Supporting Statement for Paperwork Reduction Act Submissions

**Information Collection Title**: Respirable Coal Mine Dust Sampling

**Collection Instrument**: Mine Operator Dust Data Card

**OMB**

**CONTROL 30 CFR Section CFR Title**

|  |  |  |
| --- | --- | --- |
| 1219-0011 | 70.201(b)(2), (e), (f), (g), (j);  71.201(a), (d), (e); (f);  90.201(f), (g), (j) | Sampling; general and technical  requirements |
|  |  |  |
|  | 70.205(b)(2); 71.205(b)(2) | Approved sampling devices; operation; air flowrate |
|  |  |  |
|  | 70.210(a), (c), (d), (f);  71.207(a), (c), (d), (f);  90.208(d), (f) | Respirable dust samples; transmission  by operator |
|  |  |  |
|  | 70.208(e)(3), (h)(3), (i)(2) | Quarterly sampling; mechanized mining units |
|  |  |  |
|  | 70.209(c)(3), (f)(3), (g)(2); | Quarterly sampling; designated areas |
|  |  |  |
|  | 71.206(d), (e), (h)(3), (k)(3) | Quarterly sampling; designated work  positions |
|  |  |  |
|  | 90.207(c)(3), (f)(3) | Quarterly sampling |
|  |  |  |
|  | 70.211(b), (c);  71.208(b), (c) | Respirable dust samples; report to operator; posting |
|  |  |  |
|  | 90.209(b), (c); | Respirable dust samples; report to operator |
|  |  |  |
|  | 70.212(a); 71.209(a); 90.210 | Status change reports |
|  |  |  |
|  | 71.300(a), (a)(1), (a)(3);  90.300(a) | Respirable dust control plan; filing requirements |
|  |  |  |
|  | 71.301(d)(1), (d)(3), (e) | Respirable dust control plan; approval  by District Manager and posting |
|  |  |  |
|  | 90.301(d), (e) | Respirable dust control plan; approval  by District Manager; copy to part 90  miner |
|  |  |  |
|  | 75.370(a)(3)(i), (a)(3)(iii),  (f)(1), (f)(3) | Mine ventilation plan; submission and approval |

**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 regulation mandating or authorizing the collection of information.**

Chronic exposure to respirable coal mine dust causes lung diseases including coal workers’ pneumoconiosis (CWP), emphysema, silicosis, and chronic bronchitis, known collectively as “black lung.” These diseases are debilitating and can result in disability and premature death. While considerable progress has been made in lowering dust levels since 1970, severe forms of black lung continue to be identified. Information from the federally funded Coal Workers’ Health Surveillance Program administered by the National Institute for Occupational Safety and Health (NIOSH) indicates that black lung remains an occupational health risk among coal miners. According to NIOSH, 933 or 3.7 percent of the 25,558 underground coal miners x-rayed between January 2003 and September 2011 were found to have CWP. Also, in FY 2011, over 28,600 former coal miners and the dependents of miners received $417 million in "black lung" benefits. Since inception of the federal Black Lung Benefits Program in 1970, over $45 billion in total benefits have been paid out to former miners and their dependents.

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 to protect the safety and health of miners. Further, section 101(a) of the Mine Act, 30 U.S.C. 811(a), 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. This information collection reflects requirements of MSHA’s Final Rule, Lowering Miners’ Exposure to Respirable Coal Mine Dust, Including Continuous Personal Dust Monitors (79 FR 24814; May 1, 2014) related to respirable coal mine dust sampling in effect on February 1, 2016, and respirable dust standards in effect on August 1, 2016.

MSHA’s standards in 30 CFR parts 70, 71, and 90 require each mine operator of an underground coal mine, surface coal mine, and surface work areas of an underground coal mine, and each coal mine operator who employs a part 90 miner, to protect miners from exposure to excessive respirable coal mine dust levels. Parts 70 and 71 require coal mine operators to continuously maintain the average concentration of respirable coal mine dust in the mine atmosphere where miners normally work or travel at or below 1.5 milligrams per cubic meter (mg/m3). When the concentration of respirable coal mine dust in the mine atmosphere contains more than 5 percent quartz, mine operators must maintain an equivalent concentration at or below the applicable dust standard by using the formula: 10 divided by the percent of quartz. Overexposure to respirable coal mine dust containing quartz has been associated with silicosis (black lung). These lung diseases are irreversible and may be fatal, but they are preventable. Parts 70 and 71 also require each coal mine operator to continuously maintain the average concentration of respirable dust in intake airways at underground mines at or below 0.5 mg/m3.

If a part 90 miner is employed at the mine, the coal mine operator is required to continuously maintain the average concentration of respirable dust in the mine atmosphere during each shift to which the part 90 miner in the active workings of the mine is exposed at or below 0.5 mg/m3. The allowable concentration of respirable dust is lowered if more than 5 percent quartz is found in the mine atmosphere during each shift to which the part 90 miner is exposed.

MSHA’s standards require that coal mine operators sample respirable coal mine dust quarterly and submit these samples to MSHA for analysis to determine if the mine is complying with the applicable dust standards. Underground coal mine operators must sample: the Designated Occupation (DO) and Other Designated Occupation (ODO) in each Mechanized Mining Unit (MMU) under 30 CFR 70.208 and each Designated Area (DA) at locations specified in the operator’s approved mine ventilation plan under 30 CFR 70.209. In addition, Designated Work Positions (DWP) at surface coal mines and surface work areas of underground coal mines must be sampled under 30 CFR 71.206. Furthermore, each part 90 miner must be sampled under 30 CFR 90.207.

Sampling, General and Technical Requirements under Parts 70, 71, and 90

Section 70.201(b)(2) requires that DAs identified by the underground coal mine operator be sampled quarterly only with an approved Coal Mine Dust Personal Sampling Unit (CMDPSU) unless the operator notifies the District Manager in writing that only an approved Continuous Personal Dust Monitor (CPDM) will be used for all DA sampling at the mine. With respect to DWP sampling, section 71.201(a) requires each mine operator of a surface coal mine and each mine operator of an underground coal mine with surface work areas who is sampling on the surface to sample with an approved CMDPSU. However, the operator may use an approved CPDM if the operator notifies the District Manager in writing that only an approved CPDM will be used for all DWP sampling at the mine. MSHA does not expect underground coal mine operators to use the CPDM to conduct DA sampling underground, or DWP sampling on the surface area of the underground mine.  Also, MSHA does not expect surface coal mine operators to use the CPDM to conduct DWP sampling.  Thus, there are no notifications to the MSHA District Manager and therefore no burdens to operators for sections 70.201(b)(2) and 71.201(a).

Sections 70.201(e), 71.201(d), and 90.201(f) require coal mine operators to make records showing the length of: each production shift for each MMU; each normal work shift for each DWP; and each shift for each part 90 miner, respectively. These provisions also require that the records be retained for at least 6 months, made available for inspection by authorized representatives of the Secretary and, except in the case of part 90 miners, by the representative of miners. The records must also be submitted to the District Manager when requested in writing.

Section 70.211(c)(5) requires that, when CPDMs are used for sampling, underground coal mine operators print, sign, and post a paper record (Dust Data Card) with the shift length. Under section 90.209(c)(5), when CPDMs are used for sampling, coal mine operators must print, sign, and provide to each part 90 miner a Dust Data Card with the shift length. Under sections 70.210(c) and 71.207(c), if using a CMDPSU, the operator must complete a Dust Data Card, which includes recording the shift length.

There are no separate burdens shown for recording shift lengths for sections 70.201(e) for underground coal mines and 90.201(f) related to part 90 miners when sampling is conducted because records of shift length are accounted for under sections 70.211(c)(5) and 90.209(c)(5) when a CPDM Dust Data Card is printed and signed. However, burdens for recording shift lengths when sampling is not conducted are shown under sections 70.201(e) and 90.201(f).

For surface work areas of underground coal mines and surface coal mines, there is no burden shown for section 71.201(d) when DWP sampling is conducted because records of shift length are accounted for under section 71.207(c) when a CMDPSU Dust Data Card is completed. However, the burden for recording shift length when sampling is not conducted is shown under section 71.201(d).

Sections 70.201(f), 71.201(e), and 90.201(g) require that upon request from the District Manager, the operator must submit the date and time any respirable dust sampling required by parts 70, 71, or 90 will begin. The mine operator must submit this information to MSHA at least 48 hours prior to scheduled sampling. In addition, under section 71.201(f), a mine operator may request, in writing, that the rain restriction for a normal work shift as defined in section 71.2 be waived by the District Manager.

Sections 70.210(d), 71.207(d), and 90.208(d) require that all operator samples be considered to be taken to fulfill the sampling requirements of parts 70, 71, and 90, respectively, unless the sample has been identified in writing by the operator to the District Manager prior to the intended sampling shift, as a sample to be used for another purpose.

Section 70.201(g) requires that to establish a normal production shift, the operator must record the amount of run-of-mine material produced by each MMU during each shift to determine the average production for the most recent 30 production shifts or for all production shifts if fewer than 30 shifts of production data are available. It also requires that the production records must be retained for at least 6 months and be made available for inspection by authorized representatives of the Secretary and the representative of miners.

Sections 70.201(j) and 90.201(j) allow the mine operator of an anthracite mine that uses the full box, open breast, or slant breast mining method to use either a CPDM or a CMDPSU for respirable coal mine dust sampling required under part 70 or part 90. However, if the mine operator chooses not to use a CPDM, he must notify the District Manager in writing of this decision. To estimate the full cost impact upon coal mine operators, MSHA assumed that these operators will use the CPDM for the required sampling. Therefore, no burden was estimated at this time for these operators to notify the District Manager of their choice not to use the CPDM. Operators may reevaluate whether to use the CPDM. Therefore, future updates to this package may result in a burden for these provisions.

Sampling under Parts 70 and 71

Sections 70.205(b)(2) and 71.205(b)(2) require that if a CMDPSU is used to sample respirable coal mine dust, each approved sampling device must be examined each shift by a person certified in sampling during the last hour of operation to assure that the sampling device is operating properly and at the proper flowrate. If the proper flowrate is not maintained, the respirable dust sample must be transmitted to MSHA with a notation by the certified person on the back of the Dust Data Card stating that the proper flowrate was not maintained. Other events occurring during the collection of respirable coal mine dust samples that may affect the validity of the sample, such as dropping of the sampling head assembly onto the mine floor, must also be noted on the back of the Dust Data Card. The burdens for these requirements are included in the burdens estimated to complete the Dust Data Cards under sections 70.210(c) and 71.207(c).

Quarterly Sampling Requirements for Parts 70, 71, and 90

Quarterly sampling requirements are in section 70.208 for MMUs, section 70.209 for DAs, and section 90.207 for part 90 miners. Sections 70.208(e)(3), 70.209(c)(3), and 90.207(c)(3) require that when a valid representative sample meets or exceeds the Excessive Concentration Values (ECV) that corresponds to the applicable standard and particular sampling device used for either an MMU or DA, respectively, or that corresponds to the applicable standard and particular sampling device used for part 90 miner sampling, the operator must make, upon implementation of corrective actions, a record of the actions taken. The record must be certified by the mine foreman or equivalent mine official, no later than the end of the mine foreman’s or equivalent official’s next regularly scheduled working shift. The record must be made in a secure book that is not susceptible to alteration or electronically in a computer system so as to be secure and not susceptible to alteration. Such records must be retained at a surface location at the mine for at least 1 year and be made available for inspection by authorized representatives of the Secretary and, except for part 90 miners, the representative of miners. Also, the records must be made available for inspection by the affected part 90 miner who was sampled.

Sections 70.208(h)(3), 70.209(f)(3), and 90.207(f)(3) require that mine operators, upon issuance of a citation for violation of the applicable standard for either an MMU, DA, or part 90 miner, respectively, must make, upon implementation of the corrective actions, a record of the actions taken. The record must be certified by the mine foreman or equivalent mine official, no later than the end of the mine foreman’s or equivalent official’s next regularly scheduled working shift. The record must be made in a secure book that is not susceptible to alteration or electronically in a computer system so as to be secure and not susceptible to alteration. Such records must be retained at a surface location at the mine for at least 1 year and be made available for inspection by authorized representatives of the Secretary and, except for part 90 miners, the representative of miners. Also, the records must be made available for inspection by the affected part 90 miner who was sampled.

DWPs at surface coal mines and surface work areas of underground coal mines must be sampled quarterly under section 71.206. Under section 71.206(d), operators with multiple work positions that are specified in section 71.206(c)(2) and (c)(3) must sample the DWP exposed to the greatest respirable dust concentration in each work position performing the same activity or task at the same location at the mine and exposed to the same dust generation source. Each operator must provide the District Manager with a list identifying the specific work positions where DWP samples will be collected for: active mines; new mines; and DWPs with a change in operational status that increases or reduces the number of active DWPs.

Section 71.206(e) requires that each DWP sample must be taken on a normal work shift. If a normal work shift is not achieved, the respirable dust sample must be transmitted to MSHA with a notation by the person certified in sampling on the back of the Dust Data Card stating that the sample was not taken on a normal work shift. Section 71.207(c) requires that a person certified in sampling properly complete the Dust Data Card that is provided by the manufacturer for each filter cassette. The card must have an identification number identical to that on the cassette used to take the sample and be submitted to MSHA with the sample. Each card must be signed by the certified person who actually performed the required examinations during the sampling shift and include that person’s MSHA Individual Identification Number (MIIN). A separate burden has not been included for section 71.206(e) since MSHA assumed that any notations can be made at the same time that the Dust Data Card is completed under section 71.207(c).

Section 71.206(h)(3) requires that when a valid representative sample taken in accordance with this section meets or exceeds the ECV that corresponds to the applicable standard and particular sampling device used, the operator must make, upon implementation of the corrective actions, a record of the actions taken. The record must be certified by the mine foreman or equivalent mine official, no later than the end of the mine foreman’s or equivalent official’s next regularly scheduled working shift. The record must be made in a secure book that is not susceptible to alteration or electronically in a computer system so as to be secure and not susceptible to alteration. Such records must be retained at a surface location at the mine for at least 1 year and be made available for inspection by authorized representatives of the Secretary and the representative of miners. There are no separate burden estimates projected for section 71.206(h)(3). MSHA assumed that surface samples that meet or exceed the applicable ECV will result in a citation, and this burden appears under section 71.206(k)(3).

Section 71.206(k)(3) requires that upon issuance of a citation for violation of the applicable standard, the operator must make, upon implementation of the corrective actions, a record of the actions taken. The record must be certified by the mine foreman or equivalent mine official, no later than the end of the mine foreman’s or equivalent official’s next regularly scheduled working shift. The record must be made in a secure book that is not susceptible to alteration or electronically in a computer system so as to be secure and not susceptible to alteration. Such records must be retained at a surface location at the mine for at least 1 year and be made available for inspection by authorized representatives of the Secretary and the representative of miners.

Transmission of Respirable Coal Mine Dust Samples by the Operator under Parts 70, 71, and 90

Sections 70.210(a) and 71.207(a) require that if a CMDPSU is used to sample, the operator must transmit within 24 hours after the end of the sampling shift all samples collected to fulfill the requirements of part 70, 71, or 90, including control filters, in containers provided by the manufacturer of the filter cassette to: Respirable Dust Processing Laboratory, Pittsburgh Safety and Health Technology Center, Cochrans Mill Road, Building 38, P.O. Box 18179, Pittsburgh, Pennsylvania 15236-0179, or to any other address designated by the District Manager.

Sections 70.210(c) and 71.207(c) require that a person certified in sampling properly complete the Dust Data Card that is provided by the manufacturer for each filter cassette. The card must have an identification number identical to that on the cassette used to take the sample and be submitted to MSHA with the sample. Each card must be signed by the certified person who actually performed the required examinations during the sampling shift and include that person’s MIIN. Respirable dust samples with data cards not properly completed may be voided by MSHA.

Sections 70.210(f), 71.207(f), and 90.208(f) require that if a CPDM is used to sample, the person certified in sampling must validate, certify and transmit electronically to MSHA within 24 hours after the end of each sampling shift all sample data file information collected and stored in the CPDM, including the sampling status conditions encountered when sampling. All CPDM data files transmitted electronically to MSHA must be maintained by the operator for at least 1 year.

The burdens for sections 70.210(a), (c), and (f), 71.207(a) and (c), and 90.208(f) are included in the burdens for sections 70.210, 71.207, and 90.208. Section 71.207(f) pertains only to using the CPDM.  However, operators of surface coal mines and operators of surface work areas of underground coal mines are only required to use the CPDM for part 90 miner sampling, and MSHA does not expect them to use the CPDM to conduct DWP sampling. Thus, the burden for section 71.207(f) is accounted for in the burden for section 90.208(f).

Report to the Operator of Respirable Dust Samples; Post or Provide Results and Report under Parts 70, 71, and 90

Sections 70.211(b) and 71.208(b) require that upon receipt of the sampling report that contains sampling results from MSHA, the operator must post the data for at least 31 days on the mine bulletin board. Sections 70.211(c) and 71.208(c) require, if using a CPDM, the person certified in sampling must, within 12 hours after the end of each sampling shift, to print, sign, and post on the mine bulletin board a paper record (Dust Data Card) of each sample run. This hard-copy record must include the data entered when the sample run was first programmed and the following: the mine identification number; the locations within the mine or the DWP at the mine from which the samples were taken; the concentration of respirable dust, expressed as an equivalent concentration reported and stored for each sample; the sampling status conditions encountered for each sample; and the shift length. Section 71.208(c) requires that when CPDMs are used for DWP sampling, underground coal mine operators that have surface work areas and surface coal mine operators print, sign, and post a paper record (Dust Data Card) with the shift length and other information regarding sampling for each location sampled under part 71. MSHA does not expect that the CPDM will be used for DWP sampling by underground coal mine operators on the surface area of the underground mine, or by surface coal mine operators. Therefore, no burden was estimated at this time for Section 71.208(c).

Section 90.209(b) requires that upon receipt of the sampling report from MSHA, the operator must provide a copy to the part 90 miner only. Section 90.209(c) requires that if using a CPDM, the person certified in sampling must print, sign, and provide to each part 90 miner, a paper record (Dust Data Card) of the sample run within one hour after the start of the part 90 miner’s next work shift. This hard copy record must include the data entered when the sample run was first programmed, and the following: the mine identification number; the location within the mine from which the sample was taken; the concentration of respirable dust, expressed as an equivalent concentration reported and stored for each sample; the sampling status conditions encountered for each sample; the shift length; and the part 90 miner’s MIIN.

Operational Status Changes under Parts 70, 71, and 90

Sections 70.212(a), 71.209(a), and 90.210 require that if there is a change in operational status that affects the respirable dust sampling requirements of part 70, 71, or 90, respectively, the operator must report the change in operational status of the mine, MMU, DA, DWP, or part 90 miner (such as the part 90 miner entering a terminated, injured or ill status, or returning to work) to the MSHA District Office or to any other MSHA office designated by the District Manager. Status changes must be reported in writing or electronically within 3 working days after the status change has occurred.

Revised Dust Control Parameters in the Mine Ventilation Plan in Response to Violations of the Applicable Standard under Part 70

Sections 70.208(i)(2) and 70.209(g)(2) provide that a citation for violation of the applicable standard shall be terminated by MSHA when the operator has submitted to the District Manager revised dust control parameters as part of the mine ventilation plan applicable to the MMU, or the DA, respectively, in the citation and such changes have been approved by the District Manager. The revised parameters must reflect the control measures used by the operator to abate the violation.

Dust Control Plan Provisions in Response to Violations of the Applicable Standard under Part 71

Section 71.300(a) requires that the operator must submit to the District Manager for approval a written respirable dust control plan applicable to the DWP identified in the citation within 15 calendar days after the termination date of a citation for violation of the applicable standard. The respirable dust control plan and revisions must be suitable to the conditions and the mining system of the coal mine and be adequate to continuously maintain respirable dust within the applicable standard at the DWP identified in the citation.

Section 71.300(a)(1) requires that the mine operator must notify the representative of miners at least 5 days prior to submission to MSHA of a respirable dust control plan and any revision to a dust control plan. If requested, the mine operator must provide a copy to the representative of miners at the time of notification.

Section 71.300(a)(3) requires that a copy of the proposed respirable dust control plan, and a copy of any proposed revision, submitted for MSHA approval must be posted on the mine bulletin board at the time of submittal. The proposed plan or proposed revision must remain posted until it is approved, withdrawn, or denied.

Under section 71.301(d)(1), the approved respirable dust control plan and any revisions must be provided upon request to the representative of the miners by the operator following notification of approval.

Under section 71.301(d)(3), the plan or revisions must be posted on the mine bulletin board within 1 working day following notification of approval and remain posted for the period that the plan is in effect.

Under section 71.301(e), the operator may review respirable dust control plans and submit proposed revisions to such plans to the District Manager for approval.

Dust Control Plan Provisions in Response to Violations of the Applicable Standard under Part 90

Section 90.300(a) requires that if an operator abates a violation of the applicable standard by reducing the respirable dust level in the position of the part 90 miner, the operator must submit to the District Manager for approval a written respirable dust control plan for the part 90 miner in the position identified in the citation within 15 calendar days after the citation is terminated. The respirable dust control plan and revisions thereof must be suitable to the conditions and the mining system of the coal mine and be adequate to continuously maintain respirable dust within the applicable standard for that part 90 miner.

Section 90.301(d) requires the operator to provide a copy of the current respirable dust control plan to the part 90 miner.

Under section 90.301(e), the operator may review respirable dust control plans and submit proposed revisions to such plans to the District Manager for approval.

Mine Ventilation Plan Revisions, Notify Miners’ Representatives, Provide Copy, and Posting

Section 75.370(a)(3)(i) requires underground coal mine operators to notify the miners’ representative at least 5 days prior to submission of a mine ventilation plan and any revision and, if requested, provide a copy to the miners’ representative at the time of notification. Section 75.370(a)(3)(iii) and (f)(3) require the operator to post a copy of the proposed plan and any proposed revision, and the MSHA-approved plan and any revisions, respectively, on the mine bulletin board. In addition, section 75.370(f)(1) requires the operator to provide a copy of the MSHA-approved plan and any revisions to the miners’ representative, if requested.

**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 required records for respirable coal mine dust sampling assist mine operators, miners, and state and federal regulators in determining the adequacy of the respirable coal mine dust control measures used to meet MSHA’s applicable dust standards. This information is used to protect miners from exposure to excessive levels of respirable coal mine dust.

The information provided by the mine operator is vital to the effective administration of a mine’s respirable coal mine dust control program and allows the operator and MSHA to assess the programs’ effectiveness. MSHA uses the information to determine which operators comply with required sampling requirements and dust standards, and which operators fail to protect miners from excessive dust concentrations and thus need to take appropriate measures to lower respirable dust levels in the mine atmosphere. After MSHA processes samples submitted by operators, the Agency uses the collected information to report sample results to mine operators. Mine operators provide miners notification of sampling results when operators post them on the mine bulletin board or when operators provide part 90 miners with copies of the results. The sampling results enable the Agency to effectively evaluate the adequacy of the coal mine operator’s respirable dust control measures, identify mine operators for targeted enforcement activities, and plan and undertake special health emphasis initiatives, such as the “Miners’ Choice Program” and the “End Black Lung ACT NOW!” initiative.

In addition, mine operators must submit respirable dust control plans and revisions for MSHA approval and, after MSHA approval, must comply with such plans. The requirement to post the plan, or provide a copy of the plan to the affected part 90 miner, allows affected miners to acquaint themselves with the types and locations of dust control measures that are required to be used and maintained to control respirable coal mine dust. MSHA inspectors use the plan to determine whether the mine operator is complying with plan provisions and to assess the plan’s continued effectiveness in maintaining compliance with the applicable respirable coal mine dust standards.

**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.**

For mine operators who use CMDPSU for respirable coal mine dust sampling, no improved information technology has been identified by MSHA that would reduce the burden associated with the completion of Dust Data Cards. This is because each operator-collected sample when transmitted to MSHA for processing must be physically attached to its properly completed accompanying Dust Data Card. The information recorded on the Dust Data Card provides important details about the sample, when and where it was collected, production conditions in effect during sampling, and who was responsible for certifying that it was properly collected. Consequently, this particular information collection technique does not lend itself to electronic submission. However, mine operators submit a large percentage of sampling dates (sections 70.201(f), 71.201(e), and 90.201(g)), status change reports (sections 70.212(a), 71.209(a), and 90.210), and respirable dust control plans (sections 71.300 and 90.300) electronically.

Mine operators who use CPDMs for respirable coal mine dust sampling download their sampling data to a computer and transmit the data electronically to MSHA and print out the data for posting on the mine bulletin board for interested parties to review. Electronic transmission of the CPDM data reduces errors related to transcribing the data and ensures that the data have not been altered. In addition, the quick assessment of sampling results from the CPDM provides operators and miners with real-time data that allows for immediate action to prevent miners from being overexposed to respirable coal mine dust. After downloading and transmitting the sampling data to MSHA, mine operators can store this information electronically.

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

A mine operator completes a Dust Data Card for each individual dust sample collected and submitted to MSHA to demonstrate that the mine is free of excessive dust concentrations and, therefore, is complying with mandatory exposure limits. Without these samples and the accompanying specified information about each sample and the production conditions in effect during sampling, MSHA could not ascertain whether a mine operator is in compliance with the mandatory dust exposure limits. While MSHA also conducts dust sampling periodically, its purpose is not only to supplement the operator’s sampling program, but also to: (1) monitor the effectiveness of the operator's respirable dust control programs; (2) determine whether the occupation being sampled by the operator has been properly designated for sampling as the occupation at risk of being exposed to the highest dust concentrations; (3) determine if excessive levels of quartz are present, which would require the dust concentration level to be reduced further to be more protective; and (4) identify work positions at surface coal mines or surface work areas of underground coal mines that should be designated for routine quarterly monitoring by coal mine operators. Since the purpose of MSHA and operator sampling have somewhat different objectives, there is no duplication of effort. MSHA knows of no other federal, state, or local agency that collects similar information on dust samples required for compliance purposes or that collects similar information on respirable dust control plans.

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

These information collection requirements are imposed on all coal mining operations and do not have a greater impact on small businesses or other small entities. However, MSHA believes that the burden on small mines could not be reduced without adversely affecting MSHA’s dust control enforcement efforts.

**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.**

Because mining conditions are constantly changing, the quality of the air that miners breathe must be monitored on a routine basis to ensure that it is free of excessive dust levels to prevent development of “black lung” disease. Therefore, the Mine Act and MSHA’s standards require specific occupations, miners, and work locations to be sampled by mine operators every 3 months (quarterly). Less frequent monitoring of the quality of the mine air that miners breathe would provide an inadequate indication of the dust conditions to which miners are normally exposed. This would increase the likelihood that excessive dust conditions would go undetected. Consequently, the health of miners would be adversely impacted if excessive dust concentrations could not be detected and reduced.

**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.**

Sections 70.208, 70.209, 71.206, and 90.207 require coal mine operators to sample and submit sampling information to MSHA on a quarterly basis. In addition, under sections 70.208(h)(4), 70.209(f)(4), 71.206(k)(4) and 90.207(f)(2)(i), each mine operator must submit abatement samples following issuance of a citation for the main purpose of demonstrating that the mine is free of excessive dust concentrations and in compliance with mandatory dust exposure levels. Also, when a change occurs in the operational status of a mine, MMU, DA, DWP, or part 90 miner that affects the sampling requirements of 30 CFR parts 70, 71, and 90, the change must be reported in writing to the MSHA District Office within 3 working days after the status change has occurred in accordance with sections 70.212(a), 71.209(a), and 90.210. Proper notification prevents MSHA from taking unnecessary enforcement actions against mine operators for failing to submit the required number of dust samples during a sampling period.

Once adopted by the mine operator, a respirable dust control plan for a DWP or part 90 miner in the position identified in a citation must remain in effect for the life of the surface coal mine or surface work area of an underground coal mine, for the time that the part 90 miner remains in the position, or until the MSHA District Manager determines that the plan is no longer necessary. MSHA-approved respirable dust control plans provide the basis for MSHA to determine whether miners will be adequately protected from excessive dust concentrations during each shift.

The 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.**

MSHA published a 60-day *Federal Register* notice on May 3, 2019 (84 FR 19122). 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 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.**

While MSHA provides no confidentiality assurances in connection with this collection, as a practical matter, all records pertaining to part 90 miners are kept confidential and stored in locked cabinets at applicable District Offices, and accessed only by authorized individuals. For the information collected under parts 70, 71, and 90 that is entered into the MSHA Standard Information System, only authorized persons have access to the information in this system. 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. 522) and its attendant DOL regulations, 29 CFR part 70.

In the event a mine operator should include proprietary information in the respirable dust control plan, such data will be kept confidential by MSHA consistent with the guidelines outlined in 5 U.S.C. 552(b)(4).

**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 under Item 13.**

The number of responses for this submission is 1,291,236 from 1,035 unique respondents (mining operations).

**Record of Shift Length**

Record the Length of the Shift – Sampling; General and Technical Requirements – Sections 70.201(e), 71.201(d), and 90.201(f)

Sections 70.201(e), 71.201(d) and 90.201(f) require the operator to make a record showing the length of each production shift for each MMU, normal work shift for each DWP and each shift for each part 90 miner, respectively, to retain the records for at least six months, and to make the records available for inspection by authorized representatives of the Secretary and, except in the case of part 90 miners, by the miners’ representative.

Underground Coal Mines

When CPDM sampling is conducted for MMUs and part 90 miners, sections 70.211(c) and 90.209(c) require coal mine operators to print, sign and post on the mine bulletin board for each MMU, or provide to each part 90 miner, respectively, the Dust Data Card that provides information required by paragraph (c), including shift length. Thus, the burden to record the shift length when sampling is being conducted is accounted for under sections 70.211(c) and 90.209(c). When sampling is not being conducted, the burden for recording shift length is accounted for here under sections 70.201(e) and 90.201(f).

Annually, MSHA estimates that approximately 0.3 percent of the total production shifts for 560 active producing MMUs are sampled with the CMDPSU. An estimated 450 production shifts, all in seven small anthracite coal mines with one MMU each and 1‑19 employees, are sampled with the CMDPSU annually. All other MMU and Part 90 dust samples are taken with the CPDM.

When CMDPSU sampling is conducted for DWPs at surface areas of underground coal mines, section 71.207(c) requires operators to complete the Dust Data Card, which includes recording shift length. Thus, the burden to record the shift length when DWP sampling is being conducted is accounted for under section 71.207(c). When sampling is not being conducted, the burden for recording shift length for DWPs is accounted for under sections 71.201(d).

MSHA estimates that the number of DWPs are: 4 DWPs in mines with 1‑19 employees; 76 DWPs in mines with 20‑500 employees; and 19 DWPs in mines with 501+ employees. MSHA estimates that the number of shifts per day is 1 in mines with 1‑19 employees, and 2 in mines with 20 or more employees. Also, MSHA estimates that the number of workdays per year is: 200 in mines with 1‑19 employees and 300 in mines with 20‑500 employees, 350 in mines with 501+ employees. MSHA estimates that approximately 99 percent of DWP shifts are not sampled annually or 59,103 DWP shifts (800 shifts in mines with 1‑19 employees x 0.99 + 45,600 shifts in mines with 20‑500 employees x 0.99 + 13,300 shifts in mines with 501+ employees x 0.99).

Thus, MSHA estimates that, annually, the number of shifts where underground coal mine operators will need to record shift length under sections 70.201(e), 90.201(f), and 71.201(d) when sampling does not occur are 60,150 shifts (450 MMU shifts + 59,700 DWP shifts). MSHA estimates that it takes a miner, 1 minute to record the shift length.

Surface Coal Mines

When CMDPSU sampling is conducted for DWPs at surface coal mines, section 71.207(c) requires operators to complete the Dust Data Card, which includes recording shift length. Thus, the burden to record the shift length when DWP sampling is being conducted is accounted for under section 71.207(c). When sampling is not being conducted, the burden for recording shift length for DWPs is accounted for here under sections 71.201(d).

MSHA estimates that the number of DWPs are: 650 DWPs in mines with 1‑19 employees; 1,001 DWPs in mines with 20‑500 employees; and 48 DWPs in mines with 501+ employees. MSHA estimates that the number of shifts per day is: 1 in mines with 1‑19 employees, 2 in mines with 20 or more employees. Also, MSHA estimates that the number of workdays per year is: 250 in mines with 1‑19 employees; 300 in mines with 20‑500 employees, and 350 in mines with 501+ employees. MSHA estimates that approximately 99 percent of DWP shifts are not sampled annually or 788,733 DWP shifts (162,500 shifts in mines with 1‑19 employees x 0.99 + 600,600 shifts in mines with 20‑500 employees x 0.99 + 33,600 shifts in mines with 501+ employees x 0.99). For surface coal mines, MSHA estimates that it takes a miner 1 minute to record shift length for a DWP. MSHA estimates that the hourly wage rate[[1]](#footnote-1) for mining representative for is $37.75 per hour[[2]](#footnote-2).

The annual burden hours and hour burden costs for underground and surface coal mines are shown below.

Underground Coal Mine Operators

Burden Hours

59,103 records x 1 minute = 985 hours

Anthracite Coal Mines Operators

Burden Hours

450 records x 1 minute = 8 hours

Surface Coal Mine Operators

Burden Hours

788,733 DWP records x 1 minute = 13,146 hours

Total Burden Hours

985 hours + 8 hours+13,146 hours = 14,139 hours

Total Burden Costs

14,139 hours x $37.75 =$533,747

Responses: 848,286 (59,103+450+788,733)

**Total Responses = 848,286**

**Total Burden Hours = 14,139**

**Total Burden Costs = $533,747**

**Submission of Sampling Dates**

Sections 70.201(f), 71.201(e) and (f), and 90.201(g)

Upon request from the District Manager, a mine operator must submit in advance the dates when sampling will be conducted under sections 70.201(f), 71.201(e), and 90.201(g). At surface work areas of underground coal mines and at surface coal mines, operators can also make a written request under section 71.201(f) asking the District Manager to waive the rain restriction for a normal work shift as defined section 71.2. The Agency anticipates requesting and receiving 360 sampling schedules per year. MSHA estimates that it will take a mine supervisor 20 minutes to prepare a quarterly sampling schedule, and a clerical person another 10 minutes to type and either mail, fax, or transmit electronically the schedule to the MSHA District Office. Composite hourly wage rates, that include both underground and surface wages, are $60.70 [[3]](#footnote-3) for a supervisor and $30.06[[4]](#footnote-4) for a clerical employee. Annual burden hours and hour burden costs are shown below.

Underground and Surface Coal Mine Operators

Burden Hours

360 schedules x 20 minutes = 120 hours

360 schedules x 10 minutes = 60 hours

Sub-total = 180 hours

Hour Burden Cost

120 hours x $60.70 wage rate = $7,284

60 hours x $30.06 wage rate = $1,804

Sub-total = $9,088

**Total Responses = 360**

**Total Burden Hours: = 180**

**Total Burden Costs: = $9,088**

**Provide Samples for Purposes Other than Compliance**

Sections 70.210(d), 71.207(d), and 90.208(d)

Sections 70.210(d), 71.207(d), and 90.208(d) require that an operator sample that is submitted to MSHA is considered to be taken to fulfill the sampling requirements of parts 70, 71, and 90, respectively, unless the sample has been identified in writing by the operator to the District Manager that it is to be used for another purpose. It is very rare that an operator submits a sample for reasons other than compliance with parts 70, 71, and 90, for purposes of this collection. However, MSHA estimates that there will be one occurrence annually and that it will take a mine supervisor 5 minutes to notify the District Manager in writing of the intent to submit samples for reasons other than compliance. The composite hourly wage rate, which includes both underground and surface wages, is $60.70 for a supervisor. Annual burden hours and hour burden costs are shown below.

Underground and Surface Coal Mine Operators

Burden Hours (rounded up to full hour)

1 notification x 5 minutes = 1 hour

Hour Burden Costs

1 hour x $60.70 wage rate = $61

**Total Responses: = 1**

**Total Burden Hours: = 1**

**Total Burden Costs: = $61**

**Change in Operational Status**

Sections 70.212(a), 71.209(a), and 90.210

When a change occurs in the operational status of a mine, MMU, DA, DWP, or part 90 miner that affects the sampling requirements of 30 CFR parts 70, 71, and 90, the change must be reported in writing to the MSHA District Office within 3 working days after the status change has occurred in accordance with sections 70.212(a), 71.209(a), and 90.210. MSHA anticipates receiving 2,540 status changes annually. MSHA estimates that it will take a mine supervisor 5 minutes to prepare a status change report, and a clerical person 10 minutes to type and transmit by mail or electronically the report to MSHA. Composite hourly wage rates, that include both underground and surface wages, are $60.70 per hour for a supervisor and $30.06 per hour for a clerical employee. Annual burden hours and hour burden costs are shown below.

Underground and Surface Coal Mine Operators

Burden Hours

2,540 reports x 5 minutes = 212 hours

2,540 reports x 10 minutes = 423 hours

Subtotal = 635 hours

Hour Burden Cost

212 hours x $60.70 wage rate = $12,868

423 hours x $30.06 wage rate = $12,715

Subtotal = $25,583

**Total Responses: = 2,540**

**Total Burden Hours: = 635**

**Total Burden Costs: = $25,583**

**Record of Production**

Record Production in Underground Coal Mines

Section 70.201(g)

Section 70.201(g) requires the operator to record the amount of run‑of‑mine material produced by each MMU during each shift. Production data are used to determine the average production for the most recent 30 production shifts or for all production shifts if fewer than 30 shifts of production data are available. The operator must retain production records for at least six months and make them available for inspection by authorized representatives of the Secretary and the miners’ representative.

Some mines already record the material produced per shift; however, most do not. Since nearly all mines with 1‑19 employees operate 1 shift per day, MSHA estimates that the 34 MMUs in underground coal mines with 1‑19 employees operate 1 shift per day (or 34 shifts per day). MSHA estimates that material produced is not recorded for 90 percent of these shifts, or approximately 31 shifts per day (34 shifts x 90 percent). In addition, MSHA estimates that 454 MMUs in underground coal mines with 20‑500 employees operate 2 shifts per day (or 908 shifts per day). MSHA estimates that material produced is not recorded for 75 percent of these shifts operating each day or 681 shifts (908 shifts x 75 percent). Finally, all mines with 501+ employees are assumed to already record the amount of material produced. MSHA estimates that the annual number of workdays is: 200 days in mines with 1‑19 employees; and 300 days in mines with 20‑500 employees. MSHA assumes that a mine supervisor, earning $60.70 per hour[[5]](#footnote-5), takes 5 minutes to record the material produced on each shift. Annual burden hours and hour burden costs are shown below.

Underground Coal Mine Operators

Burden Hours

210,500 shifts x 5 minutes = 17,542 hours

Hour Burden Costs

17,542 hours x $60.70 wage rate = $1,064,762

**Total Responses: = 210,500**

**Total Burden Hours: = 17,542**

**Total Burden Costs: = $1,064,762**

**List of DWPs to MSHA**

List the DWPs – Section 71.206(d)

Section 71.206(d) requires operators to provide the MSHA District Manager with a list identifying the specific work positions where DWP samples will be collected. MSHA estimates that it takes a supervisor 12 minutes to prepare the list. A supervisor’s hourly wage rate is $60.70 per hour. MSHA estimates that a clerical employee takes an additional 12 minutes to prepare and send it to MSHA. A clerical employee’s hourly wage rate is $30.06[[6]](#footnote-6) per hour.

MSHA estimates that the number of underground coal mines with surface areas that have DWPs are 56 mines (4 mines with 1‑19 employees, 45 mines with 20‑500 employees, and 7 mines with 501+ employees). MSHA estimates that the number of surface coal mines with DWPs are 554 (309 mines with 1‑19 employees, 241 mines with 20‑500 employees, and 4 mines with 501+ employees). MSHA assumes that 10 percent of these mines will update their list annually (6 underground coal mines and 55 surface coal mines). Annual burden hours and hour burden costs are shown below.

Mine Operators

Burden Hours

61 mines x 12 minutes = 12 hours

61 mines x 12 minutes = 12 hours

Subtotal = 24 hours

Hour Burden Costs

12 hours x $30.06 wage rate = $361

12 hours x $60.70 wage rate = $728

Subtotal = $1,089

Responses 61 = (6 + 55)

**Total Responses: = 61**

**Total Burden Hours: = 24**

**Total Burden Costs: = $1,089**

**Compliance Sampling**

**Compliance Sampling with a CMDPSU**

Complete and Sign Dust Data Card and Transmit Samples to MSHA – Sections 70.210(a) and (c) and 71.207(a) and (c)

Notations if Proper Flow Rate not Maintained – Sections 70.205(b)(2) and 71.205(b)(2), or if Normal Work Shift was not Achieved – Section 71.206(e)

Under sections 70.210(a) and 71.207(a), if using a CMDPSU, the operator must transmit within 24 hours after the end of the sampling shift all samples collected to fulfill the requirements of parts 70 and 71. Under sections 70.210(c) and 71.207(c), a person certified in sampling must properly complete and sign the Dust Data Card that is provided by the manufacturer for each filter cassette.

Under sections 70.205(b)(2) and 71.205(b)(2), if using the CMDPSU, and the proper flow rate was not maintained during a sampled shift, the respirable dust sample must be transmitted to MSHA with a notation by the certified person on the back of the Dust Data Card stating that the proper flow rate was not maintained. Other events occurring during the collection of respirable dust samples that may affect the validity of the sample, such as dropping of the sampling head assembly onto the mine floor, must be noted on the back of the Dust Data Card.

Under section 71.206(e) if a normal work shift is not achieved on the sampled shift, the respirable dust sample must be transmitted to MSHA with a notation by the person certified in sampling on the back of the Dust Data Card stating that the sample was not taken on a normal work shift.

The burden for section 70.210(c) concerning completing the Dust Data Card includes the burden for section 70.205(b)(2) concerning notations on the Dust Data Card since MSHA assumes that any notations required to be made on the Dust Data card can be made at the time the Dust Data Card is completed. For this same reason, the burden for section 71.207(c) includes the burdens for sections 71.205(b)(2) and 71.206(e).

Normally these tasks are performed by a certified person earning $44.94 per hour[[7]](#footnote-7). MSHA estimates that a certified person takes 6 minutes to prepare and send one sample with the Dust Data Card to MSHA.

After the Dust Data Card has been filled out, a certified person signs the card and includes that person’s MIIN on the card. MSHA estimates that a certified person (normally the mine safety inspector or an equivalent person, such as a supervisor) takes 1 minute and 30 seconds (1.5 minutes) to complete and sign the Dust Data Card. MSHA also estimates that a supervisor’s hourly wage rate is $60.70 per hour.

For underground coal mines, MSHA’s annual estimate of 6,050 Dust Data Cards (5,830 related to outby DAs and 220 related to DWPs) is based on annualizing twelve months of data ending September 2018. For surface coal mines, MSHA annualized data during the same time period to obtain its annual estimate of 4,385 Dust Data Cards related to DWP sampling. Annual burden hours and hour burden costs are shown below.

Surface and Underground Coal Mine Operators

Burden Hours

10,435 data cards x 6 minutes = 1,044 hours

10,435 data cards x 1.5 minutes = 261 hours

Subtotal = 1,305 hours

Hour Burden Costs

1,044 hours x $44.94 wage rate = $46,920

261 hours x $60.70 wage rate = $15,842

Sub-total = $62,762

Responses 10,435 (6,050 + 4,385)

**Total Responses: = 10,435**

**Total Burden Hours: = 1,305**

**Total Burden Costs: = $62,760**

Post MSHA Report – Sections 70.211(b) and 71.208(b)

After processing the CMDPSU samples, MSHA sends a report that contains the sampling data to the operator. Upon receiving the report, sections 70.211(b) and 71.208(b) require operators to post the sampling data on the mine bulletin board. MSHA estimates that a clerical employee takes 6 minutes to copy and post the data. The hourly wage rate for a clerical employee is $30.06 per hour. Annual burden hours and hour burden costs are shown below.

Underground Coal Mine Operators

Burden Hours

10,435 postings of MSHA Reposts x 6 minutes = 1,044 hours

Hour Burden Costs

1,044 hours x $30.06 wage rate = $31,382

Responses 10,435 (6,050 + 4,385)

**Total Responses: = 10,435**

**Total Burden Hours: = 1,044**

**Total Burden Costs: = $31,382**

**Compliance Sampling with a CPDM at Underground Mines**

Validate, Certify, and Transmit CPDM Sampling Data to MSHA –

Sections 70.210(f) and 90.208(f), 70.201(b)(2)

Sections 70.210(f), 90.208(f) and 70.201(b)(2) apply when operators use CPDMs to sample. These standards require that within 24 hours after the end of each sampling shift, a certified person must validate, certify, and transmit electronically to MSHA the sample data file information collected and stored in the CPDM.

MSHA estimates that validating, certifying, and uploading the CPDM data to a computer and then transmitting it electronically to MSHA takes a certified person, earning $44.94 per hour, 6 minutes. MSHA estimates that 195,430 CPDM samples (consisting of DO and ODO sampling as required by section 70.208, part 90 miner sampling as required by section 90.207, and optional DA sampling with the CPDM when approved by the District Manager, section 70.201 (b)(2)) must be validated, certified and transmitted to MSHA within 24 hours after the end of each sampling shift by a certified person. Annual burden hours and hour burden costs are shown below.

Underground Coal Mine Operators

Burden Hours

102,950 samples x 6 minutes = 10,295 hours

Hour Burden Costs

10,295 hours x $44.94 wage rate = $462,688

**Total Responses: = 102,950**

**Total Burden Hours: = 10,295**

**Total Burden Costs: = $462,688**

Post MSHA Report; Print, Sign and Post CPDM Paper Record (Dust Data Card) – Section 70.211(b) and (c);

Provide MSHA Report and Print, Sign and Provide CPDM Paper Record (Dust Data Card) to Part 90 Miners – Section 90.209(b) and (c)

Section 70.211(b) requires the operator to post sampling data from the MSHA report on the mine bulletin board and section 90.209(b) requires the operator to provide copies of the MSHA report to part 90 miners.

Sections 70.211(c) and 90.209(c) apply to operators who use a CPDM. Section 70.211(c) requires the person certified in sampling to print, sign and post on the mine bulletin board within 12 hours after the end of each sampling shift a paper record (Dust Data Card) of the sample run, also called the hard copy record, on the mine bulletin board within 12 hours after the end of each sampling shift. Section 90.209(c) requires the person certified in sampling to print, sign and provide the paper record (Dust Data Card) of the sample run to each part 90 miner within one hour after the start of the part 90 miner’s next work shift.

MSHA assumes that posting sampling data results from an MSHA report under section 70.211(b) can be done at the same time as posting a paper record (Dust Data Card) from a different sample run under section 70.211(c). Similarly, providing a part 90 miner with an MSHA report under section 90.209(b) can be done at the same time as providing the part 90 miner with a paper record (Dust Data Card) from a different sample run under section 90.209(c). MSHA estimates that it takes the same amount of time to provide a copy of the MSHA report and paper record (Dust Data Card) of the sample run to the part 90 miner as it does to post the MSHA report on the mine bulletin board.

Sections 70.211(c) and 90.209(c) state that the paper record (Dust Data Card) of the sample run must include the data entered when the sample run was first programmed and the following: 1) the mine identification number; 2) the location within the mine from which the sample was taken; 3) the concentration of respirable dust, expressed as an equivalent concentration reported and stored for each sample; 4) sampling status conditions encountered for each sample; 5) the shift length; and 6) for the part 90 miner, the miner’s MSHA Individual Identification number. This information is included on the dust data card that is printed from the CPDM. MSHA expects that a copy of the printout will be posted, or provided to the part 90 miner, to satisfy the requirements of those provisions.

As noted above under sections 70.211(c) and 90.209(c), the shift length is included in the paper record (Dust Data Card) of the sample run. However, a record is also required of the shift length for each production shift for each MMU under section 70.201(c) and each shift worked by a part 90 miner under section 90.201(f). Records of shift length were developed earlier under sections 70.201(e) and 90.201(f) for shifts where sampling did not occur. The burden for recording the shift length on a sampled shift is accounted for here in developing the burden for section 70.211(c) and 90.209(c).

The estimates of the number of CPDM samples per year are used to derive the burden hours and hour burden costs to print, sign, and post the paper record (Dust Data Card) of the sampling data, and provide the sampling data to the part 90 miner. MSHA estimates that a certified person, earning 44.94 per hour, takes 10 minutes to print, sign, and post the CPDM Dust Data Card or provide the sampling data to the part 90 miner. Annual burden hours and hour burden costs are shown below.

Underground Coal Mine Operators

Burden Hours

102,950 postings of sampling data or provide

data to part 90 miner x 10 minutes = 17,158 hours

Hour Burden Costs

17,158 hours x $44.94 wage rate = $771,132

**Total Responses: = 102,950**

**Total Burden Hours: = 17,158**

**Total Burden Costs: = $771,132**

**Part 90 Miner Compliance Sampling with a CPDM at Surface Mines**

Validate, Certify, and Transmit CPDM Sampling Data to MSHA –

Sections 71.207(f) and 90.208(f)

Sections 71.207(f) and 90.208(f) require that, within 24 hours after the end of each sampling shift, a person certified in sampling must validate, certify, and transmit electronically to MSHA the sampling data file information collected and stored in the CPDM. Surface coal mine operators are only required to use the CPDM for part 90 miner sampling, thus MSHA expects that all other sampling by these operators will be conducted with the CMDPSU. The burden hours below are for surface coal mine operators using the CPDM for part 90 sampling. At this time, MSHA does not expect any burden related to using the CPDM for sampling under section 71.207(f). MSHA estimates that validating, certifying, and uploading the CPDM data from a CPDM to a computer, and then transmitting it electronically to MSHA takes a certified person, earning $44.94 per hour, 6 minutes. MSHA estimates that there will be 40 part 90 miner samples annually at surface coal mines. Annual burden hours and hour burden costs are shown below.

Surface Coal Mine Operators

Burden Hours

40 samples x 6 minutes = 4 hours

Hour Burden Costs

4 hours x $44.94 wage rate = $180

**Total Responses: = 40**

**Total Burden Hours: = 4**

**Total Burden Costs: = $180**

Provide MSHA Report and Print, Sign and Provide CPDM Paper Record (Dust Data Card) to Part 90 Miners – Section 90.209(b) and (c)

Section 90.209(b) requires the operator to provide a copy of the MSHA report of sampling data received by the operator under section 90.209(a) to part 90 miners. In addition, section 90.209(c) requires that, when using a CPDM, operators must print, sign, and provide each part 90 miner a paper record (Dust Data Card) of the sampling run, also called the hard copy record. The hard-copy record must include the data entered when the sample run was first programmed and the following: 1) the mine identification number; the location within the mine from which the samples were taken; 2) the location within the mine from which the samples were taken; 3) the concentration of respirable dust, expressed as an equivalent concentration reported and stored for each sample; 4) the sampling status conditions encountered for each sample; 5) the shift length; and 6) the part 90 miner’s MSHA Individual Identification Number (MIIN). This information is included on the CPDM Dust Data Card. Providing the part 90 miner with an MSHA report under section 90.209(b) and the Dust Data Card from a different sample run under section 90.209(c) can be done at the same time.

As noted above, the shift length is included in the paper record (Dust Data Card) of the sample run under section 90.209(c). However, a record is also required of the shift length for each shift worked by a part 90 miner under section 90.201(f). Records of shift length were developed earlier under section 90.201(f) for shifts where sampling did not occur. The burden for recording the shift length on a sampled shift is accounted for here in developing the burden for section 90.209(c).

A new CPDM filter is used every time a CPDM is used to sample and a Dust Data Card with the information noted above, with the exception of the shift length, is generated after the sample is taken. Thus, MSHA estimates the number of times Dust Data Cards will be provided to part 90 miners is equal to the number of CPDM filters used. Sampling data under section 90.209(b) and (c) can be provided to the part 90 miner at the same time. MSHA estimates that a certified person in a surface mine, earning $44.94 per hour, takes 3 minutes to perform the functions described above and make a copy of the sampling data. MSHA estimates that there will be 40 part 90 miner samples annually at surface coal mines. Annual burden hours and hour burden costs are shown below.

Surface Coal Mine Operators

Burden Hours

40 sampling data records provided

to part 90 miner x 3 minutes = 2 hours

Hour Burden Costs

2 hours x $44.94 wage rate = $90

**Total Responses: = 40**

**Total Burden Hours: = 2**

**Total Burden Costs: = $90**

**Meeting or Exceeding the Excessive Concentration Value (ECV) When Conducting Compliance Sampling**

Record and Certify Corrective Actions – Sections 70.208(e)(3) 70.209(c)(3), 71.206(h)(3), and 90.207(c)(3)

For MMUs under section 70.208(e)(3), DAs under section 70.209(c)(3), DWPs under section 71.206(h)(3), and part 90 miners under section 90.207(c)(3), when a valid representative sample taken in accordance with part 70, 71, or 90 meets or exceeds the excessive concentration value (ECV) that is specified in parts 70, 71, or 90 that corresponds to the applicable standard and particular sampling device used, the operator must make a record of the corrective actions taken. The record must be certified by the mine foreman or equivalent mine official, no later than the end of the mine foreman’s or equivalent official’s next regularly scheduled working shift. Using 12 months of data ending October 2018, MSHA developed an annual estimate of 359 corrective action records at underground coal mines and 23 corrective action records at surface coal mines.

MSHA estimates that it takes 12 minutes to make a record of corrective actions and certify the record. MSHA assumes that a supervisory person, earning $60.70 per hour, will make the record. In addition, MSHA assumes that a mine foreman or equivalent mine official that certifies the record also earns a supervisory hourly wage rate. Annual burden hours and hour burden costs are shown below.

Surface and Underground Coal Mine Operators

Annual Burden Hours

382 records x 12 minutes =77 hours

Hour Burden Costs

77 hours x $60.70 wage rate = $4,673

Responses 382 (359 + 23)

**Total Responses: = 382**

**Total Burden Hours: = 77**

**Total Burden Costs: = $4,673**

**Related to Abatement Sampling**

Record and Certify Corrective Actions – Sections 70.208(h)(3), 70.209(f)(3), 71.206(k)(3), and 90.207(f)(3)

On implementation of the corrective actions, a record of the corrective actions must be made and certified under sections 70.208(h)(3) and 70.209(f)(3) for underground coal mine operators; section 71.206(k)(3) for surface coal mine operators; and section 90.207(f)(3) for part 90 miners. Using 12 months of data ending October 2018, MSHA developed an annual estimate of 128 corrective action records at underground coal mines and 13 corrective action records at surface coal mines.

MSHA estimates that it takes 12 minutes (to make a record of corrective actions and certify the record. MSHA assumes that a supervisory person, earning $60.70 per hour, will make the record. In addition, MSHA assumes that a mine foreman or equivalent mine official that certifies the record also earns a supervisory hourly wage rate. Annual burden hours and hour burden costs are shown below.

Surface and Underground Coal Mine Operators

Burden Hours

141 records per year x 12 minutes = 28 hours

Hour Burden Costs

28 hours x $60.70 wage rate = $1,712

Responses 141 (128 +13)

**Total Responses: = 141**

**Total Burden Hours: = 28**

**Total Burden Costs: = $1,712**

Complete and Sign Dust Data Card and Transmit Samples to MSHA –

Sections 70.210(a) and (c), and 71.207(a),and (c),

Notations if Proper Flow Rate not Maintained Sections 70.205(b)(2) and 71.205(b)(2), or if Normal Work Shift was not Achieved Section 71.206(e)

Validate, Certify, and Transmit Sampling Data to MSHA – Section 70.210(f), 71.207(f), and 90.208(f)

Under sections 70.210(a) and 71.207(a), if using a CMDPSU, the operator shall transmit within 24 hours after the end of the sampling shift all samples collected to fulfill the requirements of parts 70 and 71. Under sections 70.210(c) and 71.207(c), a person certified in sampling shall properly complete the Dust Data Card that is provided by the manufacturer for each filter cassette. Under sections 70.210(f), 71.207(f), and 90.208(f) if using a CPDM, the person certified in sampling shall validate, certify, and transmit electronically to MSHA within 24 hours after the end of each sampling shift all sample data file information collected and stored in the CPDM.

Under sections 70.205(b)(2) and 71.205(b)(2), if using the CMDPSU, and the proper flow rate was not maintained during a sampled shift, the respirable dust sample shall be transmitted to MSHA with a notation by the certified person on the back of the Dust Data Card stating that the proper flow rate was not maintained. Other events occurring during the collection of respirable dust samples that may affect the validity of the sample, such as dropping of the sampling head assembly onto the mine floor, shall be noted on the back of the Dust Data Card.

Under section 71.206(e) if a normal work shift is not achieved on the sampled shift, the respirable dust sample shall be transmitted to MSHA with a notation by the person certified in sampling on the back of the Dust Data Card stating that the sample was not taken on a normal work shift.

The burden for section 70.210(c) concerning completing the Dust Data Card includes the burden for section 70.205(b)(2) concerning notations on the Dust Data Card since MSHA assumes that any notations required to be made on the Dust Data Card can be made at the time the Dust Data Card is completed. For the same reason, the burden for section 71.207(c) includes the burdens for sections 71.205(b)(2) and 71.206(e).

Underground coal mine operators must conduct DO and ODO abatement sampling using CPDMs. MSHA assumes that underground coal mine operators will conduct outby DA abatement sampling with the CMDPSU. Surface coal mine operators are also assumed to conduct abatement sampling using CMDPSUs.

When Using a CMDPSU

When abatement sampling is conducted with the CMDPSU, the sample, the control filter, and completed Dust Data Card must be mailed to MSHA. The costs for submitting a sample are as follows. MSHA estimates that the person completing the Dust Data Card is a certified person earning $44.94 per hour. MSHA estimates that a certified person will take 6 minutes to complete and send the Dust Data Card with the sample to MSHA. MSHA estimates that a supervisory person, earning $60.70 per hour, takes 1 minute and 30 seconds (1.5 minutes) to review and sign the Dust Data Card, and include that person’s MSHA Individual Identification Number (MIIN).

When Using the CPDM

When conducting abatement sampling with the CPDM, the sampling data file information is transmitted electronically and no mailing occurs. MSHA estimates that validating, certifying, and uploading the abatement sampling data from the CPDM to a computer and then transmitting the data electronically to MSHA takes a certified person, earning $44.94 per hour, 6 minutes. Surface coal mine operators are only required to use the CPDM for part 90 miner sampling. MSHA does not expect that surface coal mine operator will be issued a citation for a part 90 sample result and therefore part 90 abatement sampling will not occur for them.

Annual burden hours and hour burden costs are shown below.

Surface and Underground Coal Mine Operators – CMDPSU Sampling

Burden Hours

204 data cards x 6 minutes = 20 hours

204 data cards x 1.5 minutes = 5 hours

Subtotal = 25 hours

Hour Burden Costs

20 hours x $44.94 wage rate = $899

5 hours x $60.70 wage rate = $303

Subtotal = $1,202

Underground Coal Mine Operators – CPDM Sampling

Burden Hours

642 data cards x 6 minutes = 64 hours

Hour Burden Costs

64 hours x $44.94 wage rate = $2,876

Responses 846 (120 + 642 + 84)

**Total Responses: = 846**

**Total Burden Hours: = 89**

**Total Burden costs: = $4,078**

Post MSHA Report – Section 71.208(b)

Post MSHA Report; Print, Sign and Post Sampling Dust Data Card – Section 70.211(b) and (c)

Provide MSHA Report and Print, Sign and Provide CPDM Paper Record (Dust Data Card) to Part 90 Miners – Section 90.209(b) and (c)

Sections 70.211(b) and 71.208(b) require the operator to post sampling data from the MSHA report on the mine bulletin board and section 90.209(b) requires the operator to provide copies of the MSHA report to part 90 miners. Sections 70.211(c), 71.208(c), and 90.209(c) apply to operators who use a CPDM. Sections 70.211(c) and 71.208(c) require the person certified in sampling to print, sign, and post on the mine bulletin board within 12 hours after the end of each sampling shift a paper record (Dust Data Card) of the sample run, also called the hard copy record, on the mine bulletin board within 12 hours after the end of each sampling shift. Section 90.209(c) requires the person certified in sampling to print, sign, and provide the paper record (Dust Data Card) of the sample run to each the part 90 miner within one hour after the start of the part 90 miner’s next work shift.

MSHA assumes that posting sampling data results from an MSHA report under sections 70.211(b) and 71.208(b) can be done at the same time as posting a paper record (Dust Data Card) from a different sample run under sections 70.211(c) and 71.208(c). Similarly, providing a part 90 miner with an MSHA report under section 90.209(b) can be done at the same time as providing a paper record (Dust Data Card) from a different sample run under section 90.209(c). MSHA estimates that it takes the same amount of time to provide a copy of the MSHA report and paper record (Dust Data Card) of the sample run to the part 90 miner as it does to post the MSHA report on the mine bulletin board.

MSHA estimates that a clerical employee, earning $30.06 per hour, 6 minutes to copy and post the sampling data. MSHA’s current practice is to transmit the MSHA reports to the operator in a group, so the number of times to post or provide results to the part 90 miner equates to the number of citations issued. Annual burden hours and hour burden costs are shown below.

Surface and Underground Coal Mine Operators

Burden Hours

846 postings of sampling data or provide

data to part 90 miner x 6 minutes = 85 hours

Hour Burden Costs

85 hours x $30.06 wage rate = $2,543

Responses 846 (762 + 84)

**Total Responses: = 846**

**Total Burden Hours: = 85**

**Total Burden Costs: = $2,543**

Revisions to Mine Ventilation Plan or Develop or Revise Dust Control Plan – Sections 70.208(i)(2), 70.209(g)(2), 71.300(a), and 90.300(a)

Under section 70.208(i)(2), a citation for violation of the applicable standard shall be terminated by MSHA when the operator has submitted to the District Manager revised dust control parameters as part of the mine ventilation plan applicable to the MMU in the citation and the changes have been approved by the District Manager. Under section 70.209(g)(2), a citation for violation of the applicable standard shall be terminated by MSHA when the operator has submitted to the District Manager revised dust control parameters as part of the mine ventilation plan applicable to the DA in the citation and the changes have been approved by the District Manager.

Under section 71.300(a), within 15 calendar days after the termination date of a citation for violation of the applicable standard, the operator shall submit to the District Manager for approval a written respirable dust control plan applicable to the DWP identified in the citation. Under section 90.300(a) if an operator abates a violation of the applicable standard by reducing the respirable dust level in the position of the part 90 miner, the operator shall submit to the District Manager for approval a written respirable dust control plan for the part 90 miner in the position identified in the citation within 15 calendar days after the citation is terminated.

MSHA estimates that it takes a supervisor, earning $60.70 per hour, 15 minutes to make mine ventilation plan revisions, or develop or revise dust control plans. Also, MSHA estimates that it takes a clerical employee, earning $30.06 per hour, another 15 minutes to prepare and send the material to MSHA. Annual burden hours and burden hour costs are shown below.

Underground Coal Mine Operators

Burden Hours

141 plans x 15 minutes = 35 hours

141 plans x 15 minutes = 35 hours

Subtotal = 70 hours

Burden Hour Costs

35 hours x $30.06 wage rate = $1,052

35 hours x $60.70 wage rate = $2,124

Subtotal = $3,176

Responses 141 (128 +13)

**Total Responses: = 141**

**Total Burden Hours: = 70**

**Total Burden Costs: = $3,176**

Notify Miners’ Representative of Plan Revisions and Provide Copy – Section 75.370(a)(3)(i) and (f)(1); Sections 71.300(a)(1) and 71.301(d)(1), and 90.301(d)

Operators are required to notify the miner’s representatives of mine ventilation plan revisions, or new or revised dust control plans and, if requested, provide the representative with a copy of the plan, and proposed and approved plan revisions (under sections 75.370(a)(3)(i) and (f)(1) for underground coal operators and sections 71.300(a)(1) and 71.301(d)(1) for surface coal operators). Under part 90.301(d), the operator must provide a copy of the current respirable dust control to the part 90 miner.

MSHA estimates that it takes a clerical employee 15 minutes to notify and provide a copy of the plan or plan revisions to the representative of miners or the part 90 miner. MSHA estimates that a clerical employee earns $30.06 per hour[[8]](#footnote-8). The number of notifications is equal to the number of citations. Annual burden hours and burden hour cost are shown below.

Surface and Underground Coal Mine Operators

Burden Hours

141 plans x 15 minutes = 35 hours

Burden Hour Costs

35 hours x $30.06 wage rate = $1,052

Responses 141 (128+13)

**Total Responses: = 141**

**Total Burden Hours: = 35**

**Total Burden Costs: = $1,052**

Post Copy of Plan or Plan Revision – Section 75.370(a)(3)(iii) and (f)(3), and Sections 71.300(a)(3) and 71.301(d)(3)

Operators must post a copy of the proposed and approved mine ventilation plan or revisions under sections 75.370(a)(3)(iii) and (f)(3) for underground coal mines; and post a copy of the proposed dust control plan and any revisions under section 71.300(a)(3) and the approved plan and any revisions under section 71.301(d)(3) for surface coal mines. The number of postings equals the number of citations issued. MSHA estimates that a clerical employee, earning $30.06 per hour, takes 15 minutes to copy and post. Annual burden hours and burden hour costs are shown below.

Surface and Underground Coal Mine Operators

Burden Hours

141 plans x 15 minutes = 35 hours

Burden Hour Costs

35 hours x $30.06 wage rate = $1,052

Responses 141 (128+13)

**Total Responses: = 141**

**Total Burden Hours: = 35**

**Total Burden Costs: = $1,052**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  | **Summary Table for Answer to Question 12** | | | |  |
|  | **Sections** | **Responses** | **Burden Hours** | **Burden Costs** |  |
|  | 70.201(e), 71.201(d), 90.201(f) | 848,286 | 14,139 | $533,747 |  |
|  | 70.201(f), 71.201(e),(f), 90.201(g) | 360 | 180 | $9,088 |  |
|  | 70.210(d), 71.207(d), 90.208(d) | 1 | 1 | $61 |  |
|  | 70.212(a), 71.209(a), 90.210 | 2,540 | 635 | $25,583 |  |
|  | 70.201(g) | 210,500 | 17,542 | $1,064,762 |  |
|  | 71.206(d) | 61 | 24 | $1,089 |  |
|  | **Compliance with a CMDPSU** |  |  |  |  |
|  | 70.210(a),(c), 71.207(a),(c), 70.205(b)(2), 71.205(b)(2), 71.206(e) | 10,435 | 1,305 | $62,762 |  |
|  | 70.211(b), 71.208(b) | 10,435 | 1,044 | $31,382 |  |
|  | **Compliance Sampling with a CPDM at UG Mines** |  |  |  |  |
|  | 70.210(f), 90.208(f) | 102,950 | 10,295 | $462,688 |  |
|  | 70.211(b),(c), 90.209(b),(c) | 102,950 | 17,158 | $771,132 |  |
|  | **Compliance Sampling Part 90 Miners with a CPDM at Surface Mines** |  |  |  |  |
|  | 71.207(f), 90.208(f) | 40 | 4 | $180 |  |
|  | 90.209(b) and (c) | 40 | 2 | $90 |  |
|  | **Meeting or Exceeding The Excessive Concentration Value (ECV) When Conducting Compliance Sampling** |  |  |  |  |
|  | 70.208(e)(3), 70.209(c)(3), 71.206(h)(3), 90.207(c)(3) | 382 | 77 | $4,673 |  |
|  | **Related to Abatement Sampling** |  |  |  |  |
|  | 70.208(h)(3), 70.209(f)(3), 71.206(k)(3), 90.207(f)(3) | 141 | 29 | $1,712 |  |
|  | 70.210(a),(c),(f), 71.207(a),(c),(f), 90.208(f), 70.205(b)(2), 71.205(b)(2), 71.206(e) | 846 | 89 | $4,078 |  |
|  | 70.211(b),(c), 71.208(b), 90.209(b),(c) | 846 | 84 | $2,543 |  |
|  | 70.208(i)(2), 70.209(g)(2), 71.300(a), 90.300(a) | 141 | 70 | $3,176 |  |
|  | 75.370(a)(3)(i),(f)(1); 71.300(a)(1), 71.301(d)(1), 90.301(d) | 141 | 35 | $1,052 |  |
|  | 75.370(a)(3)(iii),(f)(3); 71.300(a)(3), 71.301(d)(3) | 141 | 35 | $1,052 |  |
|  | **Total** | **1,291,236** | **62,748** | **$2,980,850** |  |
|  |  |  |  |  |  |

**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.**

Costs to Mail Sampling Schedule – Sections 70.201(f), 71.201(e) and 90.201(g):

The average postage for the operator to mail a sampling schedule is $0.45. Annually, MSHA estimates that 360 sampling schedules are submitted by underground and surface coal mine operators, of which 10 percent (36 sampling schedules) are submitted by mail. The remaining sampling schedules are submitted electronically. Annual mailing costs are shown below.

36 schedules x $0.45 to mail = **$16**

Costs to Mail Operational Status Changes – Sections 70.212(a), 71.209(a), and 90.210:

The average postage for the operator to report changes in the operational status is $0.45. Annually, MSHA estimates that 2,540 status change reports are submitted by underground and surface coal mine operators, of which 10 percent (254 status change reports) are submitted by mail. The remaining status change reports are submitted electronically. Annual mailing costs are shown below.

254 status change reports x $0.45 to mail = **$114**

List of DWPs

Cost to Mail List of DWPs – Section 71.206(d)

Section 71.206(d) requires operators to provide the District Manager with a list identifying the specific work positions where DWP samples will be collected. MSHA estimates $1 per mine to mail the list to MSHA.

MSHA estimates that the number of underground coal mines with surface areas that have DWPs are 56 mines (4 mines with 1‑19 employees, 45 mines with 20‑500 employees, and 7 mines with 501+ employees). MSHA estimates that the number of surface coal mines with DWPs are 554 (309 mines with 1‑19 employees, 241 mines with 20‑500 employees, and 4 mines with 501+ employees). MSHA assumes that 10 percent of these mines will update their lists annually (6 underground coal mines and 55 surface coal mines). Of these mines, 10 percent are assumed to update by mail (1 underground coal mine and 6 surface coal mines). Annual mailing costs are shown below.

Underground Coal Mine Operators

1 mine x $1 to mail = $1

Surface Coal Mine Operators

6 mines x $1 to mail = $6

**Total Burden Costs: = $7**

**Compliance Sampling with a CMDPSU**

Costs to Transmit the Dust Data Card with CMDPSU Samples to MSHA –

Sections 70.210(a) and (c), and 71.207(a) and (c)

Sections 70.210(a) and (c) and 71.207(a) and (c) require each CMDPSU sample to be transmitted to MSHA with a completed Dust Data Card. All CMDPSU samples are submitted by mail. MSHA estimates $1 per sample group to mail for all mines. Annual mailing costs are shown below.

Surface and Underground Coal Mine Operators

10,435 data cards for mines x $1 to mail per sample group = $10,435

**Total Burden Costs: = $10,435**

Copy Costs for Posting MSHA Report of CMDPSU Sampling Results – Sections 70.211(b) and 71.208(b)

After processing the CMDPSU samples, MSHA sends a report with the sampling data results to the operator. Upon receiving the report, sections 70.211(b) and 71.208(b) require operators to post the data on the mine bulletin board. MSHA estimates one-page copy costs of $0.15 per report. Annual costs for are shown below.

Surface and Underground Coal Mine Operators

10,435 MSHA Reports x $0.15 per copy = $1,565

**Total Burden Costs: = $1,565**

**Compliance Sampling with a CPDM at Underground Mines**

Copy Costs for: Posting MSHA Reports and CPDM Paper Records (Dust Data Cards) – Section 70.211(b) and (c); and MSHA Reports and CPDM Paper Records (Dust Data Cards) Provided to Part 90 Miners – Section 90.209(b) and (c)

Section 70.211(b) requires the operator to post sampling data from the MSHA report on the mine bulletin board and section 90.209(b) requires the operator to provide copies of the MSHA report to part 90 miners. Sections 70.211(c) and 90.209(c) apply to operators who use a CPDM. Section 70.211(c) requires the person certified in sampling to print, sign and post on the mine bulletin board within 12 hours after the end of each sampling shift a paper record (Dust Data Card) of the sampling run. Section 90.209(c) requires that the paper record (Dust Data Card) be provided to each part 90 miner. MSHA estimates the copy cost per report and paper record (Dust Data Card) is $0.15. Annual copy costs are shown below.

Underground Coal Mine Operators

102,950 postings of sampling data or provide

data to part 90 miner x $0.15 per copy = **$15,443**

**Part 90 Miner Compliance Sampling with a CPDM at Surface Coal Mines**

Copy Cost to Provide MSHA Report and CPDM Paper Record (Dust Data Card) to Part 90 Miners – Section 90.209(b) and (c)

Section 90.209(b) requires the operator to provide a copy of the MSHA report of sampling data received by the operator under section 90.209(a) to part 90 miners. Section 90.209(c) requires operators to provide the CPDM paper record (Dust Data Card) to part 90 miners. MSHA estimates 40 part 90 miner samples annually, and that it costs $0.15 to make a copy of each report and Dust Data Card. Annual costs are shown below.

Surface Coal Operators

40 sampling data records (Dust Data Card)

for part 90 miners x $0.15 per copy = **$6**

**Abatement Sampling**

**Cost to Transmit Dust Data Card with CMDPSU Samples to MSHA – Sections 70.210(a) and (c), and 71.207(a) and (c)**

Under section 70.210(a) and (c) for underground coal mines, and section 71.207(a) and (c) for surface coal mines and surface work areas of underground coal mines, operators must complete and sign Dust Data Cards and transmit the cards with the abatement samples to MSHA.

In underground coal mines, MSHA expects abatement samples will be taken with the CPDM. CPDM samples are transmitted electronically and no mailing occurs. Thus, there are no mailing costs related to abatement sampling for underground coal operators.

Most dust sampling in surface coal mines will be conducted with the CMDPSU and when abatement sampling is conducted with the CMDPSU, the sample must be mailed with a completed Dust Data Card to MSHA. MSHA estimates that it will cost a mine $1 to mail a set of samples to MSHA.

Surface Coal Mine Operators

84 samples with Dust Data Cards for all mines

x $1 to mail per set of samples = $84

**Total Costs = $84**

Copy Costs for: Posting the MSHA Report and the Paper Record (Dust Data Card) under Sections 70.211(b) and (c), 71.208(b) and (c); and Providing to the Part 90 Miner the MSHA Report and the Paper Record (Dust Data Card) under Sections 90.209(b) and (c)

Operators are required to post sampling data from the MSHA report and the paper record (Dust Data Card) of the sample run under section 70.211(b) and (c), respectively, at underground coal mines; and under section 71.208(b) and (c), respectively, at surface coal mines and surface work areas of underground coal mines. Under section 90.209(b), operators must provide the part 90 miner a copy of the MSHA report. Under section 90.209(c), the paper record (Dust Data Card) must be provided to the part 90 miner. MSHA estimates that it costs $0.15 per copy for the MSHA report and CPDM Dust Data Card. Annual copy costs for 846 copies of posting sampling results are shown below.

Surface and Underground Coal Mine Operators

846 copies of posted sampling results

x $0.15 per copy = $127

**Total Burden Costs: = $127**

Copy and Transmission Costs for Mine Ventilation Plan Revisions or Dust Control Plan or Revisions – Sections 70.208(i)(2), 70.209(g)(2), 71.300(a), and 90.300(a)

To terminate a citation for a violation of the respirable dust standard at underground coal mines, the operator must have submitted revised dust control parameters as part of the mine ventilation plan, applicable to the MMU in the citation under section 70.208(i)(2), and applicable to the DA in the citation under section 70.209(g)(2). At surface work areas of underground coal mines and at surface coal mines, section 71.300(a) requires that within 15 calendar days after the termination date of a citation for violation of the applicable standard, the operator must submit to the District Manager for approval a written respirable dust control plan. Under section 90.300(a), if an operator abates a violation of the applicable standard by reducing the respirable dust level in the position of the part 90 miner, the operator must submit to the District Manager for approval a written respirable dust control plan for the part 90 miner in the position identified in the citation within 15 calendar days after the citation is terminated. MSHA estimates that a plan or plan revision will be two pages, copy costs are $0.15 per page, and postage is $1.00, for a total cost per revision of $1.30. The number of revisions is equal to the number of citations that will result in new or revised plans. Annual costs are shown below.

Surface and Underground Coal Mine Operators

141 plans x $1.30 for copy and transmission costs = $183

**Total Burden Costs: = $183**

Copy Costs for Notifying Miners’ Representative of Plan or Revision and Providing Copy of Plan or Revision – Section 75.370(a)(3)(i) and (f)(1), Sections 71.300(a)(1) and 71.301(d)(1), and

Providing Copy of Plan or Revision to Part 90 miner – Section 90.301(d)

Under section 75.370(a)(3)(i), underground coal mine operators must notify the representative of miners at least 5 days prior to submission of a mine ventilation plan and any revisions and, if requested, provide a copy to the representative at the time of notification. Under section 75.370(f)(1), upon request, the operator must provide a copy of the approved mine ventilation plan and any revisions to the miners’ representative. Under section 71.300(a)(1), operators of underground coal mines with surface work areas, and operators of surface coal mines must notify the representative of miners at least 5 days prior to submission of a dust control plan and any revisions. Under section 71.301(d)(1), upon request, the operator must provide to the miners’ representative a copy of the approved dust control plan and any revisions. Under section 90.301(d) the operator must provide a copy of the current respirable dust control plan to the part 90 miner. MSHA estimates that a plan or plan revision will be, on average, two pages and copy costs are $0.15 per page. MSHA assumes that all miners’ representatives will request a copy of the plan revisions. The number of notifications is equal to the number of citations that will result in new or revised plans. Annual copy costs are shown below.

Surface and Underground Coal Mine Operators

141 plans x $0.30 per copy = $42

**Total Burden Costs: = $42**

Copy Costs for Posting a Plan or Plan Revision – Section 75.370(a)(3)(iii) and (f)(3), and Sections 71.300(a)(3) and 71.301(d)(3)

A proposed ventilation plan and any revisions under section 75.370(a)(3)(iii) and a proposed dust control plan and any revisions under section 71.300(a)(3) that are submitted for approval must be posted on the mine bulletin board at the time of submittal. The approved mine ventilation plan under section 75.370(f)(3) and the approved dust control plan under section 71.301(d) must be posted. The number of postings equals the number of citations that will result in a plan or plan revision. MSHA estimates that a plan or revision will be two pages and copy costs are $0.15 per page. Annual copy costs are shown below.

Surface and Underground Coal Mine Operators

141 plans x $0.30 per copy = $42

**Total Burden Costs: = $42**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | **Summary Table for Answer to Question 13** | |  |
|  | **Sections** | **Burden Costs** |  |
|  | 70.201(f), 71.201(e), 90.201(g) | $16 |  |
|  | 70.212(a), 71.209(a), 90.210 | $114 |  |
|  | 71.206(d) | $7 |  |
|  | **Compliance Sampling with a CMDPSU** |  |  |
|  | 70.210(a),(c), 71.207(a),(c) | $10,435 |  |
|  | 70.211(b), 71.208(b) | $1,565 |  |
|  | **Compliance Sampling with a CPDM at Underground Mines** |  |  |
|  | 70.211(b),(c), 90.209(b),(c) | $15,443 |  |
|  | **Part 90 Miner Sampling with a CPDM at Surface Mines** |  |  |
|  | 90.209(b),(c) | $6 |  |
|  | **Abatement Sampling** |  |  |
|  | 70.210(a),(c), 71.207(a),(c) | $84 |  |
|  | 70.211(b),(c), 71.208(b),(c), 90.209(b),(c) | $127 |  |
|  | 70.208(i)(2), 70.209(g)(2), 71.300(a), 90.300(a) | $183 |  |
|  | 75.370(a)(3)(i),(f)(1), 71.300(a)(1), 71.301(d)(1), 90.301(d) | $42 |  |
|  | 75.370(a)(3)(iii),(f)(3), 71.300(a)(3), 71.301(d)(3) | $42 |  |
|  | **Total** | **$28,065** |  |
|  |  |  |  |

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

MSHA incurs costs in processing operator samples submitted under sections 70.210, 71.207, and 90.208 in response to the operator sampling requirements in sections 70.208, 70.209, 71.206, and 90.207

With respect to the CMDPSU, upon receiving the operator’s dust sample and the accompanying Dust Data Card, MSHA’s Respirable Dust Processing Laboratory in Pittsburgh, PA, weighs each received sample using a robotic weighing system employing micro-balances, records the results, and enters the information recorded on the data card into a personal computer for electronic transmission to MSHA’s Standardized Information System (MSIS) on the main computer in Denver, CO, for processing. With respect to the CPDM, upon receiving operators’ electronic submissions of dust sampling data generated by the CPDM, MSHA’s Denver, CO, personnel maintain and process the data to MSIS.

For both the CMDPSU and CPDM, MSHA checks the received information for accuracy and completeness, performs required calculations of average concentration, and produces various computer-generated reports called data mailers. These data mailers, which contain specific information obtained from the dust sample and Dust Data Card, are mailed in accordance with sections 70.211(a), 71.208(a), and 90.209(a) to coal mine operators to communicate the disposition of each submitted dust sample and any required follow-up action. MSHA also incurs costs for maintaining equipment, computer software licenses, and supplies.

Sample processing and data transmission to MSIS for CMDPSU samples:

MSHA personnel cost = $332,243

Equipment and annual maintenance cost

(vacuum pump, robotic weighing system,

analytical balances, and PCs) = $43,046

Misc. supplies (labels, paper, etc.) = $2,500

Subtotal = **$377,789**

Data processing and data transmission to MSIS for CPDM samples:

MSHA personnel cost                                                              = $65,000

Contractor Staff                                                                       = $100,000

Maintenance (Software licensing, PCs, printer,

  and supplies)                                                                         = $6,800

Subtotal                                                                                   = **$171,800**

Data processing and reporting results to mine operators for coal respirable dust samples:

Data Mailers (20,256 mailers x $0.08)                                    = $1,620

Postage (20,256 mailers x $.46)                                             = $9,318

Data Storage                                                                           = $1,000

Subtotal                                                                                   = **$11,938**

Sections 70.201(f), 71.201(e) and (f), and 90.201(g)

Upon request from the District Manager, a mine operator must submit in advance of sampling the dates when sampling will be conducted under sections 70.201(f), 71.201(e), and 90.201(g). At surface work areas of underground coal mines and at surface coal mines, operators can also make a written request under section 71.201(f) asking the District Manager to waive the rain restriction for a normal work shift as defined in section 71.2. MSHA anticipates requesting approximately 100 sampling schedules annually, and expects to receive approximately 360 responses from coal mine operators, as some mine operators submit schedules automatically. It will take an Agency clerical employee, earning $33.79 per hour[[9]](#footnote-9) (GS-7), an average of 15 minutes to type and mail each request, and an average of 10 minutes to process each operator response; and an Agency health and safety specialist, earning $70.12 per hour[[10]](#footnote-10) (GS 13), an average of 15 minutes to review and distribute each response to respective field offices for follow-up action.

Hour Burden

100 requests x 15 minutes = 25 hours

360 responses x 10 minutes = 60 hours

360 responses x 15 minutes = 90 hours

Sub-total = 175 hours

Hour Burden Cost

85 hours x $33.79 wage rate = $2,872

90 hours x $70.12 wage rate = $6,311

Sub-total = **$9,183**

Sections 70.212(a), 71.209(a), and 90.210

When a change occurs in the operational status of a mine, MMU, DA, DWP, or part 90 miner that affects the sampling requirements of 30 CFR parts 70, 71, and 90, the change must be reported in writing to the MSHA District Office within 3 working days after the status change has occurred in accordance with sections 70.212(a), 71.209(a), and 90.210. MSHA expects to review and process approximately 2,540 status change reports annually. It will take an Agency clerical employee earning $33.79 per hour an average of 5 minutes to review and process each status change report.

Hour Burden

2,540 status change reports x 5 minutes = 212 hours

Hour Burden Cost

212 hours x $33.79 wage rate = **$7,163**

Section 71.300(a) and 71.301(e)

Under Section 71.300(a), within 15 calendar days after the termination date of a citation for a violation of the respirable dust standard, the operator must submit to MSHA for approval a written respirable dust control plan. Under section 71.301(e), the operator may review respirable dust control plans and submit proposed revisions to such plans to the District Manager for approval. MSHA estimates that coal mine operators will submit 8 new, and 4 revised dust control plans annually. It will take an Agency GS-12 health and safety specialist, earning $52.00 per hour, 45 minutes to review the average plan (new) and 30 minutes per revision, and an Agency clerical employee, earning $27.53 per hour, another 45 minutes to process a plan (new or revised).

Hour Burden

8 plans (new) x 45 minutes = 6 hours

4 plans (revised) x 30 minutes. = 2 hours

12 plans x 45 minutes = 9 hours

Sub-total = 17 hours

Hour Burden Cost

8 hours x $70.12 wage rate = $561

9 hours x $33.79 wage rate = $304

Sub-total = **$865**

MSHA anticipates the submission of 5 new and 1 revised respirable dust control plans annually. MSHA estimates that it takes an MSHA health supervisor, earning $70.12 per hour, 45 minutes to review the average new plan and 30 minutes per revision, and an Agency clerical person, earning $33.79 per hour, another 45 minutes to process a part 90 miner dust control plan (new or revised).

Hour Burden

5 plans (new) x 45 minutes = 4 hours

1 plan (revised) x 30 minutes = .5 hour

6 plans x 45 minutes = 5 hours

Sub-total = 6 hours (rounded)

Hour Burden Cost

5 hours x $70.12 wage rate = $350

5 hours x $33.79 wage rate = $169

Sub-total = **$519**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | **Summary Table for Answer to Question 14** | |  |
|  | **Detail** | **Costs** |  |
|  | Sample Processing & Data Transmission to MSIS for CMDPSU Samples | $377,789 |  |
|  | Sample Processing & Data Transmission to MSIS for CPDM Samples | $171,800 |  |
|  | Data Processing & Reporting Results to Mine Operators for CMDPSU & CPDM Samples | $11,938 |  |
|  | 70.201(f), 71.201(e),(f), 90.201(g) | $9,183 |  |
|  | 70.212(a), 71.209(a), 90.210 | $7,163 |  |
|  | 71.300(a), 71.301(e) | $865 |  |
|  | 90.300(a), 90.301(e) | $519 |  |
|  | **Total** | **$579,257** |  |
|  |  |  |  |

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

EXPLANATION OF CHANGE TOTALS

*Respondents*: The number of respondents has remained the same at 1,035.

*Responses*: MSHA estimates that annual responses have decreased from 1,704,366 to 1,291,236 due to a decrease in the number of samples.

*Burden Hours*: MSHA estimates that annual burden hours have decreased from 94,478 to 62,748.

*Costs*: MSHA estimates that annual burden costs have decreased from $40,967 to $28,065.

**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.**

The transmittal and processing of samples, Dust Data Cards, and related information collection requirements under this ICR are not published. Results are reported to mine operators and the electronic database is used by MSHA to plan enforcement activities and evaluate programs. The database is also used by NIOSH to monitor effectiveness of dust controls, plan and undertake dust control research initiatives, and assess trends in disease prevention. The purpose of the respirable coal mine dust sampling program is to monitor compliance with mandatory limits to ensure healthful work environments.

**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 seeking approval to not display the expiration date for OMB approval of this information collection on the Dust Data Card. MSHA has no direct control over the production or distribution of the cassettes and Dust Data Cards. Dust sampling cassettes and the accompanying Dust Data Cards for CMDPSUs are produced and distributed by the CMDPSU manufacturer. Dust Data Cards associated with the CPDM are generated by the CPDM. The CPDM is produced and distributed by its manufacturer.

**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**

This information collection does not employ any statistical methods.

1. 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-1)
2. For the mining representative hourly wage rate, MSHA used the employment weighted mean hourly wage from the OES May 2017 survey ([www.bls.gov/oes](http://www.bls.gov/oes) ), for 22 extraction worker occupations from Standard Occupational Classification (SOC) major group code 43 and 40 of the North American Industry Classification System (NAICS) codes historically represented in the approval requests. The weighted mean was adjusted for benefits and inflation to obtain a fully loaded rate of $37.75 ($24.72 x 1.49 x 1.025). All subsequent uses of $37.75 represent mine representative hourly wage rate. [↑](#footnote-ref-2)
3. For the supervisor worker hourly wage rate, MSHA used the employment weighted mean hourly wage from the OES May 2017 survey ([www.bls.gov/oes](http://www.bls.gov/oes)) for 4 First-Line Supervisor occupations from SOC major group code 43 and 40 North American Industry Classification System (NAICS) codes historically represented in the approval requests. The weighted mean was adjusted for benefits and inflation to obtain a fully loaded rate of $60.70 ($39.74 x 1.49 x 1.025). All subsequent uses of $60.70 represent supervisor hours. [↑](#footnote-ref-3)
4. For the clerical worker hourly wage rate, MSHA used the employment weighted mean hourly wage from the OES May 2017 survey ([www.bls.gov/oes](http://www.bls.gov/oes)) , for 4 clerical worker occupations from SOC major group code 43 and 40 North American Industry Classification System (NAICS) codes historically represented in the approval requests. The weighted mean was adjusted for benefits and inflation to obtain a fully loaded rate of $30.06 ($19.68 x 1.49 x 1.025). All subsequent uses of $30.06 represent clerical hours. [↑](#footnote-ref-4)
5. See note 2. ($60.70 = $39.74 x 1.49 x1.025) [↑](#footnote-ref-5)
6. See note 3. ($30.06 = $19.68 x 1.49 x 1.025) [↑](#footnote-ref-6)
7. For the mining representative hourly wage rate, MSHA used the employment weighted mean hourly wage from the OES May 2017 ([www.bls.gov/oes](http://www.bls.gov/oes)) survey, for 22 extraction worker occupations from SOC major group code 43 and 40 North American Industry Classification System (NAICS) codes historically represented in the approval requests. The weighted mean was adjusted for benefits and inflation to obtain a fully loaded rate of ($44.94 = $29.43 x 1.49 x 1.025). All subsequent uses of $44.94 represent mining representative hourly wage rate. [↑](#footnote-ref-7)
8. See footnote 3 [↑](#footnote-ref-8)
9. The wage rates shown here come from the Office of Personnel Management (OPM) March 2018 FedScope employment cube, [http://www.fedscope.opm.gov](http://www.fedscope.opm.gov/)/. Average salary was obtained for the appropriate grade and occupation for DOL-MSHA employees. In order to include the cost of benefits, this annual average salary was multiplied by a benefits scaler of 1.39 computed from MSHA’s 2018 budget submission. The final hourly wage rate was derived by dividing the adjusted annual average salary by 2,087 hours ($33.79 = $49,689 x 11.39 ÷ 2,087). Data search qualifiers agency=DLMS, occupation=1802, GSEG=GS06. [↑](#footnote-ref-9)
10. See note ($52.00 = $79,795 x 1.36 ÷ 2,087). Data search qualifiers agency=DLMS, occupation=1822, GSEG=GS12. [↑](#footnote-ref-10)