**SUPPORTING STATEMENT**

**Information Collection Request Title**: 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 48.3, 48.9, 48.23, and 48.29

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

**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 or other mines.

The Mine Act, as amended, 30 U.S.C. 801 et seq., 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 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 a form approved by the Secretary, Certificate of Training (MSHA Form 5000-23), 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 two years for current employees and for sixty 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 he/she leaves the operator's employment.

**2. Indicate how, by whom, how frequently, and for what purpose the information is to be used. For revisions, extensions, and reinstatements of a currently approved 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.

Certificate of Training( 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 e-mail.

Additionally, MSHA has an electronic system (the 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://lakegovprod3.msha.gov/UserManagement/Login.aspx?ReturnUrl=%2fTrainingPlan%2fTPADisclaimer.aspx>.

In calendar year 2016, 669 Coal mine training plans were submitted, and 857 were submitted for Metal/Nonmetal equaling 1,526 plans. MSHA further estimates that 60 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 for downloading at <http://www.msha.gov/forms/elawsforms/5000-23.htm>. 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 purpose(s) described in Item 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 has a significant impact on a substantial number of small businesses or other small entities, describe the 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, approval of the training plans must be obtained from MSHA. Once plans are approved, only changes or modifications are required to 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 that mine operators produce training certificates during an inspection in order to ensure that all miners have received the proper training. Without adequate training, miners may sustain serious or even 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 a statistical data classification that has not been reviewed and approved by OMB;**

**\* that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or**

**\* requiring respondents to submit proprietary trade secrets, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.**

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 three 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 two 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 cited 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.**

MSHA published a 60-day Federal Register notice on October 3, 2017 (82 FR 46091). MSHA received one public comment that supported the continued use of this collection.

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

MSHA does not provide payments or gifts to respondents.

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

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 (FISMA) 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. 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 in Item 13.**

# Training Plan

Based upon MSHA's records from reporting districts it is estimated that during calendar year 2016, Coal Mine Safety and Health received 479 new plans and 190 revised plans, and Metal/Nonmetal Safety and Health received 282 new plans and 575 revised plans including a total of 1,526 respondents. It is further estimated that 60 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 paper copy, 2.25 hours to complete a plan on-line, and 1 hour to revise a paper or electronic plan.

All wage rate calculations for question twelve are from the Bureau of Labor Statistics (BLS), Occupational Employment Statistics (OES) May 2016 survey[[1]](#footnote-1) increased by 1.022 for wage inflation[[2]](#footnote-2) since the May 2016 survey and a 1.48 benefit-scaling factor[[3]](#footnote-3). The average wage per hour[[4]](#footnote-4) for a coal mine safety specialist is $55.63 and is $53.86 for a metal/nonmetal mine safety specialist.

Training Plan Revision Burden

Section 48.3 requires underground coal 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. Section 48.9 requires that upon a miner’s completion of each MSHA-approved training program, the operator shall record and certify on MSHA form 5000-23 that the miner has received the specified training.

Burden Hours

Coal:

 192 new paper plans x 8 hours/plan = 1,536 hours

 287 new electronic plans x 2.25 hours/plan = 646 hours

 190 revised paper and electronic plans

 x 1 hour/plan = 190 hours

 **Coal Burden Hours = 2,372 hours**

 **192 new paper plans + 287 new electronic plans + 190 revised plans**

 **= 669 Responses**

Metal/Nonmetal:

113 new paper plan x 8 hour/plan = 904 hours

169 new electronic plan x 2.25 hours/plan = 380 hours

575 revised paper and electronic plans

 x 1 hour/plan = 575 hours

 **Metal/Nonmetal Burden Hours = 1,859 hours**

**113 new paper plans +169 new electronic plans + 575 revised plans**

 **= 857 Responses**

**Training Plan Total Burden Hours = 4,231 hours**

**Total Responses for Training Plans = 669 + 857 = 1,526**

**Burden Hour Cost**

Coal**:**

 2,372 hours x $55.63 wage rate/hour = $131,954

Metal/Nonmetal:

1,859 hours x $53.86 wage rate/hour = $100,126

 **Training Plan Total Burden Hour Cost**  = **$232,080**

**MSHA Form 5000-23**

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 calendar year 2016, the Coal Industry reported approximately 1,325 coal mining operations employing 85,397 miners (excluding office employees). The applicable Metal and Nonmetal Industries (under Part 48) reported approximately 785 mining operations employing 49,781 miners (excluding office employees).

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 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 (85,397 miners x 0.45 = 38,429), the number of forms per miner (2), and the estimated time to complete the form (5 mins).

With respect to Metal/Nonmetal, the burden is calculated based on 45 percent of miners being trained by company personnel (49,781 miners x 0.45 = 22,401), the number of forms per miner (2), and the estimated time to complete the form (5 mins).

Based on MSHA’s estimated 2016 wage rate for a Coal mine safety specialist of $55.63/hour, and a Metal/Nonmetal mine safety specialist of $53.86/hour, the burden is calculated below.

**Burden Hours**

Coal:

 38,429 miners x 2 forms per miner = 76,858 responses

 76,858 responses x 5 mins. per form = 6,149 hours

Metal/Nonmetal:

22,401 miners x 2 forms per miner = 44,802 responses

44,802 responses x 5 mins. per form = 3,584 hours

MSHA Form **5000-23 Total Burden Hours = 9,733 hours**

**Total Responses for Form 5000-23 = 121,660**

**Burden Hour Cost**

Coal:

 6,149 hours x $55.63 wage rate/hour = $342,069

Metal/Nonmetal:

3,584 hours x $53.86 wage rate/hour = $193,034

 **5000-23 Total Burden Hour Cost = $535,103**

 **RECORD KEEPING:**

 **TOTAL RESPONSES = 123,186**

**GRAND TOTAL BURDEN HOURS = 13,964 hours**

**GRAND TOTAL BURDEN HOUR COST = $767,183**

**13. Provide an estimate for the total annual cost burden to respondents or record keepers 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 collections services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.**

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

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:

 611 paper plans (1,526 plans –915 e-plans)

 x $2 /plan = $ 1,222

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 $68.41 per hour[[5]](#footnote-5). With respect to Coal, the cost is calculated based on 25 percent of miners being trained by independent contractors (85,397 miners x 0.25 = 21,349). With respect to Metal/Nonmetal, the burden is calculated based on 25 percent of miners being trained by independent contractors (49,781 miners x 0.25 = 12,445).

Coal:

 21,349 miners x $68.41 per hour

 x 5 mins. per form

 x 2 forms per miner per year = $ 233,678

Metal/Nonmetal:

12,445 miners x $74 per hour

 x 5 mins. per form

 x 2 forms per miner per year = $ 136,218

 Total cost to complete forms = $ 369,869

**GRAND TOTAL COST BURDEN = $ 371,118**

**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.**

Approval of Plan

In 2016, MSHA approved about 1,526 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 $55.33 per hour including benefits[[6]](#footnote-6).

1,526 plans x 5 hours per plan x $ 55.33 = $ 422,168

Printing of Form

MSHA Form 5000-23 is assembled in pads with 50 sets of forms per pad and four forms per set. During 2014 through 2016, MSHA ordered pads of the form costing $68,400, $36,350, and $73,000 respectively. The average cost per year for pads over this 3-year period was $59,250.

 (($68,400 + $36,350 + $73,000) / 3 yrs.) = $ 59,250 per year

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 charge by an independent contractor which is $68.41 per hour. The numbers of miners trained are: 25,619 coal miners (85,397 coal miners x 30%) and 14,935 Metal/Nonmetal miners (49,781 Metal/Nonmetal miners x 30%).

Coal:

 25,619 miners x 2 forms per miner per year

x 5 mins. per form x $68.41 per hour = $280,415

Metal/Nonmetal:

14,935 miners x 2 forms per miner per year

x 5 mins per form x $68.41 per hour = $163,473

 **GRAND TOTAL ANNUAL COST TO FEDERAL GOVERNMENT = $925,306**

MSHA inspection personnel routinely check that miners have received the required training by periodic examination of the 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.

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

There are no program changes. There was an overall decrease in the number of new paper plans for new coal miners trained due to a decrease in the number of coal mines although the Metal/Nonmetal mines increased. Respondents decreased (from 2,331 to 1,526) and correspondingly and burden hours decreased (from 15,070 to 13,964). Responses increased (from 108,368 to 123,186) due to the increase in Metal/Nonmetal Safety and Health plans and costs to respondents increased (from 269,543 to $371,118) due to an increase in the wage rates used and the cost of both Coal and Metal/Nonmetal miners to be trained.

**16. For collections of information whose results are planned to 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 will display the expiration date for OMB approval of this information collection.

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

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: 05000I; try workers in Construction, extraction, farming, fishing, and forestry occupations, Index. <https://data.bls.gov/cgi-bin/srgate> (Qtr 1 2017/Qtr 2 2016 = 128.1/125.3 = 1.022). [↑](#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 2016Qtr2-2017Qtr1 to determine that 32.7 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+
(.327/(1-.327)) ≅1.48. [↑](#footnote-ref-3)
4. For the safety specialist rates, MSHA used the employment weighted mean hourly wage from the OES May 2016 survey, Standard Occupational Classification (SOC) codes 29-9011, 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 $55.63 ($36.78 x 1.48 x 1.022) for coal and $53.86 ($35.61 x 1.48 x 1.022) for Metal/Nonmetal. [↑](#footnote-ref-4)
5. For the independent contractor instructor, MSHA used the 75th percentile hourly wage from the OES May 2016 survey, Standard Occupational Classification (SOC) codes 29-9011, 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 $68.41 ($45.23 x 1.48 x 1.022). [↑](#footnote-ref-5)
6. Hourly rate developed from Office of Personnel Management (OPM) March 2017 *FedScope* employment cube, <http://www.fedscope.opm.gov/>. Average annual salary of $82,719 for DOL-MSHA GS-12, 1822-MINE SAFETY AND HEALTH INSPECTION SERIES. Data search qualifiers were: 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 1.396 (FY 2018 budget submission). Rate equals $55.33 = $82,719/2087 x 1.396. [↑](#footnote-ref-6)