Respirable Crystalline Silica Standard
OMB Control Number: 1219-0NEW
OMB Expiration Date: x

# NOTE TO REVIEWER

Several provisions in this information collection request (ICR) impact information collections approved under OMB control numbers 1219-0011 and 1219-0048.

OMB Control Number: 1219–0011.

Background
In October 2022, MSHA received OMB approval for the reauthorization of the Respirable Coal Mine Dust Sampling under OMB Control Number 1219-0011. This information collection request outlines the legal authority, procedures, burden, and costs associated with recordkeeping and reporting requirements for coal mine operators. MSHA's standards require that coal mine operators sample respirable coal mine dust quarterly and make records of such samples.

Summary of Changes
This non-substantive change request is to revise the supporting statement for this information collection request due to the proposed PEL for respirable crystalline silica for all miners in this proposed rule. These proposed revisions would remove any reference in the information collection request to quartz or the reduction of the respirable dust standard due to the presence of quartz. This change does not modify the authority, affected mine operators, or paperwork burden.

OMB Control Number: 1219–0048.

Background
In October 2020, MSHA received OMB approval for the reauthorization of the Respirator Program Records under OMB Control Number 1219-0048. Title 30 CFR parts 56 and 57 incorporate by reference requirements of ANSI Z88.2-1969, "*Practices for Respiratory Protection*." Under this standard, certain records are required to be kept in connection with respirators. The proposed rule would incorporate by reference ASTM F3387-19, *"Standard Practice for Respiratory Protection,"* in 30 CFR parts 56 and 57 to replace the Agency's existing respiratory protection standard. The proposal would permit mine operators to select the requirements of ASTM F3387-19 that are applicable to their mines.

Summary of Changes
The proposed rule would remove the paperwork burden associated with respiratory protection in the information collection request.

MSHA will submit the non-material change request for 1219-0011 and the discontinuation for 1219-0048 upon the effective date of the final rule.

**Supporting Statement for**
**Proposed Respirable Crystalline Silica Standard**
**Paperwork Reduction Act Submissions**

The U.S. Department of Labor proposes a new information collection request (ICR).

**OMB Control Number**: 1219-0NEW

**Information Collection Request Title:** Proposed Respirable Crystalline Silica Standard

**OMB Type of Review: New Collection**

**Authority:**
30 CFR 60.12 Exposure monitoring.
30 CFR 60.13 Corrective actions.
30 CFR 60.14 Respiratory protection.
30 CFR 60.15 Medical surveillance for metal and nonmetal miners.
30 CFR 60.16 Recordkeeping requirements.

**Collection Instrument(s) :** None

**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.**

Section 103(h) of the Federal Mine Safety and Health Act of 1977 (Mine Act), 30 U.S.C.

813(h), authorizes the Mine Safety and Health Administration (MSHA) to collect information necessary to carry out its duty in protecting the safety and health of miners. Further, section 101(a) of the Mine Act, 30 U.S.C. 811, authorizes the Secretary of Labor to develop, promulgate, and revise as may be appropriate, improved mandatory health or safety standards for the protection of life and prevention of injuries in coal and metal and nonmetal mines.

Under the authority granted by the Mine Act, MSHA is proposing to issue standards for occupational exposure to respirable crystalline silica (RCS). The standards establish a permissible exposure limit of 50 micrograms of RCS per cubic meter of air (50 $\mu g/m^3$) as an 8-hour time-weighted average (TWA) in all industries covered by the rule. The standards also establish an action level (AL) of 25 micrograms per cubic meter of air (25 $\mu g/m^3$), measured as a TWA.

Proposed 30 CFR 60.16 (recordkeeping requirements) incorporates all the recordkeeping requirements related to proposed part 60. They are discussed below:

Proposed 30 CFR 60.12 (exposure monitoring) would require mine operators to make a record for each sample and each evaluation conducted pursuant to this section. The record of each sample would consist of the sample date, the occupations sampled, and the concentrations of RCS and respirable dust. The mine operator would also retain laboratory reports on sampling results. The semi-annual evaluation record would include the date of the evaluation and a record of the mine operator's evaluation of any changes in mining operations that may reasonably be expected to result in new or increased RCS exposures. In addition, the mine operator would be required to post the sampling and evaluation records and the laboratory report on the mine bulletin board and, if applicable, by electronic means, for the next 31 days, upon receipt. All records would be retained for at least 2 years from the date of each sample or evaluation.

Proposed 30 CFR 60.13 (corrective actions) would require mine operators to make a record of corrective actions and the dates of the corrective actions. The corrective action records would be retained for at least 2 years from the date of each corrective action.

Proposed 30 CFR 60.14 (respiratory protection) would require mine operators to retain a record of the written determination by a physician or other licensed health care professional (PLHCP) that a miner who may be required to use a respirator is unable to wear a respirator. The written determination record would be retained for the duration of a miner's employment plus 6 months.

Proposed 30 CFR 60.15 (medical surveillance for metal and nonmetal miners) would require metal and nonmetal (MNM) mine operators to obtain a written medical opinion from the PLHCP or specialist within 30 days of a miner's medical examination. The written medical opinion would contain the date of the medical examination, a statement that the examination has met the requirements of this proposed section, and any

recommended limitations on the miner's use of respirators. The written medical opinion record would be retained for the duration of a miner's employment plus 6 months.

**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 RCS sampling assist mine operators, miners, miner representatives, and state and federal regulators in determining the adequacy of the RCS control measures used to meet MSHA's applicable RCS standards and identify potential overexposures. This information is used to protect miners from exposure to excessive levels of RCS by determining the need for additional engineering controls, future sampling, and/or corrective actions.

The information provided by the mine operator is vital to the effective administration of a mine's RCS 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 which operators fail to protect miners from excessive RCS concentrations and thus need to take appropriate measures to lower RCS levels in the mine atmosphere.

Mine operators provide miners notification of sampling results when operators post them on the mine bulletin board.

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.**

No specific information technology has been identified that would generally reduce the burden.

The mine operator must have a written record of the most recent medical evaluation to confirm that the miner was evaluated. Additionally, the mine operator must make certain that the PLHCP provides a copy of the determination to the miner. Though the rule does not specify a timeframe in which the mine operator must have the PLHCP provide a copy to the miner of his or her medical determination, MSHA intends for the mine operator to exercise diligence in getting this important information to the miner by whatever method they choose. It has been MSHA's longstanding practice to allow operators to keep records in hard copy as well as electronically as long as the records are accessible.

**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.**

No duplication of the information requested exists. Records are unique to each mine.

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

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

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

MSHA would not be able to enforce this standard and protect miners if MSHA did not collect this information.

**7. Explain any special circumstances that would cause an information collection to be conducted in a manner:**

- **Requiring respondents to report information to the agency more often than quarterly;**
- **Requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**
- **Requiring respondents to submit more than an original and two copies of any document;**
- **Requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years;**
- **In connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;**
- **Requiring the use of a statistical data classification that has not been reviewed and approved by OMB;**
- **That includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or**

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

The collection of information is consistent with the guidelines in 5 CFR 1320.5.

**8. If applicable, provide a copy and identify the data and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB.**

In accordance with 5 CFR 1320.8(d), MSHA will publish the proposed information collection requirements in the Federal Register, notifying the public that these information collection requirements are being reviewed in accordance with the Paperwork Reduction Act of 1995, and giving interested persons 60 days to submit comments. MSHA published a 60-day Federal Register notice on July 13, 2023 (88 FR 44852).

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

MSHA does not provide payments or gifts to respondents.

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

There is no assurance of confidentiality provided to respondents.

**11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the
questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.**

There are no questions of a sensitive nature.

**12. Provide estimates of the hour burden of the collection of information. The statement should:**

- **Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless**

**directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.**

- **If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens.**

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

MSHA's proposed rule would create new information collection burdens for the mining industry. Under proposed part 60 entitled "Respirable Crystalline Silica," some new burdens would apply to all mine operators, and other burdens would apply to only some mine operators. Below, the new information collection burden that would be created by proposed part 60 is discussed.

Proposed § 60.16 lists all the recordkeeping requirements related to proposed part 60. Each of the requirements are discussed below:

Proposed § 60.12 would require mine operators to make a record for each sampling and each evaluation conducted pursuant to this section. The sampling record would consist of the sample date, the occupations sampled, and the concentrations of respirable crystalline silica and respirable dust. The mine operator would also retain laboratory reports on sampling results. The semi-annual evaluation record would include the date of the evaluation and a record of the mine operator's evaluation of any changes in mining operations that may reasonably be expected to result in new or increased respirable crystalline silica exposures. In addition, the mine operator would be required to post the sampling and evaluation records and the laboratory report on the mine bulletin board and, if applicable, by electronic means, for the next 31 days, upon receipt. All records would be retained for at least 2 years from the date of each sampling or evaluation.

Proposed § 60.13 would require mine operators to make a record of corrective actions and the dates of the corrective actions. The corrective action records would be retained for at least 2 years from the date of each corrective action.

Proposed § 60.14 would require mine operators to retain a record of the written determination by a PLHCP that a miner who may be required to use a respirator is

unable to wear a respirator. The written determination record would be retained for the duration of a miner's employment plus 6 months.

Proposed § 60.15 would require MNM mine operators to obtain a written medical opinion from the PLHCP or specialist within 30 days of a miner's medical examination. The written medical opinion would contain the date of the medical examination, a statement that the examination has met the requirements of this proposed section, and any recommended limitations on the miner's use of respirators. The written medical opinion record would be retained for the duration of a miner's employment plus 6 months.

**Wage Rates Determinations**[1]

MSHA used data from the May 2021 Occupational Employment and Wage Statistics (OEWS) published by the Bureau of Labor Statistics (BLS) for hourly wage rates[2] and adjusted the rates for benefits,[3] wage inflation,[4] and overhead costs. The occupations listed below in Table 12-1 are those that were determined to be relevant for the cost calculations.

Table 12-1 Hourly Wage Rates

| | | | A | B | C | D | A x B x C x D |
|---|---|---|---|---|---|---|---|
| **Occupation** | **NAICS Code** | **SOC Code** | **Wage Rate** | **Benefit Multiplier** | **Inflation Multiplier** | **Overhead Cost Multiplier** | **Loaded Hourly Wage Rate‡** |
| Industrial hygienist* | 212100<br>212200<br>212300 | 19-5011<br>19-5012 | $39.35 | 1.49 | 1.043 | 1.17 | $71.54 |
| Clerk** | 212100<br>212200<br>212300 | 43-9061 | $19.90 | 1.49 | 1.043 | 1.17 | $36.18 |

Note: MSHA used the latest 4-quarter moving average 2021Q3-2022Q2 to determine that 32.9 percent of total loaded wages are benefits. The benefit multiplier is 1.49 = 1+( .329/(1-.329)). The inflation multiplier of 1.043 (= 150.5/144.3) was

[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.

[2] Options for obtaining OEWS data are available at item "E3. How to get OEWS data. What are the different ways to obtain OEWS estimates from this website?" at https://www.bls.gov/oes/oes_ques.htm.

[3] The benefit multiplier comes from BLS Employer Costs for Employee Compensation accessed by menu at http://data.bls.gov/cgi-bin/srgate or directly with http://download.bls.gov/pub/time.series/cm/cm.data.0.Current. Insert the data series CMU2030000405000D and CMU2030000405000P, Private Industry Total benefits for Construction, extraction, farming, fishing, and forestry occupations, which is divided by 100 to convert to a decimal value. MSHA used the latest 4-quarter moving average to determine what percent of total loaded wages are benefits. MSHA computes the benefit multiplier with a number of detailed calculations, but it may be approximated with the formula 1 + (benefit percentage/(1-benefit percentage)).

[4] Wage inflation is the change in Series ID: CIS2020000405000I; Seasonally adjusted; Series Title: Wages and salaries for Private industry workers in Construction, extraction, farming, fishing, and forestry occupations, Index. (https://data.bls.gov/cgi-bin/srgate; Inflation Multiplier = (Current Quarter Cost Index Value / OEWS Wage Base Quarter Index Value).

determined by using the employment price index from the latest quarter, 2022Q2, divided by the base year and quarter of the OEWS employment and wage statistics, 2021Q2. MSHA assumes a 17 percent overhead cost rate.
*The Standard Occupation Codes (SOC) used for this occupation are
**The SOCs used for this occupation are

Baseline sampling

According to § 60.12(a) of the proposed rule, mine operators will need to perform initial baseline sampling within the first 180 days of the rule to assess the full shift, 8-hour TWA exposure of RCS for each miner who is or may be expected to be exposed to RCS.

The respondents would consist of all active mines because operators of active mines are assumed to perform baseline sampling. MSHA counts the number of active mines in 2019, defining an active mine as one that had at least 520 employment hours (equivalent to 1 person working full time for a quarter) in at least one quarter of 2019. Using this definition, MSHA estimates that a total of 12,631 mines (11,525 MNM mines and 1,106 coal mines) would generate baseline sampling records in the first year of implementation.

MSHA estimates that the 12,631 MNM and coal mines that recorded any employment in 2019 will average about 5.6 baseline samples per mine, with larger mines generating more samples and smaller miners generating fewer samples. MSHA assumes that a sample comprising at least 50 percent of miners at mines that employ 20 or fewer miners (including contract workers) will be necessary to collect a representative sample. In mines with 20 to 100 miners, a minimum 25 percent of miners will need to be sampled for the sample to be representative, while a minimum 10 percent sample should be representative at mines employing at least 100 miners.

In years 2 and 3 of implementation, only new mines would need to engage in baseline sampling. MSHA estimates that about 2 percent of mines each year are new while assuming that the number of mines is constant. Therefore, MSHA estimates that 253 (=12,631 mines x 2 percent) mine operators will carry out baseline sampling in years 2 and 3 of implementation. They will carry out, on average, about 5.6 samples per mine.

MSHA estimates that recordkeeping time for all types of samples takes 15 minutes per sample and is valued at the average loaded hourly wage of an industrial hygienist making $71.54 per hour. The calculations for this number are presented in Table 12-1.

Table 12-2 Baseline Sampling

| Occupation | Year | No. of Respondents (Mines) | No. of Responses per Respondent | No. of Responses (Baseline Samples) | Minutes per Response | Burden Hours | Avg. Hourly Wage | Burden Cost |
|---|---|---|---|---|---|---|---|---|
| Industrial hygienist | 1 | 12,631 | 5.6 | 70,498 | 15 | 17,624.5 | $71.54 | $1,260,927.16 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Industrial hygienist | 2 | 253 | 5.6 | 1,410 | 15 | 352.5 | $71.54 | $25,218.54 |
| Industrial hygienist | 3 | 253 | 5.6 | 1,410 | 15 | 352.5 | $71.54 | $25,218.54 |
| Three-year average | Average | 4,379 | | 24,439 | | 6,109.8 | | $437,121.42 |

Corrective Action Sampling

According to § 60.12(c) of the proposed rule, where the most recent sampling, including any sampling conducted by the operator, indicates that miner exposures are above the permissible exposure limit (PEL), the mine operator will need to sample after corrective actions taken pursuant to proposed § 60.13, until the sampling indicates that miner exposures are at or below the PEL.

For proposed § 60.12, only those mines with at least one miner exposure above the proposed PEL are assumed to carry out the proposed requirement. MSHA estimates that about 22 percent of active mines (12,631 x 22 percent = 2,771 mines in total) would have at least one miner overexposed to RCS. MSHA further estimates that the 2,771 mines that will be required to conduct and record corrective actions will do so for four mine areas each. In year 1, MSHA expects the sampling to begin in the second half of the year, thereby decreasing the number of samples by half.

MSHA estimates that recordkeeping time for all types of samples takes 15 minutes per sample and is valued at the average loaded hourly wage of an industrial hygienist making $71.54 per hour.

Table 12-3 Corrective Action Sampling

| Occupation | Year | No. of Respondents (Mines) | No. of Responses per Respondent | No. of Responses (Corrective Action Samples) | Minutes per Response | Burden Hours | Avg. Hourly Wage | Burden Cost |
|---|---|---|---|---|---|---|---|---|
| Industrial hygienist | 1 | 2,771 | 2.0 | 5,542 | 15 | 1,385.5 | $71.54 | $99,124.21 |
| Industrial hygienist | 2 | 2,771 | 4.0 | 11,084 | 15 | 2,771.0 | $71.54 | $198,248.41 |
| Industrial hygienist | 3 | 2,771 | 4.0 | 11,084 | 15 | 2,771.0 | $71.54 | $198,248.41 |
| Three-year average | Average | 2,771 | | 9,237 | | 2,309.2 | | $165,207.01 |

Periodic Sampling

According to § 60.12(b) of the proposed rule, mines where the most recent sampling, including any sampling conducted by the operator or by MSHA, indicates that miner exposures are at or above the action level but at or below the PEL, the mine operator

will need to sample within 3 months of that sampling and continue to sample every 3 months until two consecutive samplings indicate that miner exposures are below the action level.

The estimated number of periodic samplings is calculated based on the following factors: the number of miners with sampling results at or above the proposed action level but at or below the PEL, the percent of miners needed for representative samples, and the number of quarters mines would be in operation. During the first six years of this proposed rule, the number of periodic samples is expected to decline by about 14 percent per year due to the assumed decline in miners and contractors with exposure levels at or above the action level from increased compliance. As a result, MSHA estimates that an annual average of 64,116 periodic samples would be conducted in the first three years. Those samples will be carried out in a decreasing number of mines, starting with 12,600 in year 1 and falling to 11,249 in year 2 and 9,898 in year 3. That corresponds to about 7 periodic samples per mine, though there will be variation in the number of periodic samples depending on mine size and its activity level in ratios equivalent to that of baseline sampling. In year 1, MSHA expects the sampling to begin in the second half of the year, thereby decreasing the number of samples by half.

MSHA estimates that recordkeeping time for all types of samples takes 15 minutes per sample and is valued at the average loaded hourly wage of an industrial hygienist making $71.54 per hour.

Table 12-4 Periodic Sampling

| Occupation | Year | No. of Respondents (Mines) | No. of Responses per Respondent | No. of Responses (Periodic Samples) | Minutes per Response | Burden Hours | Avg. Hourly Wage | Burden Cost |
|---|---|---|---|---|---|---|---|---|
| Industrial hygienist | 1 | 12,600 | 3.5 | 44,150 | 15 | 11,037.5 | $71.54 | $789,666.86 |
| Industrial hygienist | 2 | 11,249 | 7.0 | 78,832 | 15 | 19,708.1 | $71.54 | $1,409,994.04 |
| Industrial hygienist | 3 | 9,898 | 7.0 | 69,365 | 15 | 17,341.1 | $71.54 | $1,240,654.37 |
| Three-year average | Average | 11,249 | | 64,116 | | 16,028.9 | | $1,146,771.76 |

Semi-Annual Evaluation

According to § 60.12(d) of the proposed rule, mine operators need to evaluate any changes in production, processes, engineering controls, personnel, administrative controls, or other factors that may reasonably be expected to result in new or increased RCS exposures every 6 months. Once the evaluation is completed, the mine operator needs to make a record of the evaluation and the date of the evaluation and post the record on the mine bulletin board and, if applicable, by electronic means, for the next 31 days.

MSHA assumes that all 12,631 mines would record semi-annual evaluation results twice a year and then post those results. In year 1, MSHA expects the sampling to begin in the second half of the year, thereby decreasing the number of evaluations by half. MSHA estimates it would take an industrial hygienist, earning $71.54 per hour, 15 minutes to record an evaluation. It would take a clerk, earning $36.18 per hour, an additional 3 minutes to post the record on the mine bulletin board and, if applicable, by electronic means.

Table 12-5 Semi-annual Evaluation

| Occupation / Activity | Year | No. of Respondents (Mines) | No. of Responses per Respondent | No. of Responses (Semi-annual Evaluations) | Minutes per Response | Burden Hours | Avg. Hourly Wage | Burden Cost |
|---|---|---|---|---|---|---|---|---|
| Evaluation Record | | | | | | | | |
| Industrial hygienist | 1 | 12,631 | 1 | 12,631 | 15 | 3,157.8 | $71.54 | $225,918.05 |
| Industrial hygienist | 2 | 12,631 | 2 | 25,262 | 15 | 6,315.5 | $71.54 | $451,836.11 |
| Industrial hygienist | 3 | 12,631 | 2 | 25,262 | 15 | 6,315.5 | $71.54 | $451,836.11 |
| Three-year average | Average | 12,631 | | 21,052 | | 5,262.9 | | $376,530.09 |
| Post Record on Mine Bulletin Board | | | | | | | | |
| Clerk | 1 | 12,631 | 1 | 12,631 | 3 | 631.6 | $36.18 | $22,850.54 |
| Clerk | 2 | 12,631 | 2 | 25,262 | 3 | 1,263.1 | $36.18 | $45,701.09 |
| Clerk | 3 | 12,631 | 2 | 25,262 | 3 | 1,263.1 | $36.18 | $45,701.09 |
| Three-year average | Average | 12,631 | | 21,052 | | 1,052.6 | | $38,084.24 |
| **Semi-annual evaluation total** | | **12,631** | | **42,103** | | **6,315.5** | | **$414,614.33** |

Post-Evaluation Sampling

According to § 60.12(e) of the proposed rule, if the mine operator determines as a result of the semi-annual evaluation that miners may be exposed to RCS at or above the action level, the mine operator will perform sampling to assess the full shift, 8-hour TWA exposure of RCS for each miner who is or may reasonably be at or above the action level.

MSHA estimates 754 mines would conduct sampling as a result of their semi-annual evaluations and an average of four miners would be sampled, resulting in a constant 3,016 samples each year. In year 1, MSHA expects the sampling to begin in the second

half of the year, thereby decreasing the number of samples by half.

MSHA estimates that recordkeeping time for all types of samples takes 15 minutes per sample and is valued at the average loaded hourly wage of an industrial hygienist making $71.54 per hour.

Table 12-6 Post-Evaluation Sampling

| Occupation | Year | No. of Respondents (Mines) | No. of Responses per Respondent | No. of Responses (Post-evaluation samples) | Minutes per Response | Burden Hours | Avg. Hourly Wage | Burden Cost |
|---|---|---|---|---|---|---|---|---|
| Industrial hygienist | 1 | 754 | 2 | 1,508 | 15 | 377.0 | $71.54 | $26,972.09 |
| Industrial hygienist | 2 | 754 | 4 | 3,016 | 15 | 754.0 | $71.54 | $53,944.17 |
| Industrial hygienist | 3 | 754 | 4 | 3,016 | 15 | 754.0 | $71.54 | $53,944.17 |
| Three-year average | Average | 754 | | 2,513 | | 628.3 | | $44,953.48 |

Corrective Actions

According to § 60.13 of the proposed rule, any sampling performed by the operator or MSHA that indicates that a miner's exposure exceeds the PEL requires the mine operator to make approved respirators available to affected miners before the start of the next work shift; ensure that affected miners wear respirators for the full shift or during the period of overexposure until miner exposures are at or below the PEL; and immediately take corrective actions to lower the concentration of RCS to at or below the PEL. Mine operators need to make a record of corrective actions and the dates of the corrective actions.

Only those mines with at least one miner exposure above the proposed PEL are assumed to carry out the proposed requirement. MSHA estimates that about 22 percent of active mines (12,631 x 22 percent = 2,771 mines in total) would have at least one miner overexposed to RCS. MSHA estimates that the 2,771 mines that will be required to conduct and record corrective actions will do so for four mine areas each. In year 1, MSHA expects the sampling to begin in the second half of the year, thereby decreasing the number of samples and therefore corrective actions by half.

A clerk, earning $36.18 per hour, will need 3 minutes to enter respirator records for each of the 4 miners – one in each affected mine area - in all affected mines every year. The clerk will need another 5 minutes to enter the results of the corrective action record for the same number of miners. The calculations for the clerk’s salary are presented in Table 12-1.

Table 12-7 Corrective Actions

| Occupation/ Activity | Year | No. of Respondents (Mines) | No. of Responses per Respondent | No. of Responses (Corrective Actions) | Minutes per Response | Burden Hours | Avg. Hourly Wage | Burden Cost |
|---|---|---|---|---|---|---|---|---|
| Miner Respirator Record | | | | | | | | |
| Clerk | 1 | 3,411 | 1.0 | 3,411 | 3 | 170.6 | $36.18 | $6,170.79 |
| Clerk | 2 | 3,411 | 2.0 | 6,822 | 3 | 341.1 | $36.18 | $12,341.57 |
| Clerk | 3 | 3,411 | 2.0 | 6,822 | 3 | 341.1 | $36.18 | $12,341.57 |
| Three-year average | Average | 3,411 | | 5,685 | | 284.3 | | $10,284.64 |
| Corrective Action Record | | | | | | | | |
| Clerk | 1 | 2,771 | 2.0 | 5,542 | 5 | 461.8 | $36.18 | $16,709.91 |
| Clerk | 2 | 2,771 | 4.0 | 11,084 | 5 | 923.7 | $36.18 | $33,419.82 |
| Clerk | 3 | 2,771 | 4.0 | 11,084 | 5 | 923.7 | $36.18 | $33,419.82 |
| Three-year average | Average | 2,771 | | 9,237 | | 769.7 | | $27,849.85 |
| **Corrective action total** | | **3,411** | | **14,922** | | **1,054.0** | | **$38,134.49** |

According to § 60.14(b) of the proposed rule, mine operators will need to update the information provided to the PLHCP concerning each miner's work area; type and weight of respirator; duration and frequency of respirator use; work activities and environmental conditions; hazards; and other PPE worn. This information can then be used by the PHLCP or specialist to determine whether a miner is unable to wear a respirator. Upon written determination by a PLHCP that an affected miner is unable to wear a respirator, the miner will need to be temporarily transferred either to work in a separate area of the same mine or to an occupation at the same mine where respiratory protection is not required.

MSHA estimates that 3,411 (all 1,106 coal mines plus 2,305 MNM mines - 20 percent of 11,525 MNM mines) mines currently report respirator usage. MSHA further estimates that in the first year of this proposed rule, 33 percent of the 3,411 mines (1,126) will have miners affected by this provision, an average of 2 miners per mine. In succeeding years, MSHA assumes that 10 percent of the 3,411 mines (341) will have miners affected by this provision, an average of 2 miners per mine.

MSHA estimates that it will take an industrial hygienist, earning $71.54 per hour, 30 minutes to document this information in the miner's records and to transmit it to the miner's PLHCP.

Table 12-8 Medical Evaluations

| Occupation | Year | No. of Respondents (Mines) | No. of Responses per Respondent | No. of Responses (Medical Evaluations) | Minutes per Response | Burden Hours | Avg. Hourly Wage | Burden Cost |
|---|---|---|---|---|---|---|---|---|
| Industrial hygienist | 1 | 1,126 | 2 | 2,252 | 30 | 1,126.0 | $71.54 | $80,558.54 |
| Industrial hygienist | 2 | 341 | 2 | 682 | 30 | 341.0 | $71.54 | $24,396.50 |
| Industrial hygienist | 3 | 341 | 2 | 682 | 30 | 341.0 | $71.54 | $24,396.50 |
| Three-year average | Average | 603 | | 1,205 | | 602.7 | | $43,117.18 |

Medical Surveillance

According to § 60.15 of the proposed rule, each operator of an MNM mine will need to provide to each miner periodic medical examinations performed by a PLHCP or specialist at no cost to the miner. Each mine operator will also need to provide the opportunity to have the medical examinations at least every 5 years to all miners employed at the mine. The medical examinations will need to be available during a 6-month period that begins no less than 3.5 years and not more than 4.5 years from the end of the last 6-month period.

The results of medical examinations will need to be provided only to the miner, and at the request of the miner, to the miner's designated physician. The mine operator will need to obtain a written medical opinion from the PLHCP or specialist within 30 days of the medical examination. The mine operator will then need to maintain a record of the written medical opinions received from the PLHCP or specialist.

MSHA assumes that 75 percent of eligible MNM miners (current MNM miners), including contract workers, would make use of the opportunity to receive a voluntary medical exam that is paid by their mine operator. As a result, MSHA estimates that an annual average of 25,175 current miners are estimated to receive voluntary medical exams. This estimate represents the upper range of the participation rate of voluntary medical exams by miners. MSHA is using the upper end of the range to avoid underestimating paperwork costs.

MSHA further estimates that 8,392 miners in a given year, including contract workers, would be new miners and contractors who would undergo mandatory medical examinations. MSHA estimated that the turnover of MNM miners would be 8,392 miners

per year (1/22 of the estimated total of 184,615 MNM workers with an average number of 22 years on the job before leaving the mining industry).

Given that follow-up exams will need to begin over 3 years after the implementation of this rule, the related recordkeeping will not take place during the period covered by this Paperwork Reduction Act package.

MSHA estimates that it will take a clerk, making $36.18 per hour, 15 minutes to enter the medical records for either new MNM miners undergoing a mandatory medical examination or current MNM miners undergoing a voluntary medical examination.

Table 12-9 Medical Surveillance

| Occupation/ Activity | Year | No. of Respondents (Mines) | No. of Responses per Respondent | No. of Responses (Medical Exams) | Minutes per Response | Burden Hours | Avg. Hourly Wage | Burden Cost |
|---|---|---|---|---|---|---|---|---|
| Medical Exam Records for New MNM Miners | | | | | | | | |
| Clerk | 1 | 8,392 | 1 | 8,392 | 15 | 2,097.9 | $36.18 | $75,905.47 |
| Clerk | 2 | 8,392 | 1 | 8,392 | 15 | 2,097.9 | $36.18 | $75,905.47 |
| Clerk | 3 | 8,392 | 1 | 8,392 | 15 | 2,097.9 | $36.18 | $75,905.47 |
| Three-year average | Average | 8,392 | | 8,392 | | 2,097.9 | | $75,905.47 |
| Medical Exam Records for Existing MNM Miners | | | | | | | | |
| Clerk | 1 | 26,433 | 1 | 26,433 | 15 | 6,608.3 | $36.18 | $239,097.62 |
| Clerk | 2 | 25,175 | 1 | 25,175 | 15 | 6,293.8 | $36.18 | $227,718.48 |
| Clerk | 3 | 23,916 | 1 | 23,916 | 15 | 5,979.0 | $36.18 | $216,330.29 |
| Three-year average | Average | 25,175 | | 25,175 | | 6,293.7 | | $227,715.46 |
| **Medical surveillance total** | | **33,567** | | **33,567** | | **8,391.6** | | **$303,620.94** |

The total number of respondents is 46,198: 12,631 mines plus 33,567 miners; the estimated annual number of responses would be 220,575; and the estimated annual burden would be 47,181 hours. These estimates are based on the conservative assumption that 75 percent of eligible current miners would take part in medical surveillance, which could overestimate the recordkeeping cost and burden.

The largest number of respondents comes from an estimated annual average of 33,567 miners getting mandatory or voluntary medical examinations. The largest hourly burden comes from periodic sampling – 19,708 – and is a result of mines initially testing

at or above the action limit but at or below the PEL needing two consecutive samples below the action limit before they could stop sampling and the recording of each sampling event taking 15 minutes of an industrial hygienist's time.

Table 12-10 Average Annual Burden Summary

| Activity | No. of Respondents | No. of Responses | Burden Hours (Rounded) | Burden Cost |
|---|---|---|---|---|
| Baseline sampling | 4,379 | 24,439 | 6,110 | $437,121.42 |
| Correction action sampling | 2,771 | 9,237 | 2,309 | $165,207.01 |
| Periodic Sampling | 11,249 | 64,116 | 16,029 | $1,146,771.76 |
| Semi-Annual Evaluation | 12,631 | 42,103 | 6,316 | $414,614.33 |
| Post-Evaluation Sampling | 754 | 2,513 | 628 | $44,953.48 |
| Corrective Actions | 3,411 | 14,922 | 1,054 | $38,134.49 |
| Medical Evaluations | 603 | 1,205 | 603 | $43,117.18 |
| Medical Surveillance | 33,567 | 33,567 | 8,392 | $303,620.94 |
| **Total (Rounded)** | **46,198** | **192,102** | **41,440** | **$2,593,541** |

The annual burden varies significantly from the first year to the succeeding years. The main reason for that variation is baseline sampling being conducted in all 12,631 mines in the first year and only in new mines in succeeding years. As a result, baseline sampling-related burden hours decrease from 17,625 hours in year 1 to 352 hours in years 2 and 3. The medical evaluations relating to miners' ability to wear respirators is also estimated to decrease sharply after the first year, going from exacting a cost of 1,126 burden hours in year 1 to 341 hours in years 2 and 3. On the other hand, corrective action samples, corrective actions, periodic samples, semi-annual evaluations, and post-evaluation samples are expected to only be carried out for half a year in year 1, decreasing all their burden hours.

Table 12-11 Yearly Summary

| Activity | Year | No. of Respondents (Mines) | No. of Responses | Burden Hours (Rounded) | Burden Cost |
|---|---|---|---|---|---|
| Baseline sampling | 1 | 12,631 | 70,498 | 17,625 | $1,260,927.16 |
| Correction action sampling | 1 | 2,771 | 5,542 | 1,386 | $99,124.21 |
| Periodic sampling | 1 | 12,600 | 44,150 | 11,038 | $789,666.86 |

| | | | | | |
|---|---|---|---|---|---|
| Semi-annual evaluation | 1 | 12,631 | 25,262 | 3,789 | $248,768.60 |
| Post-evaluation sampling | 1 | 754 | 1,508 | 377 | $26,972.09 |
| Corrective actions | 1 | 3,411 | 8,953 | 632 | $22,880.69 |
| Medical evaluations | 1 | 1,126 | 2,252 | 1,126 | $80,558.54 |
| Medical surveillance | 1 | 34,825 | 34,825 | 8,706 | $315,003.09 |
| **Year 1 total** | | **47,456** | **192,990** | **44,678** | **$2,843,901.23** |
| Baseline sampling | 2 | 253 | 1,410 | 352 | $25,218.54 |
| Correction action sampling | 2 | 2,771 | 11,084 | 2,771 | $198,248.41 |
| Periodic sampling | 2 | 11,249 | 78,832 | 19,708 | $1,409,994.04 |
| Semi-annual evaluation | 2 | 12,631 | 50,524 | 7,579 | $497,537.19 |
| Post-evaluation sampling | 2 | 754 | 3,016 | 754 | $53,944.17 |
| Corrective actions | 2 | 3,411 | 17,906 | 1,265 | $45,761.39 |
| Medical evaluations | 2 | 341 | 682 | 341 | $24,396.50 |
| Medical surveillance | 2 | 33,567 | 33,567 | 8,392 | $303,623.95 |
| **Year 2 total** | | **46,198** | **197,021** | **41,162** | **$2,558,724.21** |
| Baseline sampling | 3 | 253 | 1,410 | 352 | $25,218.54 |
| Correction action sampling | 3 | 2,771 | 11,084 | 2,771 | $198,248.41 |
| Periodic sampling | 3 | 9,898 | 69,365 | 17,341 | $1,240,654.37 |
| Semi-annual evaluation | 3 | 12,631 | 50,524 | 7,579 | $497,537.19 |
| Post-evaluation sampling | 3 | 754 | 3,016 | 754 | $53,944.17 |
| Corrective actions | 3 | 3,411 | 17,906 | 1,265 | $45,761.39 |
| Medical evaluations | 3 | 341 | 682 | 341 | $24,396.50 |
| Medical surveillance | 3 | 32,308 | 32,308 | 8,077 | $292,235.77 |
| **Year 3 total** | | **44,939** | **186,294** | **38,480** | **$2,377,996.36** |

**13. Provide an estimate of the total annual cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).**

- **The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life); and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including**

**system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.**

- **If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.**

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

MSHA estimates that printing the results of semi-annual evaluations and posting the record on the mine bulletin board, as required by § 60.12(d) of the proposed rule, will cost each of the 12,631 active MNM and coal mines $2 in terms of paper, ink, and folders. Other sections of the proposed rule require that mine operators retain and store the records in electronic formats and make them available to MSHA personnel if requested. Therefore, MSHA doesn't expect additional cost burden to respondents or recordkeepers.

Table 13-1 Printing Records

| Cost Components | No. of Respondents (mines) | No. of Responses per Respondent | No. of Responses | Unit Cost | Cost to Recordkeeper |
|---|---|---|---|---|---|
| Cost to print all relevant documents | 12,631 | 1 | 12,631 | $2.00 | $25,262.00 |

**14. Provide estimates of annualized cost to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information.**

**Agencies also may aggregate cost estimates from Items 12, 13, and 14 in a single**

**table.**

MSHA personnel examine records during routine inspections, and there is no additional cost to the Federal government associated with this burden.

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

This ICR package shows below the estimated responses, burden hours, and costs that will be applied to the individual control numbers as a result of the final rule.

IC 1219-0011

*Affected Public*: Business or other for-profit (mine operators)

*Estimated Number of Respondents*: 676 (0 from this rulemaking)

*Frequency*: On occasion

*Estimated Number of Responses*: 995,102 (0 from this rulemaking)

*Estimated Number of Burden Hours:* 58,259 (0 from this rulemaking)

*Estimated Hour Burden Costs*: $3,271,611 ($0 from this rulemaking)

*Estimated Capital Costs to Respondents*: $29,835 ($0 from this rulemaking)

IC 1219–0048

*Estimated Number of Respondents*: 0 (-350 from this rulemaking)

*Frequency*: On occasion

*Estimated Number of Responses*: 0 (-630 from this rulemaking)

*Estimated Number of Burden Hours*: 0 (-3,588 from this rulemaking)

*Estimated Hour Burden Costs*: $0 (-$284,084 from this rulemaking)

*Estimated Capital Costs to Respondents*: $0 (-$140,000 from this rulemaking)

IC 1219-0NEW

*Affected Public*: Business or other for-profit (mine operators)

*Estimated Number of Respondents*: an annual average of 46,198 respondents.

*Frequency*: On occasion.

*Estimated Number of Responses*: An annual average of 192,102 responses.

*Estimated Number of Burden Hours*: An annual average of 41,440 burden hours.

*Estimated Hour Burden Costs*: An annual average of $2,593,541.

*Estimated Capital Costs to Respondents:* An annual average of $25,262.

Table 15-1 Itemized Changes in Annual Burden Hours

| Information Collection Activity | Program Change (hours currently on OMB Inventory for this ICR) | Program Change (hours after implementation of this ICR) | Difference |
|---|---|---|---|
| 1219-0011 | 58,259 | 58,259 | +0 |
| 1219-0048 | 3,588 | 0 | -3,588 |
| 1219-0NEW | 0 | 41,440 | +41,440 |
| **Total(s)** | 61,847 | 99,699 | +37,852 |

**16. For information collections whose results will be published, outline plans for tabulation and publication and address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the information collection, completion of report, publication dates, and other actions.**

MSHA does not intend to publish the results of this ICR.

**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 associates no forms with this collection.

**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.