**SUPPORTING STATEMENT FOR TRAINING PLANS AND RECORDS OF TRAINING, FOR UNDERGROUND MINERS AND MINERS WORKING AT SURFACE MINES AND SURFACE AREAS OF UNDERGROUND MINES**

**CFR Citation(s):** 30 CFR 48.23, 48.29, 48.3, 48.9

**Collection Instrument(s)**: MSHA Form 5000-23, Certificate of Training

This ICR seeks to extend, without change, an existing information collection.

**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.**

Section 103(h) of the Federal Mine Safety and Health Act of 1977, as amended, (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 or other mines.

The Mine Act recognizes that education and training is an important element of Federal efforts to make the nation's mines safe. Section 115(a) of the Mine Act states that "each operator of a coal or other mine shall have a health and safety training program which shall be approved by the Secretary." Title 30 CFR 48.3 and 48.23 require training plans for miners at underground and surface mines, respectively. These standards are intended to ensure that miners will be effectively trained in matters affecting their health and safety, with the ultimate goal of reducing the occurrence of injury and illness in the nation's mines.

Training plans are required to be submitted for approval to the MSHA District Manager for the area in which the mine is located. Plans must contain the following:

1) company name; 2) mine name; 3) MSHA identification number of the mine; 4) the name and position of the person designated by the operator who is responsible for health and safety training at the mine; 5) a list of MSHA-approved instructors with whom the operator proposes to make arrangements to teach the courses and the courses each instructor is qualified to teach; 6) the location where training will be given for each course; 7) a description of the teaching methods and the course materials which are to be used in training; 8) the approximate number of miners employed at the mine and the maximum number who will attend each session of training; 9) the predicted time or periods of time when regularly scheduled refresher training will be given including the titles of courses to be taught; 10) the total number of instruction hours for each course; and 11) the predicted time and length of each session of training for new task training including a complete list of task assignments, the titles of personnel conducting the training, the outline of training procedures used, and the evaluation procedures used to determine the effectiveness of the training.

Title 30 CFR 48.9 and 48.29 require records of training for underground and surface mines, respectively. Upon completion of each training program, the mine operator certifies on MSHA Form 5000-23, Certificate of Training, that the miner has received the specified training in each subject area of the approved health and safety training plan.

The Certificate of Training forms are to be maintained by the operator for a period of 2 years for current employees and for 60 days after termination of a miner’s employment, and must be available for inspection at the mine site. In addition, the miner is entitled to a copy of the certificate upon completion of the training and when the miner leaves the operator's employment.

**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.**

Once approved by the MSHA District Manager, training plans are returned to the mine operator. The approved plans are used to implement training programs for training new miners, training experienced miners, training miners for new tasks, annual refresher training, and hazard training. MSHA also uses the plans to ensure that all miners are receiving the training necessary to perform their jobs in a safe manner.

MSHA Form 5000-23 provides the mine operator with a recordkeeping form, the miner with a certificate of training, and MSHA with a monitoring tool for determining compliance with requirements. MSHA Form 5000-23 in its present format provides the industry with one form that conforms to all the requirements of the training regulations.

**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 plans can be prepared using personal computers and word processing programs and submitted via email.

Additionally, MSHA has an electronic system (MSHA Training Plan Advisor) for mine operators to prepare and submit training plans through the internet. This is an optional method for the mining industry to prepare and file required training plans. The design of this system increases the likelihood that the plan will be complete, with the potential to decrease the paperwork burden from approximately 8 hours to 2.25 hours. It is accessed through <https://www.msha.gov/support-resources/forms-online-filing/2017/01/23/electronic-training-plan-advisor>.

In calendar year (CY) 2019, 343 coal mine training plans were submitted, and 866 were submitted for Metal/Nonmetal totaling 1,209 plans. MSHA estimates that 65 percent of all plans will be submitted electronically.

MSHA Form 5000-23 is provided by MSHA to mine operators in a booklet format. The form is also available to download at https://www.msha.gov/support-resources/forms-online-filing/2018/05/23/certificate-training. The computerized version of the form permits mine operators to enter information on the form electronically and print the completed form as a training certificate. MSHA Form 5000-23 is a recordkeeping form; it is not submitted to MSHA.

**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 A.2 above.**

Training plans are tailored to fit the needs of individual mining operations for which they are developed. There is no similar or duplicate information already available that could be used.

Due to the individualized nature of the training that each miner receives, there is no similar or duplicate information that could be used in lieu of MSHA Form 5000-23.

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

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

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

Before a new mine is opened or a mine is reopened or reactivated, MSHA must approve the training plan. Once the plan is approved, only changes or modifications must be submitted for approval.

MSHA developed MSHA Form 5000-23 for use by the mine operator to record and certify that the miner has received the specified training. Upon completion of each training program, MSHA Form 5000-23 is completed by the instructor. All training completed within the miner's 12-month training cycle may be recorded on one MSHA Form 5000-23. A copy of the form is given to the miner at the end of the 12-month cycle. Additionally, a copy of the form is given to the miner at the completion of a single training program.

MSHA inspectors will sometimes ask mine operators to produce training certificates during an inspection to ensure that all miners have received the proper training. Without adequate training, miners may sustain serious or fatal injuries because they lack the knowledge to properly and safely perform various tasks and activities. This collection ensures compliance with the training requirements.

**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 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 requirements for more than quarterly reporting. An initial plan must be submitted for MSHA District Manager approval and revised plans must be submitted whenever changes to that plan are made necessary by changes in ownership and/or circumstances at the mine. Although there is no explicit requirement that a mine operator retain records for more than 3 years, the operator must maintain a current, approved training plan during the entire time the mine is in operation. While mine operators are not specifically required to keep MSHA Form 5000-23 records for more than 2 years for current employees or more than 60 days after termination of an employee (30 CFR 48.9 and 48.29), the mine operator must be able to provide current training records for all miners during the time the mine is in operation. This collection of information is otherwise consistent with the guidelines in 5 CFR 1320.5.

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

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

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

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

**9. Explain any decision to provide any payments or gifts to respondents, other than remuneration of contractors or grantees.**

MSHA does not provide payments or gifts to respondents.

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

MSHA Form 5000-23 provides no assurances of confidentiality. The electronically collected information is protected under: Office of Management and Budget Circular A-130, Management of Federal Information Resources; the Computer Fraud & Abuse Act of 1986; Department of Labor (DOL) policies covering Network Operations and LAN Management and DOL’s Privacy Policy on Data Collection over DOL Web Sites; and by the Federal Information Security Management Act of 2002, Title III, Public Law 107-347, as part of the E-Government Act of 2002.

As a practical matter, a request for MSHA records containing mine operator responses would be processed in accordance with the provisions of the Freedom of Information Act (5 U.S.C. 552) and its implementing DOL regulations, 29 CFR part 70.

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

# Training Plans and Revisions

Sections 48.3 and 48.23 require underground and surface mine operators to have an MSHA-approved training plan. When new task training is required, mine operators must revise their training plan to include each new task. This revision must include a complete list of task assignments, the titles of personnel conducting the training, the outline of training procedures used, and the evaluation procedures used to determine the effectiveness of the training.

Based upon MSHA's records from reporting districts it is estimated that during CY 2019, Coal Mine Safety and Health received 247 new plans and 96 revised plans, and Metal/Nonmetal Safety and Health received 286 new plans and 580 revised plans including a total of 1,209 respondents. It is further estimated that 65 percent of the new and revised plans were electronically submitted.

The plans are usually prepared by company personnel. Although the burden on the mine operator is dependent to some degree upon a particular mine's size, MSHA has determined that a typical training plan requires 8 hours to prepare and submit a new paper plan, 2.25 hours to complete a new plan online, and 1 hour to revise a paper or electronic plan.

All wage rate calculations for Item 12 are from the Bureau of Labor Statistics (BLS), Occupational Employment Statistics (OES) May 2019 survey[[1]](#footnote-1) increased by 1.025 for wage inflation[[2]](#footnote-2) since the May 2019 survey and a 1.49 benefit-scaling factor[[3]](#footnote-3). The average wage per hour[[4]](#footnote-4) is $57.56 for a coal mine safety specialist and $56.56 for a metal/nonmetal mine safety specialist.

MSHA Form 5000-23

Sections 48.9 and 48.29 require that upon a miner’s completion of each MSHA-approved training program, the operator must record and certify on MSHA Form 5000-23 that the miner has received the specified training. MSHA Form 5000-23, Certificate of Training, was developed by MSHA for use by the mine operator to record and certify that the miner has received the specified training. Upon completion of each training program, the form is completed by the instructor. All training completed within the miner's 12-month training cycle may be recorded on one form. A copy of the form is given to the miner at the end of the 12-month cycle. Additionally, a copy of the form is given to the miner at the completion of a single training program upon the miner’s request.

MSHA estimates that 45 percent of the miners’ training is conducted by an employee of the mine operator. Another 30 percent of the training is conducted by State trainers funded from sources that include Federal grants. The specific burden for such State trainers is included in the answer to Item 14. The remaining 25 percent of the training is conducted by independent training contractors hired by the mine operator. The actual cost of the independent training contractor’s time is detailed under Item 13.

For CY 2019, the Coal Industry reported approximately 1,128 coal mining operations employing 52,608 miners (excluding office employees) and 1,813 contractors employing 25,797 miners, for a total of 2,941 employers of 78,405 miners. The applicable Metal and Nonmetal Industries (under Part 48) reported approximately 746 mining operations employing 53,860 mine operator-employed miners (excluding office employees), and 2,141 contractors employing 25,442 miners[[5]](#footnote-5), for a total of 2,887 employers of 79,302 miners working in Part 48 mines, mills and shops. (2,941 + 2,887 = **5,828 respondents**.

Although all of the training completed by a miner within a 1-year period may be recorded on one form, training specialists estimate that for each miner, two forms will probably be completed annually. The simple check-off method for completing the form and preparation time takes about 5 minutes (m) per form using either the paper or electronic version.

With respect to Coal, the burden is calculated based on 45 percent of miners being trained by company personnel (78,405 miners x 0.45 = 35,282), the number of forms per miner (2), and the estimated time to complete the form (5 m).

With respect to Metal/Nonmetal, the burden is calculated based on 45 percent of miners being trained by company personnel (79,302 miners x 0.45 = 35,686), the number of forms per miner (2), and the estimated time to complete the form (5 m).

Based on MSHA’s estimated 2019 wage rate for a coal mine safety specialist of $57.56/hour, and a Metal/Nonmetal mine safety specialist of $56.56/hour, the burden is calculated below.

**Estimated Annualized Respondent Cost and Hour Burden**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Activity** | **No. of Respon-ndents** | **No. of Re-spon**  **-ses**  **per Re-spon-dent** | **Total Respon-ses** | **Average Burden per Response**  **(Hours)** | **Total Burden (Hours)** | **Hourly**  **Wage Rate** | **Total Burden Cost** |
| Coal Training Plan (New Paper Plans) | 86 | 1 | 86 | 8.00 h | 688.00 | $57.56 | $39,601.28 |
| Coal Training Plan (New Electronic Plans) | 161 | 1 | 161 | 2.25 h | 362.25 | $57.56 | $20,851.11 |
| Coal Training Plan (Revised Plans) | 96 | 1 | 96 | 1.00 h | 96.00 | $57.56 | $5,525.76 |
| Metal Training Plan (New Paper Plans) | 100 | 1 | 100 | 8.00 h | 800.00 | $56.56 | $45,248.00 |
| Metal Training Plan (New Electronic Plans) | 186 | 1 | 186 | 2.25 h | 418.50 | $56.56 | $23,670.36 |
| Metal Training Plan (Revised Plans) | 580 | 1 | 580 | 1.00 h | 580.00 | $56.56 | $32,804.80 |
| MSHA Form 5000-23 (Coal) | 35,282 | 2 | 70,564 | 5 m | 5,880.33 | $57.56 | $338,471.79 |
| MSHA Form 5000-23 (Metal) | 35,686 | 2 | 71,372 | 5 m | 5,947.67 | $56.56 | $336,400.22 |
| **TOTAL** |  |  | **143,145** |  | **14,773 (rounded)** |  | **$842,573 (rounded)** |

**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 service 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.**

Training Plans

MSHA estimates no cost for course development or the actual training. MSHA provides many publications, training modules and video tapes, as well as accident reports and compilations of accident statistics, routinely used in training courses at little or no cost to the industry. These resources are available to the mining industry and are frequently used by industry trainers whether employed by the mine operator directly or as contractors.

MSHA estimates that it costs approximately $2 to copy and mail each training plan:

423 paper plans (1,209 plans – 786 e-plans)

x $2 /plan = $ 846.00

MSHA Form 5000-23

Approximately 25 percent of the training is conducted by independent contractors hired by mine operators. It takes approximately 5 minutes to fill out a form, and two forms are needed per miner. MSHA estimates that independent MSHA-approved contract trainers will charge $71.11 per hour[[6]](#footnote-6). With respect to Coal, the cost is calculated based on 25 percent of miners being trained by independent contractors (78,405 miners x 0.25 = 19,601). With respect to Metal/Nonmetal, the burden is calculated based on 25 percent of miners being trained by independent contractors (79,302 miners x 0.25 = 19,826).

Coal:

19,601 miners x 2 forms per miner

x 5 m per form x $71.11 per h = $232,304.52

Metal/Nonmetal:

19,823 miners x 2 forms per miner

x 5 m per form x $71.11 per h = $234,971.14

Total cost to complete forms = $467,275.66

**GRAND TOTAL COST BURDEN = $468,121.66**

**($468,122 rounded)**

**14. Provide estimates of the 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), 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 into a single table.**

Approval of Plan

In 2019, MSHA approved 1,209 new or revised training plans. Based on past experience, on average, it takes approximately 5 hours to receive, review, approve, and return each plan or revision. The reviews are done by MSHA technical staff (GS 12) earning $58.29 per hour including benefits[[7]](#footnote-7).

1,209 plans x 5 h per plan x $58.29 = $352,363.05

Printing of Form

MSHA Form 5000-23 is assembled in pads with 50 sets of forms per pad and 4 forms per set. The cost of pad purchases has varied significantly from year to year; in the last 6 years the annual cost has ranged between $0 and $73,000. Using an historical multiyear average is difficult to support because the form was redesigned in 2014 and a large number of new forms were printed and distributed. During the 3 years 2014-2016 MSHA’s costs were approximately $60,000 per year. In 2017 and 2018 MSHA Form 5000-23 purchases cost $48,290 and $38,780, but due to an error in 2019 no forms were ordered. Due to these fluctuating expenses, historical averages are not considered reliable. In the first half of 2020 the Mine Academy purchased pads at a cost of $19,231 and forecasts one more similar purchase later in 2020. The Mine Academy forecasts Form 5000-23 expenses will be $38,000 per year for the next 3 years.

Mine Academy forecasts Form 5000-23 expenses of = $38,000.00 per y

State Trainers

Approximately 30 percent of the training is conducted by State trainers funded from sources that include Federal grants. It takes approximately 5 minutes to fill out a form, and two forms are needed per miner. MSHA assumes that the rate per hour is similar to that charged by an independent contractor which is $71.11 per hour. The numbers of miners trained are: 23,522 coal miners (78,405 coal miners x 0.30 = 23,522) and 23,790 Metal/Nonmetal miners (79,302 Metal/Nonmetal miners x 0.30 = 23,790).

Coal:

23,522 miners x 2 forms per miner

x 5 m per form x $71.11 per hour = $278,774.90

Metal/Nonmetal:

23,790 miners x 2 forms per miner

x 5 m per form x $71.11 per hour = $281,951.15

MSHA inspection personnel routinely check that miners have received the required training by periodic examination of MSHA Form 5000-23 and interviews of the miners. However, such examinations of the mine operator’s records are done as a part of a normal, complete mine inspection. Because the review of training records is just one aspect of the inspections required under section 103(a) of the Mine Act, MSHA believes that this burden is minimal and has assigned no Federal cost burden for this specific information collection.

**GRAND TOTAL ANNUAL COST TO FEDERAL GOVERNMENT = $951,089.10**

**($951,089 rounded)**

**15. Explain the reasons for any program changes or adjustments.**

There are no program changes. There is an increase in the estimated number of respondents (from 1,526 to 5,828) due to MSHA, in the prior ICR, inadvertently counting only a subset of respondents who submitted new or revised training plans and omitting many other respondents who carried out Part 48 training. Responses increased from 123,186 to 143,145, burden hours increased from 13,964 to 14,773, and burden cost increased from $371,118 to $468,122 due to the increase in respondents. The prior ICR omitted an estimate of the number of contractors to the metal/nonmetal mining industry who provided part 48 training to their employees.

**16. For collections of information whose results will be published, outline plans for tabulations, 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 will display the expiration date for OMB approval of this information collection.

**18. Explain each exception to the certification statement.**

There are no exceptions to the certification statement.

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

The collection of this information does not employ statistical methods.

1. Options for obtaining OES data are available at item E3. “How to get OES data. What are the different ways to obtain OES estimates from this website?” at <https://www.bls.gov/oes/oes_ques.htm>. [↑](#footnote-ref-1)
2. Wage inflation is the change in Series ID: CIS2020000405000I; Seasonally adjusted; Series Title:  Wages and salaries for Private industry workers in Construction, extraction, farming, fishing, and forestry occupations, Index.  (<https://data.bls.gov/cgi-bin/srgate>; Qtr 2 2020/Qtr 2 2019). [↑](#footnote-ref-2)
3. The benefit-scaler comes from BLS Employer Costs for Employee Compensation access by menu <http://www.bls.gov/data/> or directly with <http://download.bls.gov/pub/time.series/cm/cm.data.0.Current> 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 2019Qtr2-2020Qtr1 to determine that 33.0 percent of total loaded wages are benefits. MSHA computes the scaling factor with a number of detailed calculations but it may be approximated with the formula and values 1 + (benefit percentage/(1-benefit percentage)) = 1+  
   (.330/(1-.330)) ≅1.49. [↑](#footnote-ref-3)
4. For the safety specialist rates, MSHA used the employment weighted mean hourly wage from the OES May 2019 survey, Standard Occupational Classification (SOC) code 19-5011, Occupational Health and Safety Specialists. The applicable NAICS codes are 212100, Coal Mining; 212200, Metal Ore Mining; and 212300, Nonmetallic Mineral Mining and Quarrying. The weighted mean for each NAICS was adjusted for benefits and inflation (shown in previous notes) to obtain fully loaded rates of $57.56 ($37.69 x 1.49 x 1.025) for coal and $56.56 ($37.03 x 1.49 x 1.025) for Metal/Nonmetal. [↑](#footnote-ref-4)
5. MSHA’s MSIS database has a data flag indicating which metal/nonmetal mines are exempt from part 48 training requirements (the exempt mines are instead subject to part 46 training requirements). There is no similar data flag for metal/nonmetal contractors, so the contractor firms and miners subject to part 48 requirements are estimated as 35.7 percent of the total metal-nonmetal contractor firms and miners; 35.7 percent is the number of metal-nonmetal mine-employed miners subject to part 48 training requirements divided by the total number of metal-nonmetal mine-employed miners. [↑](#footnote-ref-5)
6. For the independent contractor instructor, MSHA used the 75th percentile hourly wage from the OES May 2019 survey, Standard Occupational Classification (SOC) codes 19-5011, Occupational Health and Safety Specialists. The applicable NAICS codes are 213100, Support Activities for Mining. The 75th percentile rate was adjusted for benefits and inflation (shown in previous notes) to obtain fully loaded rates of $71.11 ($46.56 x 1.49 x 1.025). [↑](#footnote-ref-6)
7. Hourly wage rate developed from Office of Personnel Management (OPM) June 2019 *FedScope* employment cube, <http://www.fedscope.opm.gov/>. Average annual salary = $86,897 for DOL-MSHA GS-12, 1822-Mine Safety and Health Inspection Series. Data search qualifiers are: Agency = DLMS, Occupation = 1822, Work Schedule = Full-Time, Salary Grade = GS-12, Measure = Average Salary. The hourly wage is the annual salary divided by 2,087. In order to include the cost of benefits, MSHA multiplied the average annual salary by a Federal benefit scaler for MSHA of 1.400 (FY 2021 budget submission). Rate equals $58.29 = $86,897 / 2,087 x 1.400. [↑](#footnote-ref-7)