved instructor. Mine rescue team training is frequently conducted by the team captain or mine safety manager. In addition, some State agencies provide the training free of charge. Occasionally, a mine operator will hire a training contractor to provide the training. A record of training of each team member must be kept on file at the mine rescue station for a period of one year.

MSHA estimates that there are 84 mine rescue stations that maintain 335 teams, averaging six members per team. MSHA estimates that, on average, each mine rescue team will have two new or replacement members each year. Training records are usually maintained by the team captain. MSHA estimates that the trainer needs approximately 12 minutes to make, file, and maintain a record of training for each team member. The hour burden cost of the training and recordkeeping provided by team captains and safety managers is based on an average hourly wage of $96.93 for underground coal mines.

Respondents = 335 respondents

Responses

335 teams x 6 members/team = 2,010 Responses

335 teams x 2 new members/team = 670 Responses

Responses 2,680 Responses

Hour Burden

2,010 responses x 12 minutes/record = 402 h

670 responses x 12 minutes/record = 134 h

Hour Burden 536 h

Hour Burden Cost

402 h x $96.93/h = $38,966

134 h x $96.93/h = $12,989

Hour Burden Cost = $51,954

##### Section 49.19 Mine Emergency Notification Plan

Under section 49.19, each underground mine must have a mine rescue notification plan outlining the procedures to follow in notifying the mine rescue teams when there is an emergency that requires their services. A copy of the mine rescue notification plan is required to be posted at the mine for the miners' information. Where a miner’s representative has been designated, the operator must also provide the representative with a copy of the plan. The plan needs to be developed only once, and revised only when a change in notification procedures occurs. MSHA estimates that the notification procedures change at 5 percent of the mines in any given year.

MSHA estimates new and revised notification plans require an average of 2 hours to prepare, mail, post, and provide to the miners' representative. This work is usually performed by a safety manager earning $96.93 per hour for underground coal mines.

Respondents = 10 respondents (206 existing mines x 0.05 changes)

Responses

206 existing mines x 0.05 changes/y = 10 Responses

Hour Burden (Third Party Disclosure)

10 existing mine responses x 2 h /response = 20h

Hour Burden Cost

20 h x $96.93/h = $1,939

**Section 49.50 Certification of Coal Mine Rescue Teams / MSHA Form 2000-224**

Under section 49.50, the operator of an underground coal mine must send the District Manager an annual statement certifying that each mine rescue team designated to provide mine rescue coverage meets the requirements of this section. Each underground coal mine operator has to certify two mine rescue teams, and there are two responses per mine as each operator fills out two MSHA Forms 2000-224, one statement for each team. For this purpose, the mine operator may use MSHA Form 2000-224, "Operator’s Annual Certification of Mine Rescue Team Qualifications,” an optional form for certifying mine rescue teams.

MSHA estimates that it will take a mine supervisor, earning $96.93 per hour, approximately 15 minutes to certify each mine rescue team (2), and a clerical employee, earning $22.41 per hour, 30 seconds to send in the statement certifying the two mine rescue teams.[[7]](#footnote-7)

Respondents = 206 respondents

Responses

Certifying

206 respondents/mines x 2 certifying response = 412 Responses

Clerical Work

206 respondents/mines x 2 clerical response = 412 Responses

Responses = 824 Responses

Hour Burden

Certifying

412 responses x 15 minutes/annual statement = 103 h

Clerical Work

412 responses x 30 seconds/to send annual statement = 3 h

Hour Burden = 106 h

Hour Burden Cost

103 h x $96.93/h = $9,984

3 h x $22.41/h = $77

Hour Burden Cost = $10,061

**Section 75.1713-1 Arrangements for Emergency Medical Assistance and Transportation for Injured Persons; Agreements; Reporting Requirements; Posting Requirements**

Under section 75.1713-1(a), (b), and (e), operators of underground coal mines are required to make arrangements for 24-hour emergency medical assistance and transportation for injured persons. Operators are also required to post at appropriate places at the mine the names, titles, addresses, and telephone numbers of all persons or services currently available under those arrangements to provide medical assistance and transportation at the mine. The required information needs to be developed and posted only once, and revised only when a change in the arrangements for emergency medical assistance and transportation for injured persons occurs. MSHA estimates that approximately 5 percent of the underground mines experience changes in circumstances that require revising and posting new medical emergency arrangements in any given year.

MSHA estimates that it requires an average of 2 hours to make arrangements for emergency medical assistance and transportation for injured persons and to post the required information about those arrangements. This work is generally performed by a safety manager or mine superintendent with an estimated average hourly wage of $96.63.

Respondents = 10 respondents (206 existing mines x 0.05 revisions)

Responses

206 existing mines x 0.05 revisions/mine = 10 Responses

Hour Burden (Third Party Disclosure)

10 existing mines x 2 h/revised agreement = 20 h

Hour Burden Cost

20 h x $96.93/h= $1,939

**Section 77.1702 Arrangements for Emergency Medical Assistance and Transportation for Injured Persons; Reporting Requirements; Posting Requirements**

Under section 77.1702(a), (b), and (e), operators of surface coal mines, surface areas of underground coal mines, and surface coal mine facilities are required to make arrangements for 24-hour emergency medical assistance and transportation for injured persons. Operators are also required to post at appropriate places at the mine the names, titles, addresses, and telephone numbers of all persons or services currently available under those arrangements to provide medical assistance and transportation at the mine. The required information needs to be developed and posted only once, and revised only when a change in the arrangements for emergency medical assistance and transportation for injured persons occurs. Approximately 806 surface coal mines and facilities reported employment in FY2018. MSHA estimates that approximately 5 percent of these surface mines or facilities experience changes in circumstances that require revising and posting new medical emergency arrangements and that about 30 new surface operations open each year.

The arrangements made pursuant to section 75.1713-1 (pertaining to underground coal mines) are applicable to the surface areas and surface facilities of underground coal mines. Accordingly, the burden hours and costs resulting from executing and posting the emergency medical arrangements under section 77.1702 (a), (b), and (e) are solely attributable to surface coal mines and separate surface coal mine facilities.

MSHA estimates that it requires an average of 2 hours to make arrangements for emergency medical assistance and transportation for injured persons and to post the required information about those arrangements. This work is generally performed by a safety manager with an estimated average hourly wage of $96.93 for surface coal mine managers.

Respondents = 70 respondents [30 respondents (30 new mine or facility x 1 response) + 40 respondents (806 existing mines or facilities x 0.05 revisions)]

Responses

30 respondents/ new mines or facilities x 1 response = 30 Responses

806 respondents/ mines x 5% x 1 response = 40 Responses

Responses = 70 Responses

Hour Burden (Third Party Disclosure)

30 new mines responses x 2 h /agreement = 60 h

40 existing mines responses x 2 h /revision = 80 h

Hour Burden = 140 h

Hour Burden Cost

60 h x $96.93/h = $5,816

80 h x $96.93/h = $7,754

$13,570

| **QUESTION 12 Summary of Coal Rescue Teams** | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **(a)**  **Type of Respondent** | **(b)**  **Standard/ Form Number/ CFR Section** | **(c)**  **No. of Respondents** | **(d) Frequency of Responses per Respondent** | **(e)**  **Total No. of Responses\***  **(c** x **d)** | **(f)**  **Avg. Burden per Response (in h )** | **(g)**  **Total Annual Burden (in h )**  **(e** x **f)** | **(h)**  **Avg. Hourly Wage Rate** | **(i)**  **Total Annual Respondent Cost**  **(g** x **h)** |
| Business or other for-profit | 49.12 | 10 | 1 | 10 | 1 | 10  (3rd party discl.) | $96.93 | $969 |
| Business or other for-profit | 49.13 | 2 | 1 | 2 | 2 | 4  (3rd party discl.) | $96.93 | $388 |
| Business or other for-profit *(Certify)* | 49.16 | 84 | 144 | 12,096 | 0.1 | 1,210  (record-keeping) | $43.73 | $52,896 |
| Business or other for-profit *(Record Corrective Actions)* | 49.16 | 84 | 24 | 2,016 | 0.25 | 504  (record-keeping) | $43.73 | $22,040 |
| Business or other for-profit | 49.17 / MSHA Form 5000‑3 | 308 | 6 | 1,849 | 0.25 | 462  (record-keeping) | $96.93 | $44,782 |
| Business or other for-profit | 49.17 / MSHA Form 5000‑3 | 308 | 2 | 616 | 0.25 | 154  (record-keeping) | $96.93 | $14,927 |
| Business or other for-profit | 49.18 | 335 | 6 | 2,010 | 0.20 | 402  (record-keeping) | $96.93 | $38,966 |
| Business or other for-profit | 49.18 | 335 | 2 | 670 | 0.20 | 134  (record-keeping) | $96.93 | $12,989 |
| Business or other for-profit | 49.19 | 10 | 1 | 10 | 2 | 20  (3rd party discl.) | $96.93 | $1,939 |
| Business or other for-profit | 49.50 / MSHA Form 2000-224 | 206 | 2 | 412 | 0.25 | 103 (record-keeping) | $96.93 | $9,984 |
| Business or other for-profit | 49.50 / MSHA Form 2000-224 | 206 | 2 | 412 | 0.01 | 3  (reporting) | $22.41 | $77 |
|  | **(Part 49 Subtotal)** |  |  | **20,102** |  | **3,006** |  | **$199,957** |
| Business or other for-profit | 75.1713-1 | 10 | 1 | 10 | 2 | 20  (3rd party discl.) | $96.93 | $1,939 |
| Business or other for-profit | 77.1702 | 30 | 1 | 30 | 2 | 60  (3rd party discl.) | $96.93 | $5,816 |
| Business or other for-profit | 77.1702 | 40 | 1 | 40 | 2 | 80  (3rd party discl.) | $96.93 | $7,754 |
| **Total** |  |  |  | **20,182** |  | **3,166** |  | **$215,466** |

\* Rounded to whole numbers

**Total Burden By Type Hours**

Reporting = 3

Recordkeeping = 2,969

Third Party Disclosure = 194

**Total= 3,166**

**Metal:**

At the end of FY2018, there were approximately 197 active underground MNM mines. MSHA estimates an average of 5 new mines per year. Of the 197 active mines, 101 maintained one or both of the required rescue teams at 90 mine rescue stations. The remaining 96 mines were provided rescue services by state sponsored rescue teams, other mine operators, or volunteer associations and/or have approved applications for alternative mine rescue capability under sections 49.3 and 49.4. Wage rates used here come from the Bureau of Labor Statistics (BLS), Occupational Employment Statistics (OES) May 2018 survey. MSHA increased the OES hourly wage rates for benefits by a 1.49 benefit-scaling factor to obtain fully loaded wages and by a wage inflation factor of 1.028.

**30 CFR 49.2**

Under section 49.2, each operator of an underground mine who provides rescue teams under this standard is required to send the MSHA District Manager a statement describing the mine's method of compliance with 30 CFR part 49. The statement must indicate whether the operator has independently provided mine rescue teams or entered into an agreement for the services of mine rescue teams. The name of the provider and the location of the services must be included in the statement. A copy of the statement must be posted at the mine for the miner’s information. Where a miner’s representative has been designated, the operator must also provide the representative with a copy of the statement. The statement needs to be submitted only once, and revised only when a change to the method of compliance occurs. MSHA estimates that the method of compliance changes at 5 percent of the mines in any given year.

MSHA estimates that it requires an average of 1 hour to prepare, mail, post, and provide a new or revised statement to the miners' representative, assuming the mine has a miner’s representative. This work is usually performed by a supervisor earning an hourly wage of $51.01.

**Hour Burden**

5 new mines x 1 h per statement= 5 h

197 existing mines x 5% per y x 1 h per statement= 10 h

**Total Hour Burden= 15 h**

**Hour Burden Cost**

15 h x $51.01 per h= $757

**30 CFR 49.3 and 49.4**

Under section 49.3, the operator may provide for an alternative mine rescue capability if an underground mine is small and remote. Under section 49.4, the operator may provide an alternative mine rescue capability if an underground mine is operating under special mining conditions.

Under both standards, the operator is required to submit an application for alternative mine rescue capability to the MSHA District Manager for review and approval. A copy of the operator's application must be posted at the mine. Where a miners’ representative has been designated, the operator also must provide the representative with a copy of the application.

Where alternative compliance is approved by MSHA, the operator is required to adopt the alternative plan and post a copy of the approved plan at the mine for the miners' information. Where a miners’ representative has been designated, the operator must also provide the representative with a copy of the approved plan.

The mine operator is also required to notify the MSHA District Manager of any changed condition or factor materially affecting information submitted in the application for alternative mine rescue capability.

MSHA estimates that it takes an average of 2 hours to prepare, mail, post, and provide a copy of a new or revised application for alternative mine rescue capability to the miners' representative, assuming the mine has a miners’ representative, and to post and provide a copy of the approved plan to the miners' representative. This work is usually performed by a supervisor earning an hourly wage rate of $51.01.

There are 96 existing underground MNM mines that have approved applications for alternative mine rescue capability under sections 49.3 or 49.4. MSHA estimates that 5 percent of these mines (5 mines) will submit revised applications under sections 49.3 or 49.4 each year and that 5 new mines will also submit applications under sections 49.3 or 49.4 each year, for a total of 10 mines.

**Hour Burden**

10 applications x 2 h per application = 20 h

**Hour Burden Cost**

20 h x $51.01 per h = $1,020

**30 CFR 49.6**

Under section 49.6, a person trained in the use and care of mine rescue equipment must inspect and test the apparatus at intervals not exceeding 30 days and certify by signature and date that the inspections and tests were done. When the inspection indicates that a corrective action is necessary, the corrective action shall be made and the person shall record the corrective action taken. The certification and the record of corrective action must be maintained at the mine rescue station for a period of 1 year and made available on request to an MSHA inspector.

MSHA estimates that it takes an average of 20 minutes (0.33 hours) to inspect, test, and certify by signature and date that the inspections and tests were done for each apparatus. There are 7 apparatus per mine rescue team for underground MNM mines. MSHA further estimates that each apparatus requires corrective action six times a year and that it takes an average of 15 minutes (0.25 hours) to take action and record each corrective action.

MSHA’s experience is that rescue team members inspect, maintain, and certify the apparatus and record the corrective actions. Mine rescue teams maintained by mines are made up of 5 miners (average hourly wage of $34.26 per hour for MNM mines) and 1 mine supervisor (average hourly wage of $51.01 per hour for MNM mines). Accordingly, the average weighted hourly wage of an MNM mine rescue team member is estimated to be $37.05 per hour (1 team captain x $51.01 per hour + 5 team members x $34.26 per hour)/6 total members. For simplicity, MSHA has assumed the same average weighted hourly wage rates for members of mine rescue teams maintained by State agencies and contractors.

According to MSHA data, there are approximately 103 mine rescue teams equipped with seven apparatus each.

Inspect and Certify Apparatus Tests and Inspections

**Hour Burden**

103 teams x 7 apparatus per team x 12 inspections per y = 8,652 inspections

8,652 inspections x 20 m per inspection= 2,884 h

**Record Corrective Actions**

103 teams x 7 apparatus per team x 6 defects per y= 4,326 corrective actions

4,326 corrective actions x 15 m per corrective action= 1,082 h

**Total Hour Burden= 3,966 h**

**Hour Burden Cost**

3,966 h x $37.05 per h= $146,928

**30 CFR 49.7**

Under section 49.7, each mine rescue team member must be examined by a physician annually, with the first examination being completed within 60 days prior to scheduled initial training.

MSHA Form 5000-3 must be completed and signed by the examining physician for each team member. The forms must be kept on file at the mine rescue station for 1 year.

MSHA estimates that a physical examination takes an average of 4 hours to complete. The hour burden cost for this requirement is based on an average wage $37.05 per hour for a MNM mine rescue team member. The cost for the physician is addressed in Item 13 below (see section 49.7).

It is MSHA’s experience that the forms require no more than 15 minutes per form to gather and maintain. The hour burden cost for this record keeping requirement is based on an average hourly wage of $51.01 for an MNM mine supervisor.

There are approximately 90 mine rescue stations serving 101 MNM mines that incur this inspection, certification, and record keeping burden. MSHA estimates that the 90 mine rescue stations maintain 103 six-member teams.

**Hour Burden**

**Physical Examinations**

103 teams x 6 members per team x 4 h per examination= 2,472 h

**Recordkeeping**

103 teams x 6 records per team x 15 m per record= 155 h

**Total Hour Burden= 2,627 h**

**Hour Burden Cost**

2,472 h x $37.05 per h= $91,592

155 h x $51.51 per h= $7,881

**Total Hour Burden Cost= $99,473**

**30 CFR 49.8**

Under section 49.8, each team member must receive 20 hours of initial training before serving on a mine rescue team and an additional 40 hours of refresher training annually. The training must be conducted by an MSHA certified trainer. A record of training of each team member must be kept on file at the mine rescue station for a period of 1 year.

Mine rescue team training is frequently conducted by the team captain or mine safety manager. In addition, some State agencies provide the training free of charge. Occasionally, a mine operator will hire a training contractor to provide the training. MSHA estimates that 60 percent of the mine rescue teams are trained by team captains or mine safety managers, 30 percent by State agencies, and 10 percent by training contractors. It is MSHA’s experience that, on the average, each mine rescue team will have one new or replacement member each year. It is also MSHA’s experience that a trainer normally trains two teams concurrently and completes the required records of training.

The hour burden for conducting the training, not including contract and State agency trainers, is estimated to be 20 hours for initial training and 40 hours for annual training. (These estimates include a 10 percent adjustment to account for the time the trainer spends preparing for the training.) Trainer hour burden estimates for State trainers are not included in the hour burden calculations, since there is no burden imposed on mine operators. The actual cost of the training provided by independent contractors is included under Item 13 below (see section 49.8).

The 40-hour annual training can be given in intervals of 4 hours per month or 8 hours every 2 months. MSHA estimates that half of the teams exercise each option. MSHA also estimates that not more than 15 minutes is required to maintain each training record after each training session. Training records are usually maintained by the team captain.

The hour burden cost of the training and record is based on a weighted average hourly wage of $37.05 for an MNM mine rescue team member. There are six (6)-member mine rescue teams at mines that incur this training and record keeping burden.

**Initial New Rescue Member Training**

103 teams x 1 new member per team= 103 members

103 members x 60% x one trainer per two teams x 20 h per training = 618 h­

**Annual Team Training**

103 teams x 60% x one trainer per two teams x 40 h per training = 1,236 h

**Record keeping Hour Burden**

103 teams x 1 new member per team x 15 min per record= 26 h

52 teams x 6 members per team x 12 times per y x 15 m per record= 936 h

52 teams x 6 members per team x 6 times per y x 15 m per record = 468 h

**Total Hour Burden= 3,284 h**

**Hour Burden Cost**

3,284 h x $37.05 per h= $121,668

**30 CFR 49.9**

Under section 49.9, each underground mine must have a mine rescue notification plan outlining the procedures to follow in notifying the mine rescue teams when there is an emergency that requires their services. A copy of the mine rescue notification plan is required to be posted at the mine for the miners' information. Where a miners’ representative has been designated, the operator must also provide the representative with a copy of the plan. The plan need be developed only once, and revised only when a change in notification procedures occurs. MSHA estimates that the notification procedures change at 5 percent of the mines in any given year.

MSHA estimates new and revised notification plans require an average of 2 hours to prepare, mail, post, and provide to the miners' representative. This work is performed by safety department manager or mine superintendent (estimated average hourly wage of $51.01 for MNM mines).

**Hour Burden**

5 new mines x 2 hours per plan = 10 h

197 existing mines x 5% revisions per plan per y X 2 h per plan= 20 h

**Total Hour Burden= 30 h**

**Hour Burden Cost**

30 h x $51.01 per h= $1,530

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Question 12 Summary of Metal Nonmetal Mine Rescue Teams** | | | | |
| **Type of Respondent** | **30 CFR Section/ Collection Activity** | **Total No. of Responses (rounded to whole numbers)** | **Total Annual Burden (in hours/ rounded to whole numbers)** | **Total Annual Respondent Cost\*** |
| Business or other for-profit | 49.2/ Statements | 15 | 15 | $757.00 |
| (Reporting) |
| Business or other for-profit | 49.3 and 49.4/ Applications | 10 | 20 | $1,020.00 |
| (Reporting) |
| **SUBTOTAL** | **Reporting Hours** |  | **35** |  |
| Business or other for-profit | 49.6/ Team Certification Tests and Inspections | 8,652 | 2,884 | $106,857.00 |
| (Recordkeeping) |
| Business or other for-profit | 49.6/ Team Recording of Corrective Actions (Recordkeeping) | 4,326 | 1,082 | $40,071.00 |
| Business or other for-profit | 49.7/ | 618 | 155 | $7,881.00 |
| (Recordkeeping) |
| Business or other for-profit | 49.8/ Training (Recordkeeping) | 6,152 | 3,284 | $121,668.00 |
| **SUBTOTAL** | **Recordkeeping Hours** |  | **7,404** |  |
| Business or other for-profit | 49.7/ | 618 | 2,472 | $91,592.00 |
| Physical Examinations |
| (3rd Party Disclosure) |
| Business or other for-profit | 49.9/ Plans (3rd Party Disclosure) | 15 | 30 | $1,530.00 |
| **SUBTOTAL** | **3rd Party Disclosure Hours** |  | **2,502** |  |
| **TOTAL** |  | **20,406** | **9,941** | **$371,376.00** |
|

**Total Burden By Type Hours**

Reporting = 35

Recordkeeping = 7,404

Third Party Disclosure = 2,502

**Total 9,941**

**\* Note: All wages in this Supporting Statement include a multiplier to reflect a fully loaded wage rate.**

**GRAND TOTAL OF ESTIMATED ANNUALIZED COAL AND METAL AND NONMETAL BURDEN HOURS AND COSTS Responses:**

**Respondents: 197**

**Burden Hours: 9,941**

**Cost: $371,376**

**Question 12 Total Summary of Hour Burden and Burden Cost**

| **(a)**  **Type of Respondent** | **(b)**  **Standard/ Form Number/ CFR Section** | **(c)**  **No. of Respondents** | **(d) Frequency of Responses per Respondent** | **(e)**  **Total No. of Responses\***  **(c** x **d)** | **(f)**  **Avg. Burden per Response (in h )** | **(g)**  **Total Annual Burden (in h )**  **(e** x **f)** | **(h)**  **Avg. Hourly Wage Rate** | **(i)**  **Total Annual Respondent Cost**  **(g** x **h)** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Business or other for-profit | 49.12 | 10 | 1 | 10 | 1 | 10  (3rd party discl.) | $96.93 | $969 |
| Business or other for-profit | 49.13 | 2 | 1 | 2 | 2 | 4  (3rd party discl.) | $96.93 | $388 |
| Business or other for-profit *(Certify)* | 49.16 | 84 | 144 | 12,096 | 0.1 | 1,210  (record-keeping) | $43.73 | $52,896 |
| Business or other for-profit *(Record Corrective Actions)* | 49.16 | 84 | 24 | 2,016 | 0.25 | 504  (record-keeping) | $43.73 | $22,040 |
| Business or other for-profit | 49.17 / MSHA Form 5000‑3 | 308 | 6 | 1,848 | 0.25 | 462  (record-keeping) | $96.93 | $44,782 |
| Business or other for-profit | 49.17 / MSHA Form 5000‑3 | 308 | 2 | 616 | 0.25 | 154  (record-keeping) | $96.93 | $14,927 |
| Business or other for-profit | 49.18 | 335 | 6 | 2,010 | 0.20 | 402  (record-keeping) | $96.93 | $38,966 |
| Business or other for-profit | 49.18 | 335 | 2 | 670 | 0.20 | 134  (record-keeping) | $96.93 | $12,989 |
| Business or other for-profit | 49.19 | 10 | 1 | 10 | 2 | 20  (3rd party discl.) | $96.93 | $1,939 |
| Business or other for-profit | 49.50 / MSHA Form 2000-224 | 206 | 2 | 412 | 0.25 | 103 (record-keeping) | $96.93 | $9,984 |
| Business or other for-profit | 49.50 / MSHA Form 2000-224 | 206 | 2 | 412 | 0.01 | 3  (reporting) | $22.41 | $77 |
| Business or other for-profit | 75.1713-1 | 10 | 1 | 10 | 2 | 20  (3rd party discl.) | $96.93 | $1,939 |
| Business or other for-profit | 77.1702 | 30 | 1 | 30 | 2 | 60  (3rd party discl.) | $96.93 | $5,816 |
| Business or other for-profit | 77.1702 | 40 | 1 | 40 | 2 | 80  (3rd party discl.) | $96.93 | $7,754 |
| **1219-0144 Total** |  |  |  | **20,182** |  | **3,166** |  | **$215,466** |
| Business or other for-profit | 30 CFR 49.2 | 15 | 1.0 | 15 | 1 | 15  (reporting) | $51.01 | $757 |
| Business or other for-profit | 30 CFR 49.3 and 49.4 | 10 | 1.0 | 10 | 2 | 20  (reporting) | $51.01 | $1,020 |
| Business or other for-profit | 30 CFR 49.6 | 103 | 84.0 | 8,652 | 0.33 | 2,884  (record keeping) | $37.05 | $106,857 |
| Business or other for-profit | 30 CFR 49.6 | 103 | 42.0 | 4,326 | 0.25 | 1,082  (record keeping) | $37.05 | $40,071 |
| Business or other for-profit | 30 CFR 49.7 | 103 | 6.0 | 618 | 4 | 2,472  (3rd Party discl.) | $37.05 | $91,592 |
| Business or other for-profit | 30 CFR 49.7 | 103 | 6.0 | 618 | 0.25 | 155 (record keeping) | $51.01 | $7,881 |
| Business or other for-profit | 30 CFR 49.8 | 62 | 1.0 | 62 | 20 | 618 (record keeping) | $37.05 | $22,898 |
| Business or other for-profit | 30 CFR 49.8 | 62 | 6.0 | 371 | 40 | 1,236 (record keeping) | $37.05 | $45,796 |
| Business or other for-profit | 30 CFR 49.8 | 103 | 1 | 103 | 0.25 | 26  (record keeping) | $37.05 | $954 |
| Business or other for-profit | 30 CFR 49.8 | 52 | 72 | 3,744 | 0.25 | 936 (record keeping) | $37.05 | $34,680 |
| Business or other for-profit | 30 CFR 49.8 | 52 | 36 | 1,872 | 0.25 | 468 (record keeping) | $37.05 | $17,340 |
| Business or other for-profit | 30 CFR 49.9 | 5 | 1 | 5 | 2.00 | 10  (3rd party discl.) | $51.01 | $510 |
| Business or other for-profit | 30 CFR 49.9 | 10 | 1 | 10 | 2.00 | 20  (3rd party discl.) | $51.01 | $1,020 |
| **1219-0078 Total** |  |  |  | 20,405 |  | 9,941 |  | $371,376 |
| **Grand Total** |  |  |  | **40,589** |  | **13,107** |  | **$586,842** |

**Grand Total Coal and Metal Burden By Type Hours**

Reporting = 3+35 = 38

Recordkeeping = 2,969+7,404 = 10,373

Third Party Disclosure = 194+2,502 = 2,696

**Total 31,66 + 9,941 = 13,107**

**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 already reflected on the burden worksheet.)**

* **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.**

Coal:

MSHA does not expect that mine operators will incur any capital or start-up costs as a result of this information collection requirement.

##### Section 49.12 Availability of Mine Rescue Teams

Under section 49.12, each operator of an underground coal mine must send the MSHA District Manager a statement describing the mine's method of compliance with 30 CFR Part 49. The statement must indicate whether the operator has independently provided mine rescue teams or entered into an agreement for the services of mine rescue teams. MSHA estimates that about 12 new underground coal mines open each year and that the method of compliance changes at 5 percent of the mines in any given year. MSHA estimates that it would cost $1.00 for postage and supplies to send the statement to MSHA. MSHA estimates that the operator submits the statement electronically 60 percent of the time.

Burden Cost

12 new mines x 0.40 = 5 mines submit statement by mail

5 new mines x $1.00 postage per statement = $5.00

206 existing mines x 5% compliance changes x 0.40 = 4 mines submit statement by mail

4 mines x $1.00 postage per statement = $4.00

Total Burden Cost = $9.00

##### Section 49.13 Alternative Mine Rescue Capability for Small and Remote Mines

Under section 49.13, the operator may provide for an alternative mine rescue capability if an underground mine is small and remote. The operator is required to submit an application for alternative mine rescue capability to the MSHA District Manager for review and approval. MSHA estimates that underground coal mine operators will not submit any new or revised applications, so there is no cost burden to be estimated.

###### **Section 49.17 Physical Requirements for Mine Rescue Team/** **MSHA Form 5000-3**

Under section 49.17, each mine rescue team member must be examined by a physician annually, and the examining physician must complete and sign an MSHA Form 5000-3 for each team member. MSHA estimates that, on average, each mine rescue team will have six members and, on average, two new or replacement member each year. MSHA estimates that the cost of the physical examination, including completing and signing the form, is $200[[8]](#footnote-8).

Burden Cost

335 teams x 6 members/team x $200/examination = $402,000

335 teams x 2 member/team x $200/examination = $134,000

Burden Cost = $536,000

**Section 49.18 Training for Mine Rescue Teams**

Under section 49.18, each mine rescue team member must receive 20 hours of initial training before serving on a team and an additional 96 hours of refresher training annually. The training must be conducted by an MSHA approved instructor. Occasionally, a mine operator will hire a training contractor to provide the training. MSHA estimates that 10 percent of the mine rescue team training is conducted by an independent training contractor. MSHA estimates that a trainer normally trains two teams concurrently and new members individually, and completes the required records of training. MSHA estimates that the average rate for a training contractor is $400 per hour and that there is no additional charge for the contractor's preparation time.

Burden Cost

335 teams x (96 hours/2 teams) x 0.10 x $400/h = $652,800

335 teams x 2 new member/team

x 20 h /new member x 0.10 x $400/h = $544,000

Burden Cost = $1,196,800

**Section 49.50 Certification of Mine Rescue Teams / MSHA Form 2000-224**

The mine rescue team standards require all underground coal mine operators with underground miners to send the District Manager an annual statement certifying that each of the mine’s two designated mine rescue teams meets the requirements in Table 49.50-A and Table 49.50-B of section 49.50. MSHA estimates that it would cost $1 for postage and handling for the operator to send the certification of mine rescue teams to MSHA for the 40 percent of the 206 mines (82) that are not submitted electronically.

Burden Cost

82 active underground coal mines x $1 postage & handling = $82

**ANNUAL COST BURDEN**

**TO RESPONDENTS OR RECORD-KEEPERS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Standard/ Data Collection Instrument/ CFR Section** | **Annual Capital Start-Up Cost** (investments in overhead, equipment and other one-time expenditures) | **Annual Operations and Maintenance Cost** (such as recordkeeping, technical/ professional services, etc.) | **Annual Non-Labor Cost** (expenditures on training, travel and other resources) | **Total Annual Cost to Respondents** |
| 49.12 | $0 | $0 | $9 | $9 |
| 49.13 | $0 | $0 | $0 | $0 |
| 49.17 / MSHA Form 5000-3 | $0 | $536,000 | $0 | $536,000 |
| 49.18 | $0 | $0 | $1,196,800 | $1,196,800 |
| 49.50 / MSHA Form 2000-224 | $0 | $0 | $82 | $82 |
| **Total** | **$0** | **$536,000** | **$1,196,891** | **$1,732,891** |

**Total Burden By Type Cost**

Reporting = $1,732,891

Metal:

MSHA does not expect that mine operators will incur any capital or start-up costs as a result of this information collection requirement. Operation, maintenance, and purchase of service costs are detailed below.

##### 30 CFR 49.2

Under section 49.2, each operator of an underground MNM mine who provides rescue teams under this standard is required to send the MSHA District Manager a statement describing the mine's method of compliance with 30 CFR part 49. The statement must indicate whether the operator has independently provided mine rescue teams or entered into an agreement for the services of mine rescue teams. MSHA estimates that it will receive 18 statements from underground MNM mine operators each year.

Underground Metal and Nonmetal Mines

18 statements x $1.00 postage per statement = $18

##### 30 CFR 49.3 and 49.4

Under section 49.3, the operator may provide for an alternative mine rescue capability if an underground mine is small and remote. Under section 49.4, the operator may provide for an alternative mine rescue capability if an underground mine is operating under special mining conditions. Under both standards, the operator is required to submit an application for alternative mine rescue capability to the MSHA District Manager for review and approval.

MSHA estimates that it will receive an average of twelve new or revised applications from underground MNM mine operators each year. MSHA estimates that it would cost $5.00 for postage and supplies to send the revised application to MSHA.

Underground Metal and Nonmetal Mines

12 applications per year x $5.00 postage per application = $60

###### **30 CFR 49.7**

Under section 49.7, each mine rescue team member must be examined by a physician annually, and an MSHA Form 5000-3 for each team member must be completed and signed by the examining physician. MSHA estimates that the cost of the physical examination is $200.

Underground Metal and Nonmetal Mines

103 teams x 6 members per team x $200 per exam = $123,600

##### 30 CFR 49.8

Under section 49.8, each team member must receive 20 hours of initial training before serving on a mine rescue team and an additional 40 hours of refresher training annually. The training must be conducted by an MSHA certified trainer. Mine rescue team training is frequently conducted by the team captain or mine safety manager. In addition, some State agencies provide the training free of charge. Occasionally, a mine operator will hire a training contractor to provide the training. MSHA estimates that 60 percent of the mine rescue teams are trained by team captains or mine safety managers, 30 percent by State trainers, and 10 percent by training contractors. The cost for training conducted by rescue team captains and mine safety managers is detailed under Item 12 above. No cost burden has been assigned for training conducted by State trainers, since there is no cost to mine operators. The cost of the remaining 10 percent of the training that is conducted by independent contractors is estimated below.

It is MSHA’s experience that, on average, each mine rescue team will have one new or replacement member each year. It is also MSHA’s experience that a trainer normally trains two teams concurrently and completes the required records of training. MSHA estimates that the average rate for a training contractor is $400 per hour and that there is no additional charge for the contractor's preparation time.

Underground Metal and Nonmetal Mines

103 teams x 10% x 1 new members = 10 new

10 new members x 1 trainer per 2 teams x 20 h per training = 103 h

103 h x $400 per h = $41,200

103 rescue teams x 10% x 1 trainer per 2 teams x 40 h annual training = 206 h

206 h x $400 per h = $82,400

Total Cost = $123,600

**Summary of Total Annual Burden Cost for Metal Nonmetal Mines**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Standard/ Data Collection Instrument/ CFR Section** | **Annual Capital Start-Up Cost** (investments in overhead, equipment and other one-time expenditures) | **Annual Operations and Maintenance Cost** (such as recordkeeping, technical/ professional services, etc.) | **Annual Non-Labor Cost** (expenditures on training, travel and other resources) | **Total Annual Cost to Respondents** |
| 49.2 | $0 | $18 | $0 | $18 |
| 49.3 and 49.4 | $0 | $60 | $0 | $60 |
| 49.7 | $0 | $123,600 | $0 | $123,600 |
| 49.8 | $0 | $41,200 | $0 | $41,200 |
| 49.8 | $0 | $82,400 | $0 | $84,200 |
| **Total** | **$0** | **$247,278** | **$0** | **$247,278** |

Question 13 Summary of Estimated Burden

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Standard/ Data Collection Instrument/ CFR Section** | **Annual Capital Start-Up Cost** (investments in overhead, equipment and other one-time expenditures) | **Annual Operations and Maintenance Cost** (such as recordkeeping, technical/ professional services, etc.) | **Annual Non-Labor Cost** (expenditures on training, travel and other resources) | **Total Annual Cost to Respondents** |
| 49.12 | $0 | $0 | $9 | $9 |
| 49.13 | $0 | $0 | $0 | $0 |
| 49.17 / MSHA Form 5000-3 | $0 | $536,000 | $0 | $536,000 |
| 49.18 | $0 | $0 | $1,196,800 | $1,196,800 |
| 49.50 / MSHA Form 2000-224 | $0 | $0 | $82 | $82 |
| 49.2 | $0 | $18 | $0 | $18 |
| 49.3 and 49.4 | $0 | $60 | $0 | $60 |
| 49.7 | $0 | $123,600 | $0 | $123,600 |
| 49.8 | $0 | $41,200 | $0 | $41,200 |
| 49.8 | $0 | $82,400 | $0 | $82,400 |
| **Total** | **$0** | **$783,278** | **$1,196,891** | **$1,980,169** |

GRAND TOTAL COST BURDEN: $1,980,169

**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.**

**Coal:**

MSHA inspectors examine most records related to mine rescue teams and arrangements for emergency medical assistance and transportation for injured persons during routine inspections at the mine or the mine rescue station. MSHA estimates that the time expended for reviewing these records is minimal and, therefore, no cost burden has been assigned. MSHA estimates that it takes an Agency safety specialist (GS 12) earning $56.62 per hour[[9]](#footnote-9) including benefits, approximately 1 hour to review and acknowledge the average statement or certification, and an Agency clerk (GS 7), earning $33.21 per hour[[10]](#footnote-10) including benefits, approximately 15 minutes (0.25 hour) to process and file the statement.

All costs to the Federal government consist of staff salaries and benefits. The costs for the Agency's review of statements of rescue team availability under section 49.12, review and approval of applications for alternative mine rescue capability under section 49.13, and review of certifications of rescue team qualifications under section 49.50 are as follows:

**Section 49.12 Availability of Mine Rescue Teams**

Cost to Federal Government

10 statements x 1 h x $56.62/h = $566

10 statements x 15 minutes x $33.21/h = $83

Cost to Federal Government = $649

**Section 49.13 Alternative Mine Rescue Capability for Small and Remote Mines**

Cost to Federal Government

2 applications x 1 h x $56.62/h = $113

2 applications x 15 minutes x $33.21/h = $17

Cost to Federal Government = $130

**Section 49.50 Certification of Mine Rescue Teams** /**MSHA Form 2000-224**

Cost to Federal Government

200 mines x 2 certifications x 30 minutes x $56.62/h = $11,324

200 mines x 2 certifications x 15 minutes x $33.21/h = $3,321

Cost to Federal Government = $14,645

**TOTAL ANNUAL COST TO THE FEDERAL GOVERNMENT**

|  |  |
| --- | --- |
| **Section / Form / CFR Section** | **Cost** |
| 49.12 | $649 |
| 49.13 | $130 |
| 49.50 / MSHA Form 2000-224 | $14,645 |
| **Total** | **$15,424** |

**Metal:**

MSHA inspectors examine records related to mine rescue teams and arrangements for emergency medical assistance and transportation for injured persons during routine inspections. MSHA estimates that the time expended for reviewing these records is minimal, and therefore no cost burden has been assigned. The costs for the Agency's review of statements of rescue team availability under section 49.2 and review and approval of applications for alternative mine rescue capability under sections 49.3 and 49.4 are as follows:

**30 CFR 49.2**

Under section 49.2, each operator of an underground mine who provides rescue teams under this standard is required to send the MSHA District Manager a statement describing the mine's method of compliance with 30 CFR part 49. The statement must indicate whether the operator has independently provided mine rescue teams or entered into an agreement for the services of mine rescue teams.

MSHA estimates that the Agency will receive 16 new or revised statements from underground MNM mine operators each year. MSHA also estimates that it takes an Agency safety specialist (GS 12) earning $56.62 per hour including benefits, approximately 1 hour to review and acknowledge the average statement, and an Agency clerk (GS 7), earning $33.21 per hour including benefits, approximately 15 minutes to process and file the statement.

Underground Metal and Nonmetal Mines

16 statements per y x 1 h per statement x $56.62 per h = $906

16 statements per y x 15 m per statement x $33.21 per h = $133

Total Cost = $1,039

**30 CFR 49.3 and 49.4**

Under section 49.3, the operator may provide for an alternative mine rescue capability if an underground mine is small and remote. Under section 49.4, the operator may provide for an alternative mine rescue capability if an underground mine is operating under special mining conditions. Under both standards, the operator is required to submit an application for alternative mine rescue capability to the MSHA District Manager for review and approval. Provisions have been made for small or remote mines to submit alternate plans to MSHA for approval on an individual basis. Also, in certain States, small operators have gained relief through State plan agreements with MSHA, whereby State maintained mine rescue stations are made available to the mine operator.

MSHA’s estimates that it will receive an average of twelve new or revised applications from underground MNM mine operators each year. MSHA also estimates that it takes an Agency safety specialist (GS 12) earning $56.62 per hour including benefits, approximately 1 hour to review the average application, and an Agency clerk (GS 7), earning $33.21 per hour including benefits, takes approximately 45 minutes to process the application and to prepare an approval letter for the MSHA District Manager's signature.

Underground Metal and Nonmetal Mines (New or Revised Applications)

12 applications per y x 1 h per application x $56.62 per h = $679

12 applications per y x 45 m per application x $33.21 per h = $299

Total Cost = $978

**Total Cost to Federal Govt. =$2,017**

**TOTAL ANNUAL COST TO THE FEDERAL GOVERNMENT**

|  |  |
| --- | --- |
| **Section / Form / CFR Section** | **Cost** |
| 49.2 | $1,039 |
| 49.3 and 49.4 | $978 |
| **Total** | **$2,017** |

|  |  |
| --- | --- |
| **Section / Form / CFR Section** | **Cost** |
| 49.12 | $649 |
| 49.13 | $130 |
| 49.50 / MSHA Form 2000-224 | $14,645 |
| 49.2 | $1,039 |
| 49.3 and 49.4 | $978 |
| **Total** | **$17,441** |

GRAND TOTAL COST TO THE GOVERNMENT: $17,441

**15. Explain the reason for any program changes or adjustments reported on the burden worksheet.**

This is a revision reflecting increased vales on all items as a result of combining OMB No. 1219-0078 into this ICR, OMB No. 1219-0144. The table below shows the changes in burden based the difference between the sum of the previous combined clearances for 1219-0078 and 1219-0144 and this request combining both ICR’s. Previously approved totals for OMB No.1219-0078 are being added to this ICR as a Program Change Due to Agency Discretion for the previously approved 19,973 responses, 9,941 hours and $309,068 in annual cost burden. Adjustments are made for current estimates and both ICR’s are added together in the combined request. Since the last clearance of 1219-0144, there has been an increase in the number of rescue teams that resulted in increased burden. A small amount of the increase is due to updating and standardizing the costs for similar provisions in the combined collection.

|  |  |  |
| --- | --- | --- |
|  | **Burden for this Combined Request (OMB No. 1219-0078 added to this ICR, OMB No. 1219-0144)** | **Combined Inventory of the Existing Collections (OMB No. 1219-0078 and this ICR, OMB No. 1219-0144)** |
| Responses | 40,588 | 35,253 |
| Time Burden (Hours) | 13,107 | 12,144 |
| Cost Burden (Dollars) | $1,980,169 | $926,138 |

This result of adding these two ICR’s in the combined request will increase the respondents from 275 to 577, responses from 15,280 to 40,588, burden from 2,203 to 13,107, and cost from $617,070 to $1,980,169 for OMB No. 1219-0144 as a single ICR. Upon approval of OMB No. 1219-0144, OMB 1219-0078 will be discontinued leaving no burden on the OMB inventory for that ICR.

**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.**

MSHA is not seeking approval to not display the expiration date or OMB approval number for this collection of information.

**18. Explain each exception to the topics of the certification statement identified in "Certification for Paperwork Reduction Act Submissions."**

There are no certification exceptions identified with this information collection.

**B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS**

The collection of this information does not employ statistical methods.

1. For those not familiar with the OES survey, see item “E3. How to get OES data. What are the different ways to obtain OES estimates from this website?” at <http://www.bls.gov/oes/oes_ques.htm>. [↑](#footnote-ref-1)
2. The benefit scaler comes from BLS Employer Costs for Employee Compensation access by menu [http://www.bls.gov/data/](http://www.bls.gov/data/%20). The data series CMU2030000405000P, Private Industry Total benefits for Construction, extraction, farming, fishing, and forestry occupations, is divided by 100 to convert to a decimal value. MSHA used the latest 4-quarter moving average 2018Qtr2-2019Qtr2 to determine that 32.9 percent of total loaded wages are benefits. The scaling factor = 1 + (benefits/(1-benefits)) = 1+( .329/(1-.329)) = 1.49. [↑](#footnote-ref-2)
3. The inflation factor comes from BLS Employment Cost Index access by menu [http://www.bls.gov/data/](http://www.bls.gov/data/%20). The data series CIS2020000405000I, Wages and salaries for Private industry workers in Construction, extraction, farming, fishing, and forestry occupations, Index is updated from Q2 2018 to Q2 2019, 135.8/132.1 = 1.028. [↑](#footnote-ref-3)
4. For all wage rates, MSHA uses the relevant precision throughout the calculation to avoid compound rounding errors and rounds at the final rate value. Displayed intermediate calculation values are presented to explain the calculation and are representative but the final rate value reflects the correct rounding and final estimate. [↑](#footnote-ref-4)
5. Hourly wages from OES May 2018 survey, Standard Occupational Classification (SOC) code 11-3000. Operations Specialties Managers; Coal Mining; (NAICS code 212100). MSHA used the 75th percentile. wage rate for the highly experienced rescue team members. MSHA multiplied the wage rate of $64.13 times the 1.49 benefit scaling factor and inflation factor of 1.028 to obtain a fully loaded hourly wage of $96.93. [↑](#footnote-ref-5)
6. Hourly wages from OES May 2018 survey, Standard Occupational Classification (SOC) code 47-0000, Construction and Extraction Occupations; Coal Mining; (NAICS code 212100). MSHA multiplied the mean wage rate of $28.55 times the 1.49 benefit scaling factor and inflation factor of 1.028 to obtain a fully loaded hourly wage of $43.73. [↑](#footnote-ref-6)
7. Hourly wages from OES May 2018 survey, Standard Occupational Classification (SOC) code 43-9061, Office Clerks General; Coal Mining; (NAICS code 212100). MSHA multiplied the mean wage rate of $14.63 times the 1.49 benefit scaling factor and 1.028 inflation factor to obtain a fully loaded hourly wage of $22.41. [↑](#footnote-ref-7)
8. Physical exam costs rounded from Medical Expenditure Panel Survey (MEPS), <https://meps.ahrq.gov/mepsweb/data_stats/MEPSnetHC/startup>. 2015 Full Year Person-Level File, Analysis Variable: Obdtch15 - Office-Based Physician Visit Charges 13. Median value adjusted for medical inflation 2019 first half/2015 (<http://data.bls.gov/timeseries/CUUR0000SAM?output_view=pct_12mths>) (Median $310.49 x 0.72 =$224.02 rounded to $200). [↑](#footnote-ref-8)
9. Hourly wage rate developed from Office of personnel Management (OPM) March 2018 *FedScope* employment cube, <http://www.fedscope.opm.gov/> . Average annual salary of $84,882 obtained from DOL-MSHA employees. Data search qualifiers are: agency = DLMS, occupation = 1822, Salary Grade = GS-12. In order to include the cost of benefits, the average annual salary was multiplied by a benefit scaler of 1.392. [$56.62 = ($84,882 x 1.392) ÷ 2,087 annual h ] [↑](#footnote-ref-9)
10. Hourly wage rate developed from Office of personnel Management (OPM) March 2018 *FedScope* employment cube, <http://www.fedscope.opm.gov/> . Average annual salary of $49,786 obtained from DOL-MSHA employees. Data search qualifiers are: DLMS, occupation = 0303, Salary Grade = GS-7. In order to include the cost of benefits, the average annual salary was multiplied by a benefit scaler of 1.392. [$33.21 = ($49,786 x 1.392) ÷ 2,087 annual h.] [↑](#footnote-ref-10)