Justification for Substantive Changes

Department of Labor
Mine Safety and Health Administration (MSHA)

Respirable Crystalline Silica Standard
OMB Control Number 1219-0156

Substantive changes need to be made to the currently approved information collection request (ICR) under OMB Control Number 1219-0156, due to the proposed rule titled "Respirable Crystalline Silica and Respiratory Protection" (RIN 1219-AC22).

Background

In May 2024, MSHA received OMB approval for the 3-year new collection of an ICR titled "Respirable Crystalline Silica Standard" under OMB Control Number 1219-0156. This ICR includes the burden and costs associated with recordkeeping and reporting concerning silica dust. The ICR was developed under 30 CFR part 60, established after the publication of MSHA's 2024 Silica Final Rule, "*Lowering Miners' Exposure to Respirable Crystalline Silica and Improving Respiratory Protection*" (89 FR 28218). In this ICR, MSHA establishes a uniform permissible exposure limit for respirable crystalline silica at 50 micrograms per cubic meter of air ($\mu g/m^3$) for a full-shift exposure, calculated as an 8-hour time-weighted average, for all miners. MSHA's final rule also includes other requirements to protect miners' health, such as exposure sampling, qualitative periodic evaluations, corrective actions to be taken when a miner's exposure exceeds the permissible exposure limit, and medical surveillance for metal and nonmetal (MNM) mines. The final rule also replaces existing requirements for respiratory protection and incorporates by reference of *ASTM F3387-19 Standard Practice for Respiratory Protection*.

In the currently approved ICR 1219-0156 supporting statement, MSHA lists five types of information collection concerning respirable crystalline silica:

- Sampling records: including first- and second-time sampling, above-action-level sampling, correction actions sampling, periodic evaluations and posting, and post-evaluation sampling;
- Corrective actions records;
- Written determination records: including medical evaluations and fit testing records for respiratory protection;
- Written medical opinion records; and
- ASTM updates.

MSHA also provides the estimated time burden associated with each of these activities.

Summary of Changes

In November 2026, MSHA published a notice of proposed rulemaking (NPRM) titled "Respirable Crystalline Silica and Respiratory Protection" in the *Federal Register* (91 FR 73062). The NPRM (RIN 1219-AC22) proposed to revise the standards used to reduce and monitor miners' exposure to respiratory crystalline silica in 30 CFR 60, Respirable Crystalline Silica. This proposed rule clarifies and modifies provisions of respiratory protection standards established in MSHA's 2024 Silica Final Rule. The proposed rule provides additional clarity for the regulated community and updates to requirements for exposure monitoring, respiratory protection, medical surveillance, and recordkeeping while maintaining the protection of miners. Details of requirement changes in the proposed rule is summarized below.

Table 1. Changes between Existing Standards and Proposed Rule

	Existing Standards	Proposed Rule	Impact
Exposure Monitoring			
First-time and second-time sampling	First-time and second-time sampling	First-time sampling only	Fewer samples
(new) As-needed sampling	None	Sampling as frequently as necessary	More samples
Above-action-level sampling	Three months after sampling results at or above the action level and continues until 1 sample below the action level	Sampling until 1 sample below the action level	Fewer samples
Correction actions sampling	Triggered by first-time, above-action-level, or post-evaluation samples above the PEL Multiple samples might be necessary to demonstrate post-corrective action exposure level is below the PEL	Triggered by first-time, above-action-level, or as-needed samples above the PEL Multiple samples might be necessary to demonstrate post-corrective action exposure level is below the PEL	No Change
Periodic evaluations and posting	All mines Every 6 months, or when a change that may reasonably be expected to result in new or increased exposure	None	Eliminated
Post-evaluation	If qualitative evaluation	None	Eliminated

sampling	shows exposure level above the action level		
Corrective actions	If any sampling indicates that a miner's exposure above the PEL Make approved respirators available to affected miners	If any sampling indicates that a miner's exposure above the PEL Make approved respirators available to affected miners	No Change
Respirator Protection			
Written determination records from PLHCP if above the PEL	Make approved respirators available to affected miners until below the PEL	Make approved respirators available to affected miners until below the PEL	No change
(new) Written determination records from PLHCP if above-action-level sampling at or above the action level but at or below the PEL	None	Make approved respirators available until below the action level	Additional respirators
Medical Surveillance			
Written confirmation of medical examination records	Mandatory examinations for new MNM miners Voluntary 5-year examinations for all MNM miners	Voluntary examinations for new MNM miners Voluntary 5-year examinations for all MNM miners (new) Mandatory MNM and coal miners if exposed above the PEL	Fewer medical examinations No change More medical examinations
ASTM/OSHA Standard Updates	Written respiratory protection program consistent with the requirements of ASTM F3387-19	Written respiratory protection program consistent with the requirements of OSHA Respiratory Protection Standard	No change, generally equivalent requirements
Recordkeeping Requirements	Records created in part 60, including - Sampling records and evaluations - Corrective actions records	Records created in part 60, including - Sampling records - Corrective actions records	Removes the record retention requirement for periodic

	- Written determination records - Written medical opinion records	- Written determination records - Written confirmation of medical examination records	evaluation and post-evaluation sampling

In the NPRM, MSHA notified the public that the existing ICR 1219-0156 supporting statement would be revised and sought public comments.

Changes in Burden

Substantive changes to the currently approved ICR 1219-0156 are shown below. The number of affected respondents, responses, time burden, and annual burden costs is projected to decrease.

Table 2. Summary of Changes between Currently Approved ICR and Revised ICR

	Currently Approved ICR	Revised ICR	Difference
Number of Respondents	47,596	12,631	-34,965
Number of Responses	265,509	246,496	-19,013
Annual Time Burden	63,972	59,674	-4,298
Annual Recordkeeping Costs	$775,683	$416,535	-$359,149

Supporting Statement for
Respirable Crystalline Silica Standard
Paperwork Reduction Act Submission

This information collection request (ICR) seeks to revise an existing information collection.

OMB Control Number: 1219-0156

Information Collection Request Title: Respirable Crystalline Silica Standard

Type of OMB Review: Revision

Authority:
Part 60—Respirable Crystalline Silica
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), as amended, 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(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 and metal and nonmetal (MNM) mines.

The Paperwork Reduction Act of 1995 (PRA, 44 U.S.C. 3501 *et seq.*) governs paperwork burdens imposed on the public by Federal agencies for using identical questions to collect information from 10 or more persons. The PRA defines paperwork burden in 44 U.S.C. 3502(2) as time, effort, or financial resources expended to generate, maintain, or provide information to or for a Federal agency. Under 44 U.S.C. 3507, the PRA also establishes policies and procedures of information collection for controlling paperwork burdens imposed by Federal agencies on the public, including evaluating public comments.

Under the authority granted by the Mine Act, MSHA proposed clarifications and modifications to provisions of the respirable crystalline silica and respiratory protection standards that were established in MSHA's 2024 Silica Final Rule titled "Lowering Miners' Exposure to Respirable Crystalline Silica and Improving Respiratory Protection" (89 FR 28218). The changes improve clarity for the regulated community and address new developments. The proposed rule titled "Respirable Crystalline Silica and Respiratory Protection" (91 FR 7306) includes clarifications and updates to requirements for exposure monitoring, methods of compliance, respiratory protection, medical surveillance, and recordkeeping while maintaining the protection of miners.

The proposed rule contains information collection requirements in different sections of 30 CFR part 60. These requirements include exposure monitoring (section 60.12), corrective actions (section 60.13), respiratory protection (section 60.14), and medical surveillance for metal and nonmetal miners (section 60.15). Table 1 to section 60.16(a) lists all the records the mine operator must retain and the retention period of each record. Each recordkeeping requirement is described in more detail below.

Table 1 to Section 60.16(a)—Recordkeeping Requirements

Record	Section references	Retention period
1. Sampling records	Section 60.12(e)	At least 5 years from sample date.
2. Corrective actions records	Section 60.13(c)	At least 5 years from date of each corrective action.
3. Written determination records received from a PLHCP	Section 60.14(b)	Duration of miner's employment plus 6 months.
4. Written confirmation of medical examination records received from a PLHCP or specialist	Section 60.15(f)	Duration of miner's employment plus 6 months.

Burden costs associated with this ICR include:

I. Exposure monitoring – sampling records and notifications (30 CFR 60.12)
II. Corrective actions records (30 CFR 60.13)
III. Respiratory protection - written determination records (30 CFR 60.14)
IV. Medical surveillance – written medical opinion records (30 CFR 60.15)
V. OSHA Respiratory Protection Standard updates (30 CFR 60.14(c)(2))
VI. Providing access (30 CFR 60.16(b))

Authorization and the associated rule text are described below.

I. Exposure Monitoring – Sampling Records and Notifications (30 CFR 60.12)

The samples identified in proposed 30 CFR 60.12 include: samples by the compliance date or first-time samples (60.12(a)(1)), as-needed samples (60.12(a)(2)), above-action-level-samples (60.12(a)(3)), and corrective actions samples (60.12(b)). The mine operator also would reports all samples above the PEL to MSHA (60.12(a)(4)) or samples after corrective actions at or below the PEL (60.12(b)).

I-1. First-time Sampling (30 CFR 60.12(a)(1))

Existing Rule
Under existing 30 CFR 60.12(a)(1), mine operators shall commence sampling by the compliance date to assess the full shift, 8-hour TWA exposure of respirable crystalline silica for each miner who is or may reasonably be expected to be exposed to respirable crystalline silica.

Proposed Rule
Under proposed 30 CFR 60.12(a)(1), mine operators shall commence sampling by the compliance date.

I-2. As-needed Sampling (30 CFR 60.12(a)(2))

Existing Rule
There is no requirement for as-needed sampling.

Proposed Rule
Under proposed 30 CFR 60.12(a)(2), mine operators shall conduct sampling as frequently as necessary to assess the full-shift, 8-hour TWA exposure of respirable crystalline silica to each miner who is or may reasonably be expected to be exposed to respirable crystalline silica at or above the action level.

I-3. Above-action-level Sampling (30 CFR 60.12(a)(3))

Existing Rule
Under existing 30 CFR 60.12(a)(2)(i), if one sampling is below the action level, the mine operator shall take at least one additional sampling within 3 months.

Under existing 30 CFR 60.12(a)(2)(ii), if the sampling is at or above the action level but at or below the PEL, the mine operator shall take another sampling within 3 months.

Under existing 30 CFR 60.12(a)(3), where the most recent sampling indicates that miner exposures are at or above the action level but at or below the PEL, the mine operator shall continue to sample within 3 months of the previous sampling.

Under existing 30 CFR 60.12(a)(4), the mine operator may discontinue sampling when two consecutive samplings indicate that miner exposures are below the action level. The second of these samplings must be taken after the operator receives the results of the prior sampling but no sooner than 7 days after the prior sampling was conducted.

Proposed Rule
Under proposed 30 CFR 60.12(a)(3), if the sampling is at or above the action level but at or below the PEL, then the mine operator shall make approved respirators available before the start of the next work shift until sampling indicates exposures are below the action level.

I-4. Corrective Actions Sampling (30 CFR 60.12(b) and 60.13(b)(1))

Existing Rule
Under existing 30 CFR 60.12(b) and 60.13(b)(1), where the most recent sampling indicates that miner exposures are above the PEL, the mine operator shall sample after corrective actions are taken until the sampling indicates that miner exposures are at or below the PEL.

Proposed Rule
Standards under proposed 30 CFR 60.12(b) and 60.13(b)(1) are the same as existing 60.12(b) and 60.13(b)(1).

I-5. Sampling Notifications (30 CFR 60.12(a)(4) and 60.12(b))

Existing Rule
Under existing 30 CFR 60.12(b), the mine operator shall immediately report all operator samples above the PEL to the MSHA District Manager or to any other MSHA office designated by the District Manager.

Proposed Rule
(new) Under proposed 30 CFR 60.12(a)(4), if the sampling is above the PEL, then the mine operator shall immediately report all operator samples above the PEL to the MSHA District Manager or to any other MSHA office designated by the MSHA District Manager.

Under proposed 30 CFR 60.12(b), once corrective actions sampling indicates that miner exposures are at or below the PEL, the mine operator shall contact the MSHA District Manager or any other MSHA office designated by the MSHA District Manager.

I-6. Sampling Records (30 CFR 60.12(e))

Existing Rule
Under existing 30 CFR 60.12(g), for each sample, the mine operator shall make a record of the sample date, the occupations sampled, and the concentrations of respirable crystalline silica and respirable dust and post the record and the laboratory report on the mine bulletin board and, if applicable, by electronic means, for the next 31 days, upon receipt.

Under existing 30 CFR 60.16(a)(2), sampling records shall be retained for at least 5 years from the sample date.

Proposed Rule
Standards under proposed 30 CFR 60.12(e) are the same as existing 60.12(g).

Standards under proposed 30 CFR 60.16(a)(1) are the same as existing 60.16(a)(2).

I-7. Periodic Evaluations and Sampling

Existing Rule
Under existing 30 CFR 60.12(c), at least every 6 months after commencing sampling or whenever there is a change in: production; processes; installation or maintenance of engineering controls; installation or maintenance of equipment; administrative controls; or geological conditions; mine operators shall evaluate whether the change may reasonably be expected to result in new or increased respirable crystalline silica exposures.

Under existing 30 CFR 60.12(d), if the mine operator determines as a result of the periodic evaluation that miners may be exposed to respirable crystalline silica at or above the action level, the mine operator shall perform sampling to assess the full shift, 8-hour TWA exposure of respirable crystalline silica for each miner who is or may reasonably be expected to be at or above the action level.

Proposed Rule
Periodic evaluations or post-evaluation sampling are no longer required.

II. Corrective Action Records (30 CFR 60.13)

Existing Rule
Under existing 30 CFR 60.13(a)(3), if any sampling indicates that a miner's exposure exceeds the PEL, mine operators shall immediately take corrective actions to lower the concentration of respirable crystalline silica to at or below the PEL.

Under existing 30 CFR 60.13(b), once corrective actions have been taken, the mine operator shall:

(1) Conduct corrective actions sampling; and
(2) Take additional or new corrective actions until sampling indicates miner exposures are at or below the PEL.

Under existing 30 CFR 60.13(c), the mine operator shall make a record of corrective actions taken and the dates of the corrective actions.

Under existing 30 CFR 60.16(a)(3), corrective action records shall be retained for at least 5 years from the date of each corrective action. These records must be stored with the records of related corrective action sampling.

Proposed Rule
Standards under proposed 30 CFR 60.13 are the same as existing 60.13.

Standards under proposed 30 CFR 60.16(a)(2) are the same as existing 60.16(a)(3).

III. Respiratory Protection - Written Determination Records (30 CFR 60.12(a)(3), 60.13(a)(1), 60.14(a) and 60.14(b))

III-1. Written Determination Records if Exposure above the PEL (30 CFR 60.13(a)(1), 60.14(a) and 60.14(b))

Existing Rule
Under existing 30 CFR 60.13(a)(1), if any sampling indicates that a miner's exposure exceeds the PEL, mine operators shall make approved respirators available to affected miners before the start of the next work shift.

Under existing 30 CFR 60.14(b), upon written determination by a physician or other licensed health care professional (PLHCP) that an affected miner (either a coal or a MNM miners) is unable to wear a respirator, the miner shall 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.

Under existing 30 CFR 60.16(a)(4), written determination records received from a PLHCP shall be retained for the duration of the miner's employment plus 6 months.

Proposed Rule
Requirements under proposed 30 CFR 60.13(a)(1) are the same as existing 60.13(a)(1) to make approved respirators available if a miner's exposure exceeds the PEL.

Standards under proposed 30 CFR 60.14(b) are the same as existing 60.14(b).

Standards under proposed 30 CFR 60.16(a)(3) are the same as existing 60.16(a)(4).

III-2. (New) Written Determination Records if Exposure between the Action Level and the PEL (30 CFR 60.12(a)(3) and 60.14(b))

Under proposed 30 CFR 60.12(a)(3), if the sampling is at or above the action level but at or

below the PEL, then the mine operator shall make approved respirators available before the start of the next work shift until sampling indicates exposures are below the action level.

IV. Medical Surveillance - Written Medical Opinion Records (30 CFR 60.15)

IV-1. Medical Examinations (30 CFR 60.15(b) and (c))

Voluntary MNM Medical Examinations (30 CFR 60.15(b))

Existing Rule

Under existing 30 CFR 60.15(b), each mine operator shall provide the opportunity to all miners employed at the mine to have the medical examinations as follows:

(1) During an initial 12-month period; and

(2) At least every 5 years after the end of the initial period in paragraph (b)(1). The medical examinations shall 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.

Proposed Rule

Under proposed 30 CFR 60.15(b), each MNM mine operator shall provide the opportunity to all miners employed at the mine to have the medical examinations as follows:

(1) During an initial 5-year period; and

(2) At least every 5 years after the end of the initial period in paragraph (b)(1). The medical examinations shall 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.

(3) For each MNM miner who begins work in the mining industry for the first time, the mine operator shall provide the opportunity for medical examinations as follows:

(i) An initial medical examination no later than 60 days after beginning employment;

(ii) A follow-up medical examination no later than 3 years after the initial examination in paragraph (c)(1) of this section; and

(iii) A follow-up medical examination conducted by a specialist no later than 2 years after the examinations in paragraph (c)(2) of this section if the chest X-ray shows evidence of pneumoconiosis or the spirometry examination indicates evidence of decreased functions.

Mandatory Medical Examinations for All Miners Exposed above the PEL (30 CFR 60.15(c))

Existing Rule

Under existing 30 CFR 60.15(c), for each miner who begins work in the mining industry for the first time, the mine operator shall provide medical examinations as follows:

(1) An initial medical examination no later than 60 days after beginning employment;

(2) A follow-up medical examination no later than 3 years after the initial examination in paragraph (c)(1) of this section; and

(3) A follow-up medical examination conducted by a specialist no later than 2 years after the examinations in paragraph (c)(2) of this section if the chest X-ray shows evidence of

pneumoconiosis or the spirometry examination indicates evidence of decreased lung function.

Proposed Rule
Under proposed 30 CFR 60.15(c), each MNM mine operator and each coal mine operator shall provide the medical examinations to all miners who are exposed above the PEL based upon an MSHA sample within 60 days of the operator's receipt of the sample results, except for miners who have, within the last 2 years, received a medical examination pursuant to this section or in accordance with 30 CFR 72.100.

IV-2. Medical Examinations Results (30 CFR 60.15(d))

Existing Rule
Under existing 30 CFR 60.15(d), the mine operator shall ensure that the results of medical examinations or tests shall be provided from the PLHCP or specialist within 30 days of the medical examination to the miner, and at the request of the miner, to the miner's designated physician or another designee identified by the miner.

Proposed Rule
Standards under proposed 30 CFR 60.15(d) are the same as existing 60.15(d).

IV-3. Written Medical Opinion Records (30 CFR 60.15(e))

Existing Rule
Under existing 30 CFR 60.15(e), the mine operator shall obtain a written medical opinion from the PLHCP or specialist within 30 days of the medical examination. The written opinion shall contain only the following:

(1) The date of the medical examination;
(2) A statement that the examination has met the requirements of this section; and
(3) Any recommended limitations on the miner's use of respirators.

Under existing 30 CFR 60.15(f), the mine operator shall maintain a record of the written medical opinions received from the PLHCP or specialist.

Under existing 30 CFR 60.16(a)(5), written medical opinion records received from a PLHCP or specialist shall be retained for the duration of the miner's employment plus 6 months.

Proposed Rule
Under proposed 30 CFR 60.15(e), the mine operator shall obtain written confirmation of a miner's medical examination from the PLHCP or specialist within 30 days of the medical examination. The written confirmation shall contain only the following:

(1) The date of the medical examination; and
(2) A statement that the examination has met the requirements of this section.

Standards under proposed 30 CFR 60.15(f) are the same as existing 60.15(f).

Standards under proposed 30 CFR 60.16(a)(4) are the same as existing 60.16(a)(5).

V. OSHA Respiratory Protection Standard Updates (30 CFR 60.14(c)(2))

Existing Rule
Under existing 30 CFR 60.14(c)(2), when approved respirators are used, the mine operator must have a written respiratory protection program that meets the following requirements in accordance with ASTM F3387-19: program administration; written standard operating procedures; medical evaluation; respirator selection; training; fit testing; maintenance, inspection, and storage. ASTM F3387-19, *Standard Practice for Respiratory Protection*, approved August 1, 2019, is incorporated by reference into this section.

Proposed Rule
Under proposed 30 CFR 60.14(c)(2), when approved respirators are used, the mine operator must have a written respiratory protection program that meets the requirements of the Department of Labor's Occupational Safety and Health Administration in 29 CFR 1910.134. MSHA adopts by reference the requirements of 29 CFR 1910.134, Respiratory protection, into this section.

VI. Providing Access (30 CFR 60.16(b))

Existing Rule
Under existing 30 CFR 60.16(b), upon request from an authorized representative of the Secretary, from an authorized representative of miners, or from miners, mine operators shall promptly provide access to any record listed in this section, including sampling records, corrective actions records, written determination records received from a PLHCP, and written medical opinion records received from a PLHCP or specialist.

Proposed Rule
Standards under proposed 30 CFR 60.16(b) are the same as existing 60.16(b).

This ICR under OMB Control Number 1219-0156 covers burden and costs associated with recordkeeping and reporting requirements of respirator protection programs related to respirable crystalline silica for MNM and coal mines.

Mine operators' burden and costs associated with recordkeeping and reporting requirements of respirator protection programs and exposure to airborne contaminants other than respirable crystalline silica in MNM mines are included in a separate ICR under OMB Control Number 1219-0048. A similar ICR under OMB Control Number 1219-0158 covers burden and costs associated with recordkeeping requirements of respirator protection programs and exposure to airborne contaminants other than respirable crystalline silica in coal mines.

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 crystalline silica exposure monitoring and corrective actions assist mine operators, miners, miner representatives, and state and federal regulators in tracking miners' occupational exposure to respirable crystalline silica, detecting potential overexposures, determining the adequacy of control measures used to meet MSHA's respirable crystalline silica standards, and identifying possible actions taken to control such exposure.

For MSHA and Mine Operators
The sampling information collected by the mine operator is vital to the effective administration of a mine's control of respirable crystalline silica exposures and allows the operator and MSHA to assess the programs' effectiveness.

MSHA uses the information to determine how operators comply with the rule's exposure monitoring requirements, which operators fail to protect miners from excessive respirable crystalline silica concentrations, and which operators need to take appropriate measures to lower respirable crystalline silica levels in the mine atmosphere. The information enables MSHA to provide needed compliance assistance.

The information collection requirements will provide mine operators with robust and timely information to enable them to understand the history of occupational exposures at the mines and to take appropriate actions to protect miners, such as implementing engineering and administrative controls. Sampling records can identify overexposures early on, which could be due to changes in production, processes, controls, or geological conditions. The information helps mine operators develop, implement, and adjust controls and other measures that protect miners from overexposure.

Mine operators also must immediately report the result of any operator samples above the PEL to the MSHA District Manager or to any other MSHA office designated by the District Manager. MSHA uses the information to determine how operators comply with the rule's exposure monitoring requirements, which operators fail to protect miners from excessive respirable crystalline silica concentrations, and which operators need to take appropriate measures to lower respirable crystalline silica levels in the mine atmosphere. The information enables MSHA to provide needed compliance assistance.

Mine operators use the information to properly issue respiratory protection to miners who need to use respiratory protection to control occupational diseases. MSHA uses the information to determine compliance with the standard specified in 30 CFR part 60 on selection, fit, use, and maintenance of approved respirators to control exposure to respirable crystalline silica.

For Miners

Mine operators are required to notify miners of sampling results by posting them on the mine bulletin board and, if applicable, by electronic means. The information is used to protect miners from exposure to excessive levels of respirable crystalline silica by determining the need for additional engineering controls, future sampling, and/or corrective actions.

After a medical examination, the PLHCP will provide miners with the results of medical examinations. The required medical information updates miners of their health status and potential overexposures to silica. The information provides miners and their representatives with information about exposure patterns over time to understand health hazards at their mines.

After a medical examination, mine operators will receive a written medical opinion concerning recommended limitations on the miner's use of a respirator. This information can be invaluable to miners who have already been diagnosed with an illness or experienced negative health effects and help them to make decisions about their health and future employment. The information also helps miners identify early symptoms of respirable crystalline silica-related diseases so that they can take necessary steps to proactively protect their health and make informed decisions about their health care. From MSHA's experience and observation, informed miners who are aware of occupational health hazards around them are more likely to follow safe work practices and to report these hazards to their operators or MSHA when necessary. When miners are aware of occupational health hazards and participate in the identification, remediation, and control of those hazards, the overall level of safety and health at the mine will be improved.

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 information technology has been identified that would reduce the burden of this collection. To comply with the Government Paperwork Elimination Act of 1998, 44 U.S.C. 3504, mine operators may submit or retain records in whatever form they choose, including using computer technology to store records electronically, provided they are secure and not susceptible to loss or alteration. MSHA encourages operators who store records electronically to provide a mechanism that will allow the continued storage and retrieval of records.

Section 60.16 does not require records to be maintained in a specific format. MSHA's longstanding practice is to allow operators to keep records in hard copy and/or electronic copy as long as the records are safeguarded and easily accessible. No specific information technology has been identified that would generally reduce the recordkeeping burden.

Under section 60.12(c)(1) and (2), the mine operator must make a record of the periodic evaluation and post the record on the mine bulletin board and if applicable, by electronic means, for the next 31 days. Under section 60.12(g), for each sample the mine operator is required to make a record of the sampling information and post the laboratory report on the mine bulletin board and, if applicable, by electronic means, for the next 31 days, upon receipt. Section 109(a)

of the Mine Act, 30 U.S.C. 819(a), requires a mine operator to maintain a bulletin board where information can be posted and shared with miners and their representatives. For portable operations and other operators who prefer to communicate electronically, the final rule permits electronic notification in addition to posting the record on the bulletin board.

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 similar or duplicate information is available or submitted to MSHA.

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

The information collection provisions apply to all mine operators, both large and small. Congress intended that the Secretary enforce the law at all mining operations within the Agency's jurisdiction regardless of size and that information collection and recordkeeping requirements be consistent with efficient and effective enforcement of the Mine Act. Section 103(e) of the Mine Act, 30 U.S.C. 813(e), directs the Secretary not to impose an unreasonable burden on small businesses when obtaining any information under the Mine Act. MSHA considered the burden on small mines when developing the collection and believes that this ICR does not have a significant impact on a substantial number of 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 monitor potential overexposure, assess program effectiveness, and enforce the respirable crystalline silica standard and protect miners if MSHA did not collect this information. Less frequent monitoring of the quality of mine air that miners breathe would fail to provide an adequate indication of the dust conditions to which miners are normally exposed. This would increase the likelihood that conditions with excessive respirable crystalline silica concentrations would go undetected. As a result, miners could suffer from material impairments of health or functional capacity caused by exposure to respirable crystalline silica and other airborne contaminants.

The health and safety of miners required to use respirators could be jeopardized without the collection of this information. Mine operators are required to develop their written respirator protection programs consistent with the requirements of OSHA Respiratory Protection Standard that address the selection, use, and care of respirators. However, in instances where the levels or types of airborne contaminants like respirable crystalline silica in mines change significantly and the needs for respirator use change, mine operators are required to revise their respirator programs to address these new conditions and the mine operators will keep records in accordance with OSHA Standard requirements.

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

- **Requiring respondents to report information to the agency more often than quarterly;**
- **Requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**
- **Requiring respondents to submit more than an original and two copies of any document;**
- **Requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years;**
- **In connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;**
- **Requiring the use of a statistical data classification that has not been reviewed and approved by OMB;**
- **That includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or**
- **Requiring respondents to submit proprietary trade 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. There are special circumstances under which respondents must report information to the Agency more often that quarterly. These circumstances include mine operators making multiple determinations that require multiple rounds of corrective actions sampling after an overexposure to ensure exposure is below the PEL. There are also instances that multiple as-needed sampling in response to a change in production, processes, installation and maintenance of engineering controls, installation and maintenance of equipment, administrative controls, or geological conditions to determine if the change was reasonably expected to result in new or increased respirable crystalline silica exposures.

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.

On November 12, 2026, published the proposed rule titled “Respirable Crystalline Silica and

Respiratory Protection" in the Federal Register (91 FR 73062). The publication of the proposed rule notified the public that the current information collection requirements under OMB control number 1219-0156 were being created in accordance with the Paperwork Reduction Act of 1995, and provided 60 days for the public to submit 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.

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.**

Respondents.
Based on 2019 data, MSHA anticipates 11,525 MNM mines and 1,106 coal mines will be impacted by this ICR every year. MSHA defines an active mine as one that had at least 520 employment hours (equivalent to 1 person working full time for a quarter of a year) in at least one quarter of 2019.

The section below summarizes MSHA's process for determining the wage rates of occupations MSHA assumes will be tasked with implementing the recordkeeping requirements of the rule.

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.[5] The wage rates were then inflated from 2021 constant dollars to 2024 constant dollars using the change in the GDP implicit price deflator between 2021 and 2024. The occupations listed below in Table 12-1 are those that were determined to be relevant for the cost calculations.

[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] To obtain OEWS data, follow BLS's directions in its Frequently Asked Questions: "E. How to get OEWS data. 4. 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 at 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).

[5] MSHA used an overhead rate of 17 percent. This overhead rate is based on a 2002 EPA report by Cody Rice, "Wage Rates for Economic Analysis of the Toxics Release Inventory Program", available at https://www.regulations.gov/document/EPA-HQ-OPPT-2016-0387-0064.

Table 12-1. Hourly Wage Rates

Occupation	NAICS Code	Mean Wage Rate	Benefit Multiplier	Inflation Multiplier	Overhead Cost Multiplier	GDP Deflator from 2021 to 2024*	Loaded Hourly Wage Rate in 2024 $
		A	B	C	D	E	A x B x C x D x E
MNM - Industrial hygienist	212200 212300	$39.43	1.49	1.043	1.17	1.139	$81.62
Coal - Industrial hygienist	212100	$39.22	1.49	1.043	1.17	1.139	$81.20
MNM - Clerk	212200 212300	$19.71	1.49	1.043	1.17	1.139	$40.80
Coal - Clerk	212100	$21.49	1.49	1.043	1.17	1.139	$44.49

Notes: MSHA used the latest 4-quarter moving average 2021Q2-2022Q2 to determine that 32.9 percent of total loaded wages are benefits for private industry workers in construction, extraction, farming, fishing, and forestry occupations. The benefit multiplier is 1.490= 1 + (0.329/(1-0.329)). The inflation multiplier was determined by using the employment price index from the most current quarter data available, 2022Q2, divided by the base year and quarter of the OEWS employment and wage statistics, 2021Q2, for private industry workers in construction, extraction, farming, fishing, and forestry occupations, current dollar index. The inflation multiplier is 1.043 = 150.5/144.3. MSHA used the overhead multiplier of 1.17.
The 2021 wages were updated to 2024 constant dollars using the change in the GDP implicit price deflator of 1.139 (=125.422/110.157) between 2021 and 2024.
[a] The Standard Occupation Codes (SOC) used for this occupation are (19-5011) and (19-5012).
[b] The SOC used for this occupation is (19-5011).
[c] The SOC used for this occupation is (43-9061).

Hour Burden

I. Exposure Monitoring – Sampling Records and Notifications (30 CFR 60.12)

I-1. First-time Sampling (30 CFR 60.12(a)(1))

Under proposed 30 CFR 60.12(a)(1) and (a)(2)(i), all mine operators would need to commence sampling by April 8, 2026, of each miner who is or may reasonably be expected to be exposed to respirable crystalline silica at or above the action level.

The respondents consist of all active mines as all active mines would be required to perform first-time sampling and generate sampling records in Year 1, including 11,525 MNM mines and 1,106 coal mines.

MSHA assumes that at least 50 percent of miners at mines that employ 20 or fewer miners (including contract workers) will 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 15 percent of miners need to be sampled to ensure the samples are representative at mines employing at least 100 miners.

Table 12-2a. Estimated Number of Mines, Miners, and Samples by Mine Size and Sector in Year 1, First-time Sampling

Mine Size	Percentage for Representative Sampling	No. of Samples Per Miner	MNM Year 1			Coal Year 1		
			No. of Mines	No. of Miners	No. of Samples	No. of Mines	No. of Miners	No. of Samples
	A	B	C	D	A x B x D	E	F	A x B x F
Emp <= 20	50%	1	10,238	69,520	34,760	707	6,217	3,109
20 < Emp <= 100	25%	1	1,066	61,316	15,329	271	16,854	4,214
100 < Emp <= 500	15%	1	195	50,469	7,570	116	37,299	5,595
500 < Emp	15%	1	26	29,899	4,485	12	13,205	1,981
Total			***11,525***	***211,203***	***62,144***	***1,106***	***73,576***	***14,898***

Note: The totals might not equal the sum of the individual rows due to rounding.

Starting from Year 2, only new mines will need to engage in first-time sampling. MSHA assumes that each year about 2 percent of existing mines will exit the industry and stop production, and that the same number of mines will enter the industry and start production, which ensures that the total number of active mines remains constant. Therefore, MSHA estimates that starting in Year 2 of implementation, 231 (=11,525 x 2 percent) new MNM mines will collect 1,243 (=62,144 x 2 percent) first-time samples, and 22 (=1,106 mines x 2 percent) new coal mines will collect 298 (=14,898 x 2 percent) first-time samples.

Table 12-2b. Estimated Number of Mines, Miners, and Samples by Mine Size and Sector in Year 2 and 3, First-time Sampling

Mine Size	Percentage for Representative Sampling	No. of Samples Per Miner	MNM Year 2-3			Coal Year 2-3		
			No. of Mines	No. of Miners	No. of Samples	No. of Mines	No. of Miners	No. of Samples
	A	B	C	D	A x B x D	E	F	A x B x F
Emp <= 20	50%	1	205	1,390	695	14	124	62
20 < Emp <= 100	25%	1	21	1,226	307	5	337	84
100 < Emp <= 500	15%	1	4	1,009	151	2	746	112
500 < Emp	15%	1	1	598	90	0	264	40
Total			***231***	***4,224***	***1,243***	***22***	***1,472***	***298***

Note: The totals might not equal the sum of the individual rows due to rounding.

MSHA estimates that it takes an industrial hygienist, earning $81.62 per hour at MNM mines and $81.20 per hour at coal mines, 15 minutes to conduct recordkeeping activities for a sample, including the time needed to post the record and the laboratory report on the mine bulletin board and, if applicable, by electronic means.

Table 12-2. Estimated Annual Respondent Hour and Cost Burden, First-time Sampling Records (30 CFR 60.12(a)(1))

Year	No. of Respondents (Mines)	No. of Responses per Respondent	Total Responses (Samples)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Monetized Value of Time
MNM - First-time sampling records (Industrial hygienist)							
1	11,525	5.4	62,144	0.25	15,536.00	$81.62	$1,268,028.42
2	231	5.4	1,243	0.25	310.75	$81.62	$25,363.02
3	231	5.4	1,243	0.25	310.75	$81.62	$25,363.02
Yearly Average	3,995	5.4	21,543	0.25	5,385.83	$81.62	$439,584.82
Coal - First-time sampling records (Industrial hygienist)							
1	1,106	13.5	14,898	0.25	3,724.47	$81.20	$302,414.41
2	22	13.5	298	0.25	74.49	$81.20	$6,048.29
3	22	13.5	298	0.25	74.49	$81.20	$6,048.29
Yearly Average	383	13.5	5,165	0.25	1,291.15	$81.20	$104,836.99
Total - First-time sampling records (Industrial hygienist)							
1	12,631		77,042		19,260.47		$1,570,442.83
2	253		1,541		385.24		$31,411.30
3	253		1,541		385.24		$31,411.30
Yearly Average (Rounded)	***4,379***		***26,708***		***6,677***		***$544,422***

Note: The number of responses per respondent calculated by dividing the number of responses by the number of respondents and rounded.

I-2. (New) As-needed Sampling (30 CFR 60.12(a)(2))

Under proposed 30 CFR 60.12(a)(2), all mine operators would need to conduct sampling as frequently as necessary to assess the full-shift, 8-hour TWA exposure of respirable crystalline silica to each miner who is or may reasonably be expected to be exposed to respirable crystalline silica at or above the action level.

Table 12-3a describes active mines affected by the as-needed sampling requirements under the proposal and characterizes mines by the number of quarters in which they were active in 2019.

Table 12-3a. Estimated Number of Mines and Miners, by Active Quarter and Sector

	Mines		Miners	
Operation Status	MNM	Coal	MNM	Coal
Active 4 Quarters	8,031	818	200,052	71,188
Active 3 Quarters	1,993	117	7,544	1,554
Active 2 Quarters	1,004	85	2,344	572
Active 1 Quarters	497	86	1,264	263
Total	***11,525***	***1,106***	***211,204***	***73,577***

Note: To be considered active a mine must have reported at least 520 hours in a quarter; excluding Subunit 99 – Office (professional and clerical employees at the mine or plant working in an office).

All active mines would be required to conduct as-needed samples; however, MSHA believes the costs for exposure monitoring vary by mine size and the number of quarters they are in operation. The assumptions MSHA used for the frequency of this type of sampling are based on the number of quarters a mine is active in a year:

- 4 Quarters: once every 12 months.
- 3 Quarters: once every 18 months.
- 1 or 2 Quarters: once every 24 months.

MSHA estimates that the number of as-needed samples is to be 2.5 percent of miners and estimates the number of as-needed samples taken each year in Table 12-3b.

Table 12-3b. Estimated Annual As-Needed Samples, by Active Quarter and Sector

	No. of Miners Taking As-Needed Samples	No. of Miners Taking As-Needed Samples		Sampling Frequency	No. of As-Needed Samples	
Operation Status		MNM	Coal	Per Year	MNM	Coal
Active 4 Quarters	2.5%	5,001	1,780	1	5,001	1,780
Active 3 Quarters	2.5%	189	39	0.67	126	26
Active 2 Quarters	2.5%	59	14	0.5	29	7
Active 1 Quarters	2.5%	32	7	0.5	16	3
Total		5,280	1,839		5,172	1,816

Note: The totals might not equal the sum of the individual rows due to rounding.

MSHA estimates that it takes an industrial hygienist, earning $81.62 per hour at MNM mines and $81.20 per hour at coal mines, 15 minutes to conduct recordkeeping activities for a sample, including the time needed to post the record and the laboratory report on the mine bulletin board and, if applicable, by electronic means.

Table 12-3. Estimated Annual Respondent Hour and Cost Burden, As-Needed Sampling Records (30 CFR 60.12(a)(2))

Year	No. of Respondents (Mines)	No. of Responses per Respondent	Total Responses (Samples)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Monetized Value of Time
MNM - As-Needed Sampling Records (Industrial hygienist)							
1	11,525	0.45	5,172	0.25	1,293.03	$81.62	$105,535.72
2	11,525	0.45	5,172	0.25	1,293.03	$81.62	$105,535.72
3	11,525	0.45	5,172	0.25	1,293.03	$81.62	$105,535.72
Yearly Average	11,525	0.45	5,172	0.25	1,293.03	$81.62	$105,535.72
Coal - As-Needed Sampling Records (Industrial hygienist)							
1	1,106	1.64	1,816	0.25	454.01	$81.20	$36,864.03
2	1,106	1.64	1,816	0.25	454.01	$81.20	$36,864.03
3	1,106	1.64	1,816	0.25	454.01	$81.20	$36,864.03

Yearly Average	1,106	1.64	1,816	0.25	454.01	$81.20	$36,864.03
Total - As-Needed Sampling Records (Industrial hygienist)							
1	12,631	[redacted]	6,988	[redacted]	1,747.04	[redacted]	$142,399.75
2	12,631	[redacted]	6,988	[redacted]	1,747.04	[redacted]	$142,399.75
3	12,631	[redacted]	6,988	[redacted]	1,747.04	[redacted]	$142,399.75
Yearly Average (Rounded)	***12,631***	[redacted]	***6,988***	[redacted]	***1,747***	[redacted]	***$142,400***

Note: The number of responses per respondent is calculated by dividing the number of responses by the number of respondents and rounded.

I-3. Above-action-level Sampling (30 CFR 60.12(a)(3))

Under proposed 30 CFR 60.12(a)(3), if the sampling is at or above the action level but at or below the PEL, then the mine operator shall make approved respirators available before the start of the next work shift until sampling indicates exposures are below the action level.

Because above-action-level sampling will start after first-time sampling, it is expected to be carried out starting in the second half of Year 1.

MSHA estimates that the number of respondents required to make above-action-level sampling records will decrease each year. MSHA assumes that the shares vary by commodity and are expected to decrease linearly each year until reaching a steady state in year 7. For example, the share of MNM samples at or above the action level but below the PEL is assumed to decrease from 18.8 percent in Year 1 to 16.9 percent in Year 2 and 14.9 percent in Year 3. This leads to 2,170 MNM mines (=11,525 mines x 18.8 percent of samples between the action level and the PEL) carry out the sampling in Year 1, 1,943 MNM mines in Year 2 and 1,716 MNM mines in Year 3.

Similarly, MSHA estimates that for coal mines, the share of samples at or above the action level but below the PEL is assumed to decrease from 13.5 percent in the second half of Year 1 to 12.9 percent in Year 2 and 12.3 percent in Year 3. This leads to the sampling being carried out in 149 coal mines (=1,106 mines x 13.5 percent of samples over the action level) in Year 1, 143 coal mines in Year 2 and 136 coal mines in Year 3.

Table 12-4a. Estimated Number of Mines and Above-Action-Level Samples

	MNM	Coal	Total
No. of Mines	11,525	1,106	12,631
Percentage of Samples between the Action Level and the PEL			
Year 1	18.8%	13.5%	[redacted]
Year 2	16.9%	12.9%	
Year 3	14.9%	12.3%	
Percentage of Mines between the Action Level and the PEL			
Year 1	2,170	149	2,319
Year 2	1,943	143	2,086
Year 3	1,716	136	1,852

Note: The totals might not equal the sum of the individual rows due to rounding.

The estimated number of above-action-level samples is calculated based on the following factors:

(A) The number of miners with sampling results at or above the new action level.

(B) The percent of miners needed for representative samples. MSHA assumes representative samples will consist of samples from 50 percent of miners from mines with 20 or fewer miners, 25 percent from mines with between 20 and 100 miners, 15 percent from mines with more than 100 miners. The miner numbers include contract workers.

(C) The sampling frequency based on the number of quarters mines will be in operation.

- 4 Quarters: once every 6 months.
- 3 Quarters: once every 9 months.
- 2 Quarters: once every 12 months
- 1 Quarter: once every 24 months.

Using these assumptions MSHA estimates that in Year 1 there will be 42,083 above-action level samples taken at MNM mines and 5,423 samples at coal mines. In Year 2 these figures are anticipated to fall to 37,719 samples at MNM mines and 5,230 samples at coal mines, respectively, and 33,355 and 5,036 samples in Year 3. This results in an annual average of 37,719 samples from MNM mines and 5,230 samples from coal mines, for a total of 42,949 samples.[6]

MSHA estimates that it takes an industrial hygienist, earning $81.62 per hour at MNM mines and $81.20 per hour at coal mines, 15 minutes to conduct recordkeeping activities for a sample, including the time needed to post the record and the laboratory report on the mine bulletin board and, if applicable, by electronic means.

Table 12-4. Estimated Annual Respondent Hour and Cost Burden, Above-Action-Level Sampling Records (30 CFR 60.12(a)(3))

Year	No. of Respondents (Mines)	No. of Responses per Respondent	Total Responses (Samples)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Monetized Value of Time
MNM - Above-action-level sampling records (Industrial hygienist)							
1	2,170	19.4	42,083	0.25	10,520.75	$81.62	$858,690.11
2	1,943	19.4	37,719	0.25	9,429.75	$81.62	$769,644.09
3	1,716	19.4	33,355	0.25	8,338.75	$81.62	$680,598.07
Yearly Average	1,943	19.4	37,719	0.25	9,429.75	$81.62	$769,644.09
Coal - Above-action-level sampling records (Industrial hygienist)							
1	149	36.4	5,423	0.25	1,355.75	$81.20	$110,082.32
2	143	36.7	5,230	0.25	1,307.50	$81.20	$106,164.58
3	136	37.0	5,036	0.25	1,259.00	$81.20	$102,226.55

[6] For detailed information on calculation methodology for the number of samples, please refer to "Preliminary Regulatory Impact Analysis (PRIA) for the Mine Safety and Health Administration (MSHA) Proposed Respirable Crystalline Silica Rule (2023)," Docket ID MSHA-2023-0001-1287, https://www.regulations.gov/document/MSHA-2023-0001-1287.

Yearly Average	143	36.7	5,230	0.25	1,307.42	$81.20	$106,157.81
Total - Above-action-level sampling records (Industrial hygienist)							
1	2,319		47,506		11,876.50		$968,772.43
2	2,086		42,949		10,737.25		$875,808.68
3	1,852		38,391		9,597.75		$782,824.62
Yearly Average (Rounded)	***2,086***		***42,949***		***10,737***		***$875,802***

Note: The number of responses per respondent is calculated by dividing the number of responses by the number of respondents and rounded.

I-4. Corrective Actions Sampling (30 CFR 60.12(b))

Under proposed 30 CFR 60.12(b), where the most recent sampling indicates that miner exposures are above the PEL, the mine operator shall sample after corrective actions are taken until the sampling indicates that miner exposures are at or below the PEL. Once sampling indicates that miner exposures are at or below the PEL, the mine operator shall contact the MSHA District Manager or any other MSHA office designated by the MSHA District Manager.

Based on MSHA's inspector sampling data (2005-2019 for MNM mines, and August 2016 to July 2019 for coal mines), 1,226 mines (1,096 MNM mines and 130 coal mines) were over the PEL in their most recent sampling event. MSHA estimates that the number of mines required to take corrective actions records will decrease each year based on the share of miners above the PEL. MSHA assumes that the shares vary by commodity and are expected to decrease linearly each year until reaching a steady state in year 7: the share of MNM samples above the PEL is assumed to decrease from 18.0 percent in the first half of Year 1 to 17.1 percent in the second half of Year 1, 16.3 percent in Year 2, and 14.2 percent in Year 3. Hence, the number of MNM mines to take corrective actions would be 1,045 mines in the second half of Year 1 (= 1,096 mines x 17.1 percent / 18.0 percent), 995 MNM mines in Year 2, and 868 MNM mines in Year 3.

Table 12-5a. Estimated Number of Mines and Corrective Actions Samples

	MNM	Coal	Total
No. of Mines	1,096	130	1,226
Percentage of Samples above the PEL			
Year 1 First Half	18.0%	5.5%	
Year 1 Second Half	17.1%	5.5%	
Year 2	16.3%	5.4%	
Year 3	14.2%	5.3%	
Percentage of Mines above the PEL			
Year 1 First Half	1,096	130	1,226
Year 1 Second Half	1,045	129	1,174
Year 2	995	127	1,122
Year 3	868	125	993

Similarly, MSHA assumes that the share of coal samples above the PEL would decrease from

5.5 percent in the second half of Year 1 to 5.4 percent in Year 2 and 5.3 percent in Year 3. The resulting number of coal mines to take corrective actions would be 130 coal mines in the second half of Year 1, 129 coal mines in Year 2, and 127 coal mines in Year 3.

The estimated number of corrective actions samples is calculated based on the following factors:

(A) The number of miners with sampling results above the PEL. As a result of greater compliance, MSHA assumes that the share of miners obtaining corrective actions samples will decrease linearly each year until reaching a steady state in year 7. For MNM, the share of miners reporting exposure that are above the PEL declines from 18.0 percent in Year 1 to 16.3 percent in Year 2 and 14.7 percent in Year 3. MSHA estimates that the number of MNM miners sampled due to corrective actions also changes from 34,454 in Year 1 to 27,431 in Year 3.

For coal, the share of miners reporting exposure that are above the PEL declines from 5.5 percent in Year 1 to 5.4 percent in Year 2 and 5.3 percent in Year 3. MSHA estimates that the number of coal miners sampled in response to a corrective actions changes from 4,031 in Year 1 to 3,999 in Year 2, and 3,871 in Year 3.

(B) The percent of miners needed for representative samples. MSHA assumes representative samples will consist of samples from 50 percent of miners from mines with 20 or fewer miners, 25 percent from mines with between 20 and 100 miners, 15 percent from mines with more than 100 miners. The miner numbers include contract workers.

(C) The sampling frequency based on the number of quarters mines will be in operation.

- 4 Quarters: once every 6 months.
- 3 Quarters: once every 9 months.
- 2 Quarters: once every 12 months.
- 1 Quarter: once every 24 months.

(D) The number of corrective actions samples is increased by 25 percent to account for the case that some mines not correcting the problem on the first try. This assumes 80 percent of mines correct the problem on the first try, 15 percent of mines correct the problem on the second try, and 5 percent correct the problem on the third try. MSHA also assumes that corrective actions samples are taken in the first half of the year.

Using these assumptions MSHA estimates that in second half of Year 1 there will be 25,938 corrective action samples taken at MNM mines and 1,991 at coal mines. In Year 2 these figures are anticipated to raise to 48,090 samples at MNM mines and 3,934 samples at coal mines respectively, and 43,041 and 3,871 samples in Year 3. This results in an annual average of 39,023 samples from MNM mines and 3,265 from coal mines, for a total of 42,288.[7]

MSHA estimates that it takes an industrial hygienist, earning $81.62 per hour at MNM mines

[7] For detailed information on calculating the number of samples, please refer to "Preliminary Regulatory Impact Analysis (PRIA) for the Mine Safety and Health Administration (MSHA) Proposed Respirable Crystalline Silica Rule (2023)," Docket ID MSHA-2023-0001-1287, https://www.regulations.gov/document/MSHA-2023-0001-1287.

and $81.20 per hour at coal mines, 15 minutes to conduct recordkeeping activities for a sample, including the time needed to post the record and the laboratory report on the mine bulletin board and, if applicable, by electronic means.

Table 12-5. Estimated Annual Respondent Hour and Cost Burden, Corrective Actions Sampling Records (30 CFR 60.12(b))

Year	No. of Respondents (Mines)	No. of Responses per Respondent	Total Responses (Samples)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Monetized Value of Time
MNM - Corrective actions sampling records (Industrial hygienist)							
1	1,045	24.8	25,938	0.25	6,484.50	$81.62	$529,256.57
2	995	48.3	48,090	0.25	12,022.5	$81.62	$981,261.02
3	868	49.6	43,041	0.25	10,760.25	$81.62	$878,237.80
Yearly Average	969	40.3	39,023	0.25	9,755.75	$81.62	$796,251.80
Coal - Corrective actions sampling records (Industrial hygienist)							
1	129	15.4	1,991	0.25	497.75	$81.20	$40,415.62
2	127	30.9	3,934	0.25	983.50	$81.20	$79,856.88
3	125	30.9	3,871	0.25	967.75	$81.20	$78,578.03
Yearly Average	127	25.7	3,265	0.25	816.33	$81.20	$66,283.51
Total - Corrective actions sampling records (Industrial hygienist)							
1	1,174		27,929		6,982.25		$569,672.19
2	1,122		52,024		13,006.00		$1,061,117.90
3	993		46,912		11,728.00		$956,815.83
Yearly Average (Rounded)	***1,097***		***42,288***		***10,572***		***$862,535***

Note: The number of responses per respondent is calculated by dividing the number of responses by the number of respondents and rounded.

I-5. Sampling Notifications (30 CFR 60.12(a)(4) and 60.12(b))

Under proposed 30 CFR 60.12(a)(4), if the sampling is above the PEL, then the mine operator shall immediately report all operator samples above the PEL to the MSHA District Manager or to any other MSHA office designated by the MSHA District Manager.

Under proposed 30 CFR 60.12(b), once corrective actions sampling indicates that miner exposures are at or below the PEL, the mine operator shall contact the MSHA District Manager or any other MSHA office designated by the MSHA District Manager.

Each miner's overexposure to respirable crystalline silica – which requires corrective actions sampling – will have to be followed by a report by the mine operator to the MSHA District Office or to any other MSHA office designated by the District Manager.

MSHA estimates that it takes a clerk, earning $40.80 per hour at MNM mines and $44.49 per hour at coal mines, 5 minutes to report to MSHA District Office or to any other MSHA office designated by the District Manager.

Table 12-6. Estimated Annual Respondent Hour and Cost Burden, Sampling Notifications (30 CFR 60.12(a)(4) and 60.12(b))

Year	No. of Respondents (Mines)	No. of Responses per Respondent	Total Responses (Notifications)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Monetized Value of Time
MNM - Sampling notifications (Clerk)							
1	1,045	24.8	25,938	0.08	2,161.50	$40.80	$88,198.80
2	995	48.3	48,090	0.08	4,007.50	$40.80	$163,523.80
3	868	49.6	43,041	0.08	3,586.75	$40.80	$146,355.33
Yearly Average	969	40.3	39,023	0.08	3,251.92	$40.80	$132,692.64
Coal - Sampling notifications (Clerk)							
1	129	15.4	1,991	0.08	165.92	$44.49	$7,381.50
2	127	30.9	3,934	0.08	327.83	$44.49	$14,585.04
3	125	30.9	3,871	0.08	322.58	$44.49	$14,351.47
Yearly Average	127	25.7	3,265	0.08	272.11	$44.49	$12,106.00
Total - Sampling notifications (Clerk)							
1	1,174		27,929		2,327.42		$95,580.30
2	1,122		52,024		4,335.33		$178,108.84
3	993		46,912		3,909.33		$160,706.80
Yearly Average (Rounded)	***1,097***		***42,288***		***3,524***		***$144,799***

Note: The number of responses per respondent is calculated by dividing the number of responses by the number of respondents and rounded.

I-6. Sampling Records (30 CFR 60.12(e))

Under existing 30 CFR 60.12(g), the mine operator shall make a record of each sample and post the record and the laboratory report on the mine bulletin board and, if applicable, by electronic means, for the next 31 days, upon receipt. Under existing 30 CFR 60.16(a)(2), sampling records shall be retained for at least 5 years from the sample date.

MSHA assumes that sampling recordkeeping activities are already included in sampling records discussed above so there are no separate sampling burden or costs.

II. Corrective Action Records (30 CFR 60.13)

Under proposed 30 CFR 60.13(a)(3), if any sampling indicates that a miner's exposure exceeds the PEL, mine operators shall immediately take corrective actions to lower the concentration of respirable crystalline silica to at or below the PEL. Under proposed 30 CFR 60.13(c), the mine Mine operators shall make a record of corrective actions taken and the dates of the corrective actions.

Only those mines with at least one miner exposure above the PEL are assumed to carry out the requirement, with each corrective action being followed by a corrective actions sample. The

number of respondents (mines) and responses (corrective actions) is equivalent to those of corrective actions samples as shown in Table 12-5, given that each corrective action must be followed by corrective actions sampling. Table 12-5 provides the estimated number of mines conducting corrective actions sampling as 1,045 in Year 1, 995 in Year 2, and 868 in Year 3 in for MNM and 129 in Year 1, 127 in Year 2, 125 in Year 3 for coal. MSHA estimates that an annual average of 1,097 mines (969 MNM mines and 127 coal mines) will require corrective actions each year.

MSHA estimates that the number of corrective actions and corrective actions sampling would be: for MNM mines, 25,938 in Year 1, 48,090 in Year 2, and 43,041 in Year 3; for coal, 1,991 in Year 1, 3,934 in Year 2, and 3,871 in Year 3. The annual average of corrective actions records will 42,288 (39,023 in MNM mines and 3,265 in coal mines).

MSHA estimates that it takes a clerk, earning $40.80 per hour in MNM mines and $44.49 per hour in coal mines, 5 minutes to enter the results of the corrective action record.

Table 12-7. Estimated Annual Respondent Hour and Cost Burden, Corrective Actions Records (30 CFR 60.13)

Year	No. of Respondents (Mines)	No. of Responses per Respondent	Total Responses (Corrective Actions)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Monetized Value of Time
MNM - Corrective actions records (Clerk)							
1	1,045	24.8	25,938	0.08	2,161.50	$40.80	$88,198.80
2	995	48.3	48,090	0.08	4,007.50	$40.80	$163,523.80
3	868	49.6	43,041	0.08	3,586.75	$40.80	$146,355.33
Yearly Average	969	40.3	39,023	0.08	3,251.92	$40.80	$132,692.64
Coal - Corrective actions records (Clerk)							
1	129	15.4	1,991	0.08	165.92	$44.49	$7,381.50
2	127	30.9	3,934	0.08	327.83	$44.49	$14,585.04
3	125	30.9	3,871	0.08	322.58	$44.49	$14,351.47
Yearly Average	127	25.7	3,265	0.08	272.11	$44.49	$12,106.00
Total - Corrective actions records (Clerk)							
1	1,174		27,929		2,327.42		$95,580.30
2	1,122		52,024		4,335.33		$178,108.84
3	993		46,912		3,909.33		$160,706.80
Yearly Average (Rounded)	***1,097***		***42,288***		***3,524***		***$144,799***

Note: The number of responses per respondent is calculated by dividing the number of responses by the number of respondents and rounded.

III. Respiratory Protection - Written Determination Records (30 CFR 60.12(a)(3), 60.13(a)(1), 60.14(a), and 60.14(b))

III-1. Respiratory Protection - Written Determination above the PEL (30 CFR 60.13(a), 60.14(a), and 60.14(b))

Under proposed 30 CFR 60.13(a)(1), if any sampling indicates that a miner's exposure exceeds the PEL, mine operators shall make approved respirators available to affected miners before the start of the next work shift.

Under proposed 30 CFR 60.14(a), MNM miners may work for reasonable periods of time using respiratory protection when miners must work in concentrations of respirable crystalline silica above the PEL while engineering control measures are being developed and implemented or it is necessary by the nature of work involved (for example, occasional entry into hazardous atmospheres to perform maintenance or investigation).

Under proposed 30 CFR 60.14(b), upon written determination by a physician or other licensed health care professional (PLHCP) that an affected miner is unable to wear a respirator, the miner shall 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 assumes that all mines carrying out corrective actions will have miners wearing respirators. Table 12-5 identifies 1,045 MNM mines reporting samples above the PEL in Year 1, according to proposed 30 CFR 60.13(a)(1), mine operators must make approved respirators available to affected miners in these mines. The number of MNM mines requiring respiratory protection would be 969 mines in Year 2 and 868 mines in Year 3. Under proposed 30 CFR 60.14(a)), MSHA assumes an additional 10 percent of MNM mines will provide respiratory protection if a miner's exposure exceeds the PEL, adding 1,153 MNM mines (respondents) each year. Therefore, 2,197 MNM mines (=1,045 mines undergoing corrective actions + 1/10 of 11,525 MNM mines) would need to provide written determination records to establish affected miners' inability to wear a respirator in Year 1. The number of affected MNM mines is expected to decrease to 2,147 mines in Year 2 and 2,020 mines in Year 3.

At coal mines, 129 coal mines (equivalent to the number of coal mines undergoing corrective actions) require respirators in Year 1, 127 mines in Year 2 and 125 coal mines in Year 3.

MSHA further assumes that in each mine where respirators are worn, an average of one miner will need a written determination record to establish the miner's inability to wear a respirator.

MSHA estimates that it takes an industrial hygienist, earning $81.62 per hour in MNM mines and $81.20 per hour in coal mines, 30 minutes to provide a miner's job description to the PLHCP, document the PLHCP's results of medical evaluation and/or respirator fit testing, and prepare a written determination record regarding the miner's ability to wear a respirator.

Table 12-8. Estimated Annual Respondent Hour and Cost Burden, Written Determination Records from PLHCP if Exposure above the PEL (30 CFR 60.13(a)(1), 60.14(a), and 60.14(b))

Year	No. of Respondents (Mines)	No. of Responses per Respondent	Total Responses (Records)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Monetized Value of Time
MNM - Written Determination Records from PLHCP (Industrial hygienist)							
1	2,198	1	2,198	0.5	1,098.91	$81.62	$89,691.37
2	2,147	1	2,147	0.5	1,073.56	$81.62	$87,622.90
3	2,020	1	2,020	0.5	1,010.21	$81.62	$82,451.72
Yearly Average	2,122	1	2,122	0.5	1,060.89	$81.62	$86,588.66
Coal - Written Determination Records from PLHCP (Industrial hygienist)							
1	129	1	129	0.5	64.49	$81.20	$5,236.21
2	127	1	127	0.5	63.72	$81.20	$5,173.85
3	125	1	125	0.5	62.70	$81.20	$5,090.71
Yearly Average	127	1	127	0.5	63.63	$81.20	$5,166.92
Total - Written Determination Records from PLHCP (Industrial hygienist)							
1	2,327		2,327		1,163.39		$94,927.58
2	2,275		2,275		1,137.28		$92,796.75
3	2,146		2,146		1,072.90		$87,542.42
Yearly Average (Rounded)	***2,249***		***2,249***		***1,125***		***$91,756***

III-2. (New) Written Determination Records if Exposure between the Action Level and the PEL (30 CFR 60.12(a)(3) and 60.14(b))

Under proposed 30 CFR 60.12(a)(3), if the sampling is at or above the action level but at or below the PEL, then the mine operator shall make approved respirators available before the start of the next work shift until sampling indicates exposures are below the action level.

As described in Table 12-4, 2,170 MNM mines would report samples between the action level and the PEL in Year 1. The number of MNM mines is expected to decrease to 1,943 in Year 2 and 1,716 in Year 3. For coal mines, the number of mines is expected to decrease from 149 in Year 1 to 143 in Year 2 and 136 in Year 3.

MSHA further assumes that in each mine where respirators are worn, an average of one miner will need a written determination record to establish the miner's inability to wear a respirator.

MSHA estimates that it takes an industrial hygienist, earning $81.62 per hour in MNM mines and $81.20 per hour in coal mines, 30 minutes to provide a miner's job description to the PLHCP, document the PLHCP's results of medical evaluation and/or respirator fit testing, and prepare a written determination record regarding the miner's ability to wear a respirator.

Table 12-9. Estimated Annual Respondent Hour and Cost Burden, Written Determination Records from PLHCP if Exposure between the Action Level and the PEL (30 CFR 60.12(a)(3) and 60.14(b))

Year	No. of Respondents (Mines)	No. of Responses per Respondent	Total Responses (Records)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Monetized Value of Time
MNM - Written Determination records from PLHCP (Industrial hygienist)							
1	2,170	1	2,170	0.5	1,085.10	$81.62	$88,564.42
2	1,943	1	1,943	0.5	971.48	$81.62	$79,290.84
3	1,716	1	1,716	0.5	857.86	$81.62	$70,017.26
Yearly Average	1,943	1	1,943	0.5	971.48	$81.62	$79,290.84
Coal - Written Determination records from PLHCP (Industrial hygienist)							
1	149	1	149	0.5	74.47	$81.20	$6,046.78
2	143	1	143	0.5	71.28	$81.20	$5,787.34
3	136	1	136	0.5	68.08	$81.20	$5,527.91
Yearly Average	143	1	143	0.5	71.28	$81.20	$5,787.34
Total - Written Determination records from PLHCP (Industrial hygienist)							
1	2,319		2,319		1,159.57		$94,611.20
2	2,086		2,086		1,042.75		$85,078.19
3	1,852		1,852		925.94		$75,545.17
Yearly Average (Rounded)	***2,086***		***2,086***		***1,043***		***$85,078***

IV. Medical Surveillance - Written Confirmation of Medical Examination Records (30 CFR 60.15)

IV-2. Medical Examinations Results (30 CFR 60.15(d))

Under proposed 30 CFR 60.15(c), each MNM mine operator and each coal mine operator shall provide the medical examinations to all miners who are exposed above the PEL based upon an MSHA sample within 60 days of the operator's receipt of the sample results, except for miners who have, within the last 2 years, received a medical examination pursuant to this section or in accordance with 30 CFR 72.100.

The unit cost of medical examination includes recordkeeping of mine operators. Hence, there is no separate cost for providing results of medical examinations to miner.

IV-3. Written Confirmation of Medical Examination Records (30 CFR 60.15(e))

Under proposed 30 CFR 60.15(e), the mine operator shall obtain a written confirmation of medical examination from the PLHCP or specialist within 30 days of the medical examination. Under proposed 30 CFR 60.15(f), the mine operator shall maintain a record of the written confirmations of medical received from the PLHCP or specialist.

Under the proposed rule, mine operators will need to provide medical examinations to both MNM and coal miners. There is also a change to which examinations are mandatory or voluntary for MNM miners. Under the proposed rule examinations provided to miners new to the mining industry will be voluntary examinations, instead of mandatory examinations. This rule adds a new examination that is mandatory for both MNM and coal miners who are exposed above the PEL based on a sample from MSHA.

MSHA identifies 4 different types of medical examinations under 30 CFR 60.15: voluntary examinations for new MNM miners, voluntary 5-year examinations for existing MNM miners, mandatory examinations for exposed MNM miners, and mandatory examinations for exposed coal miners. Every medical examination will be followed by a written confirmation of medical examination record.

For the three years covered by this ICR, the methodology in estimating the number of examinations for miners is explained below using a participation rate of 25 percent. This same method is then applied using a participation rate of 75 percent, and the average number of examinations is determined by comparing the two participation rates.

MSHA assumes the total number of MNM miners will remain constant at 184,615. MSHA estimates that the average tenure (number of years on the job) of an MNM miner (before leaving the mining industry) is 22 years, which is derived from a 2012 survey conducted by NIOSH. Assuming an average miner staying employed for 22 years in mining, MSHA estimated that 1/22 of all MNM miners (8,392 miners) would leave and be replaced by the same number of new miners joining the industry each year.

MSHA assumes that each of the 8,392 new miners are eligible for an initial medical evaluation within 60 days of employment. MSHA estimated that the turnover of MNM miners will be 8,392 miners per year. MSHA estimates that 4,196 new miners (=2,098 if 25 percent of new MNM miners participate in voluntary medical exams + 6,294 if 75 percent of new MNM miners participate)/2). Every medical examination will be followed by a written confirmation of medical examination record.

Given that follow-up examinations 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 ICR.

MSHA assumes that all current MNM miners who already work in the mining industry prior to the implementation of the proposed rule would be offered the voluntary 5-year examination at a 5-year interval, starting in Year 1. MSHA expects 88,112 existing miners (=44,056 if 25 percent of existing MNM miners participate in voluntary medical examinations in Year 1 + 132,167 if 75 percent of MNM miners participate)/2) to receive voluntary medical examinations in Year 1. As this examination is only offered every five years MSHA estimates no examinations in Years 2 and 3.

Under proposed 30 CFR 60.15(c), both MNM and coal mine operators would be required to provide mandatory medical examinations to all miners who are exposed above the PEL based

upon an MSHA sample within 60 days of the operator's receipt of the sample results. However, a miner who has been exposed above the PEL, based upon an MSHA sample, would not be provided with a mandatory medical examination if the miner has taken a medical examination within the last two years.

Miners who would choose to take voluntary examinations within the last two years would not be provided with a mandatory examination even when they would be found to be exposed above the PEL. MSHA presents the calculation of mandatory examinations in the 3 years covered by this ICR, under a 25 percent participation rate and mandatory examinations in the last two years.

MNM mine operators are required to have their exposed MNM miners to take medical examinations. MSHA assumes that some MNM miners will be sampled by MSHA and found to be exposed above the PEL. To calculate the number of samples that would be above the PEL, MSHA uses the exposure rate to estimate the number of exposed MNM miners each year. As MNM mines become more compliant with the standard, MSHA expects the percentage of exposed miners to decrease over time, from 18 percent in Year 1 to 14.7 percent in Year 3.

Table 12-10a. Exposed MNM Miners Based on MSHA Samples

Year	MNM Miners Sampled	Projected Exposed MNM Miners	Exposed MNM Miners Sampled by MSHA
	(A)	(B)	(C)=(A)x(B)
1	3,851	18.0%	692
2	3,851	16.3%	628
3	3,851	14.7%	564

Not all exposed MNM miners would be required to take mandatory medical examinations, as some exposed miners may have taken voluntary or mandatory medical examinations within the last two years. For this analysis, MSHA considers a miner excluded for the mandatory examination if the miner has received an examination (regardless of whether the examination was voluntary or mandatory) during the two previous years or in current year.

Table 12-10b. Voluntary Medical Examinations for MNM Miners Within the Last Two Years (25 Percent Participation Rate)

Year	Total MNM Miners	MNM Voluntary Exams in that Year	MNM Voluntary Exams in Prior Year	MNM Voluntary Exams 2 Years Ago	Total Voluntary Exams for MNM Miners Within the Last 2 Years
	(A)	(B)	(C)	(D)	(E)=(B)+(C)+(D)
1	184,615	46,154	0	0	46,154
2	184,615	2,098	46,154	0	48,252
3	184,615	2,098	2,098	46,154	50,350

In Year 1, 46,154 voluntary examinations and no mandatory examinations would be taken for 184,615 MNM miners. As a result, about 25 percent of MNM miners would take examinations in Year 1. MSHA applies the same ratio for mandatory examinations among exposed miners and estimates that for the 692 exposed miners in Year 1, 25 percent would have taken examinations and would be excluded from taking mandatory medical examinations. The remaining 75 percent (519 miners) would be required to take mandatory examinations.

In Year 2, 48,252 voluntary examinations would be taken within the last 2 years (in Year 1 and 2) and 519 mandatory examinations in Year 1, which implies that 26 percent of MNM miners would take either voluntary or mandatory medical examinations in Year 1 or Year 2. For the 628 exposed MNM miners, 74 percent (462 miners) would be required to take mandatory examinations after excluding the miners who receive examinations within the last two years.

Similarly, in Year 3, 50,350 voluntary examinations would be taken within the last 2 years (in Year 1, 2 and 3), and 981 mandatory examinations would be taken in Year 1 and Year 2. In total, 28 percent of miners would have received voluntary or mandatory medical examinations within the last 2 years. Of the 564 exposed miners, 407 miners would be required to take mandatory medical examinations in Year 3.

MSHA estimates that in Year 1 there will be 346 existing miners (=519 if 25 percent of exposed MNM miners are required to take medical examinations + 173 if 75 percent of MNM miners participate)/2). Following the same method of estimation MSHA estimates that there will be 299 in Year 2 and 255 in Year 3.

Table 12-10c. Mandatory Examinations for Exposed MNM Miners (25 Percent Participation Rate)

Year	Number of MNM Miners	Voluntary Exams for MNM Miners Within the Last 2 Years	Number of Exposed Miners Examined Last Year	Number of Exposed Miners Examined 2 Years Ago	Percent of Miners Examined Within the Last 2 Years	Number of Exposed MNM Miners	Number of Exams for Exposed MNM Miners
	(A)	(B)	(C)	(D)	(E)=((B)+(C)+(D))/(A)	(F)	(G)=(F)x(1-(E))
1	184,615	46,154	0	0	25%	692	519
2	184,615	48,252	519	0	26%	628	462
3	184,615	50,350	462	519	28%	564	407

As coal mines become more compliant with the standard, MSHA expects that the percentage of exposed miners will decrease over time, from 5.5 percent in Year 1 to 5.3 percent in Year 3.

Table 12-10d. Number of Exposed Coal Miners Based on MSHA Samples

Year	Coal Miners Sampled	Projected Exposed Coal Miners	Exposed Coal Miners Sampled by MSHA
	(A)	(B)	(C)=(A)x(B)
1	10,521	5.5%	579
2	10,521	5.4%	568
3	10,521	5.3%	558

Not all exposed coal miners identified by MSHA samples would be required to take mandatory medical examinations, as some exposed miners would be excluded because they have taken voluntary or mandatory medical examinations in accordance with 30 CFR 72.100.

Unlike the voluntary medical examinations for new MNM miners in proposed 30 CFR 60.15(b)(3), under 30 CFR72.100(c) the medical examinations would be mandatory for new coal miners entering the industry. The frequency of mandatory examinations for coal miners is similar to that of voluntary examinations for MNM miners: an initial examination no later than 30 days after beginning employment, a follow-up examination no later than 3 years after the initial examination, and a follow-up examination no later than 2 years after the 3-year follow-up examinations if the coal miner is identified as high-risk.

MSHA assumes the total number of coal miners would remain constant at 72,768. MSHA estimates that the average tenure (number of years on the job) of a coal miner (before leaving the mining industry) is 32 years, which is derived from a 2012 survey conducted by NIOSH.[8] Assuming an average miner staying employed for 32 years in mining, MSHA estimates that 1/32 of all coal miners (2,274 miners) would leave and be replaced by the same number of new miners joining the industry each year.

MSHA uses the same methodology to estimate the number of coal miners that receive mandatory examinations under existing 30 CFR 72.100(c) as for MNM miners that would receive voluntary examinations under proposed 30 CFR 60.15(b)(3).

[8] The 2012 report by NIOSH, entitled, "National Survey of the Mining Population: Part 1: Employees," (https://www.cdc.gov/niosh/mining/works/coversheet776.html) includes the findings of its 2008 survey on mine operators and miners in the U.S. (Details on the survey methodology and results are available in the link.) The survey found the average mining experience for coal miners was 16.0 years. These averages reflected the average number of years that respondent miners had worked at mines at the time the survey was conducted. MSHA considered these average mine experiences to represent approximately one half of the mining tenure these miners would have (the years in mining when they leave). Conversely, MSHA estimated miners' total expected tenure to be twice these average mining experiences.

Table 12-10e. Mandatory Initial, 3-Year Follow-up, and 2-Year Follow-up Examinations for New Miners Within 5 Years of Joining Coal Mines

Year	New Coal Miners	Initial Exams	3-Year Follow-up Exams	2-Year Follow-up Exams for High-Risk Miners	Total Mandatory Exams of New Coal Miners
	(A)	(B)=(A)x100%	(C)=(B)x100%	(E)=(D)x5%	(B)+(C)+(E)
1	2,274	2,274	2,274	114	4,662
2	2,274	2,274	2,274	114	4,662
3	2,274	2,274	2,274	114	4,662

Similar to the voluntary examinations for MNM miners in proposed 30 CFR 60.15(b)(1) and (b)(2), each coal mine operator would be required to provide voluntary examinations at least every 5 years to all miners employed at a coal mine, in accordance with 30 CFR 72.100(b). The voluntary examinations would 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.

Table 12-10f. Voluntary 5-Year Examinations for Coal Miners (25 Percent Participation Rate)

Year	5-Year Voluntary Exams Offered	Miners Offered Voluntary Exams	New Miners Receiving Mandatory Exams	Miners Eligible for Voluntary 5-Year Exams	Voluntary 5-Year Exams of Coal Miners
	(A)	(B)	(C)	(D)	(E)=(D)x25%
1	Yes	72,768	4,662	68,106	17,027
2	No	0	4,662	0	0
3	No	0	4,662	0	0

All exposed coal miners would be required to take mandatory medical examinations if identified by MSHA samples unless they have already taken voluntary or mandatory examinations within the last two years and thus would be excluded from mandatory examinations. To calculate the number of mandatory examinations of exposed miners, MSHA first estimates the share of miners taking examinations within the last two years, including both voluntary and mandatory examinations.

Table 12-10g. Examinations within the Last Two Years for Coal Miners (25 Percent Participation Rate)

Year	Total Number of Coal miners	Number of New Miners Coal Exams	Number of 5-Year Exams for Coal Miners	Number of Coal Exams in that Year	Coal Miner Exams in Prior Year	Coal Miner Exams Year 2 Years Ago	Total Exams for Coal Miners within the Last 2 Years
	(A)	(B)	(C)	(D)=(B)+(C)	(E)	(F)	(G)=(D)+(E)+(F)
1	72,768	4,662	17,027	21,688	4,662	4,662	31,012
2	72,768	4,662	0	4,662	21,688	4,662	31,012
3	72,768	4,662	0	4,662	4,662	21,688	31,012

MSHA uses the same methodology when calculating the number of mandatory examinations for MNM miners as for coal miners. Using this methodology MSHA estimates that there will be 197, 192, and 187 coal miners examined in Years 1, 2, and 3 respectively, averaging the participation rate of 25 and 75 percent.

Table 12-10h. Mandatory Examinations for Exposed Coal Miners (25 Percent Participation Rate)

Year	Number of Coal Miners	Exams for Non-Exposed Coal Miners Within the Last 2 Years	Number of Exposed Miners Examined Last Year	Number of Exposed Miners Examined 2 Years Ago	Percent of Miners Examined Within the Last 2 Years	Number of Exposed Coal Miners	Number of Exposed Coal Miners Requiring Exams
	(A)	(B)	(C)	(D)	(E)=((B)+(C)+(D))/(A)	(F)	(G)=(F)x(1-(E))
1	72,768	31,012	0	0	43%	579	332
2	72,768	31,012	332	0	43%	568	323
3	72,768	31,012	323	332	44%	558	315

MSHA estimates that it takes an industrial hygienist, making $81.62 per hour at MNM mines and $81.20 at coal mines, 15 minutes to enter the confirmation of medical examination records for miners undergoing medical examinations.

Table 12-10. Estimated Annual Respondent Hour and Cost Burden, Written Confirmation of Medical Examination Records (30 CFR 60.15(e))

Year	No. of Respondents (Mines)	No. of Responses per Respondent	Total Responses (Records)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Monetized Value of Time
Confirmation of medical examination records for new MNM miners (Industrial hygienist)							
1	11,525	0.36	4,196	0.25	1,049.00	$81.62	$85,618.03
2	11,525	0.36	4,196	0.25	1,049.00	$81.62	$85,618.03

3	11,525	0.36	4,196	0.25	1,049.00	$81.62	$85,618.03
Yearly Average	11,525	0.36	4,196	0.25	1,049.00	$81.62	$85,618.03
Confirmation of medical examination MNM miners (Industrial hygienist)							
1	11,525	7.65	88,112	0.25	22,027.88	$81.62	$1,797,886.89
2	0	0.00	0	0.25	0.00	$81.62	$0.00
3	0	0.00	0	0.25	0.00	$81.62	$0.00
Yearly Average	3,842	7.65	29,371	0.25	7,342.63	$81.62	$599,295.63
Confirmation of medical examination MNM miners (Industrial hygienist)							
1	11,525	0.03	346	0.25	86.52	$81.62	$7,061.93
2	11,525	0.03	299	0.25	74.66	$81.62	$6,093.45
3	11,525	0.02	255	0.25	63.67	$81.62	$5,196.28
Yearly Average	11,525	0.03	300	0.25	74.95	$81.62	$6,117.22
Confirmation of medical examination Coal miners (Industrial hygienist)							
1	1,106	0.18	197	0.25	49.13	$81.20	$3,989.28
2	1,106	0.17	192	0.25	47.93	$81.20	$3,891.54
3	1,106	0.17	187	0.25	46.63	$81.20	$3,785.79
Yearly Average	1,106	0.17	192	0.25	47.89	$81.20	$3,888.87
Total - MNM Mines- Confirmation of medical examination records (Industrial hygienist)							
1	11,525	8.04	92,654	0.25	23,163.40	$81.62	$1,890,566.86
2	11,525	0.39	4,495	0.25	1,123.66	$81.62	$91,711.49
3	11,525	0.39	4,451	0.25	1,112.67	$81.62	$90,814.31
Yearly Average	11,525	2.94	33,866	0.25	8,466.57	$81.62	$691,030.89
Total - Coal Mines- Confirmation of medical examination records (Industrial hygienist)							
1	1,106	0.18	197	0.25	49.13	$81.20	$3,989.28
2	1,106	0.17	192	0.25	47.93	$81.20	$3,891.54
3	1,106	0.17	187	0.25	46.63	$81.20	$3,785.79
Yearly Average	1,106	0.17	192	0.25	47.89	$81.20	$3,888.87
Total - Confirmation of medical examination records (Industrial hygienist)							
1	12,631		92,850		23,213		$1,894,556.13
2	12,631		4,686		1,172		$95,603.03
3	12,631		4,637		1,159		$94,600.11
Yearly Average (Rounded)	***12,631***		***34,058***		***8,514***		***$694,920***

Note: The number of responses per respondent is calculated by dividing the number of responses by the number of respondents and rounded.

V. OSHA Respiratory Protection Standard (30 CFR 60.14(c)(2))

Under proposed 30 CFR 60.14(c)(2), when approved respirators are used, the mine operator must have a written respiratory protection program that meets the requirements of OSHA in 29 CFR 1910.134. MSHA adopts by reference the requirements of 29 CFR 1910.134, Respiratory protection, into this section.

Since the OSHA Respiratory Protection requirements are generally equivalent to the ASTM standard, MSHA has determined that the proposed changes would not modify the authority or

affected mine operators. Therefore, MSHA assumes the same cost applies to mine operators who are adopting the OSHA Respiratory Protection Standard, compared to the ASTM F3387-19 standard.

For the OSHA respiratory protection standard incorporation by reference under section 60.14(c)(2), MSHA estimates that respiratory protection is used in a total of 3,411 mines (20 percent or 2,305 MNM mines and all 1,106 coal mines).

V-1. Written New SOP (30 CFR 60.14(c)(2))

MSHA expects half of the 2,305 MNM mines (1,153 mines) affected by the respiratory protection requirement need to write new SOPs in Year 1. In Year 2 and Year 3 MSHA estimates that only 46 new MNM are required to write new SOPs (2 percent of the 2,305 MNM mines).

MSHA expects that half of the 1,106 coal mines (553 mines) affected by the respiratory protection requirement will need to write new SOPs due to the proposed rule in Year 1. MSHA expects 22 new coal mines, estimated as 2 percent of the 1,106 affected coal mines, are required to write respiratory protection SOPs in Year 2 and 3.

MSHA estimates that, on average, it takes an industrial hygienist, earning $81.62 per hour at MNM mines and $81.20 per hour at coal mines, 4 hours to write respiratory protection program SOPs.

Table 12-11. Estimated Annual Respondent Hour and Cost Burden, Written New SOPs (30 CFR 60.14(c)(2))

Year	No. of Respondents (Mines)	No. of Responses per Respondent	Total Responses (New SOPs)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Monetized Value of Time
MNM – Written New SOPs (Industrial hygienist)							
1	1,153	1	1,153	4	4,612.00	$81.62	$376,425.52
2	46	1	46	4	184.00	$81.62	$15,017.84
3	46	1	46	4	184.00	$81.62	$15,017.84
Yearly Average	415	1	415	4	1,660.00	$81.62	$135,487.07
Coal – Written New SOPs (Industrial hygienist)							
1	553	1	553	4	2,212.00	$81.20	$179,606.92
2	22	1	22	4	88.00	$81.20	$7,145.30
3	22	1	22	4	88.00	$81.20	$7,145.30
Yearly Average	199	1	199	4	796.00	$81.20	$64,632.51
Total – Written New SOPs (Industrial hygienist)							
1	1,706		1,706		6,824.00		$556,032.45
2	68		68		272.00		$22,163.15
3	68		68		272.00		$22,163.15
Yearly Average (Rounded)	***614***		***614***		***2,456***		***$200,120***

V-2. Revised Existing SOPs (30 CFR 60.14(c)(2))

MSHA expects no mine will need to revise existing SOPs in subsequent years after initial written or revision of SOPs because after the initial year mines will only be writing new SOPs. In addition, these silica related SOPs don't need to be revised frequently. As a result, MSHA assumes the remaining half of the 2,305 MNM mines and 1,106 coal mines already have SOPs that need to be revised in Year 1. There will be no revisions in Year 2 and Year 3 in either MNM or coal mines.

MSHA estimates that, on average, it takes an industrial hygienist, earning $81.62 per hour at MNM mines and $81.20 per hour at coal mines, 1 hour to revise existing respiratory protection program SOPs.

Table 12-12. Estimated Annual Respondent Hour and Cost Burden, Revised Existing SOPs (30 CFR 60.14(c)(2))

Year	No. of Respondents (Mines)	No. of Responses per Respondent	Total Responses (Revised SOPs)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Monetized Value of Time
MNM - Revised Existing SOPs (Industrial hygienist)							
1	1,153	1	1,153	1	1,153.00	$81.62	$94,106.38
2	0	1	0	1	0.00	$81.62	$0.00
3	0	1	0	1	0.00	$81.62	$0.00
Yearly Average	384	1	384	1	384.33	$81.62	$31,368.79
Coal - Revised Existing SOPs (Industrial hygienist)							
1	553	1	553	1	553.00	$81.20	$44,901.73
2	0	1	0	1	0.00	$81.20	$0.00
3	0	1	0	1	0.00	$81.20	$0.00
Yearly Average	184	1	184	1	184.33	$81.20	$14,967.24
Total - Revised Existing SOPs (Industrial hygienist)							
1	1,706		1,706		1,706.00		$139,008.11
2	0		0		0.00		$0.00
3	0		0		0.00		$0.00
Yearly Average (Rounded)	***569***		***569***		***569***		***$46,336***

V-3. Recordkeeping for New Respiratory Protection Programs

The OSHA Respiratory Protection Standard require mine operators to establish and retain written information regarding medical evaluations, respirator fit testing, and respirator programs.

In Year 1 MSHA treats all mines as existing mines, so there are no new mines keeping records related to repository protection programs. MSHA estimates that 2 percent of existing 2,305 MNM mines and 1,106 coal mines will be replaced by new mines in Year 2 and Year 3, 46 new

MNM mines and 22 new coal mines. These new mines are required to meet the recordkeeping requirements and incur burden.

MSHA estimates it takes a clerk, earning $40.80 per hour at MNM mines and $44.49 per hour at coal mines, 4 hours in Year 2 and Year 3 to carry out recordkeeping relating to new respiratory protection programs.

Table 12-13. Estimated Annual Respondent Hour and Cost Burden, Recordkeeping for New Respiratory Protection Programs (30 CFR 60.14(c)(2))

Year	No. of Respondents (Mines)	No. of Responses per Respondent	Total Responses (Records)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Monetized Value of Time
MNM - Recordkeeping for New Respiratory Protection Programs (Clerk)							
1	0	1	0	4	0.00	$40.80	$0.00
2	46	1	46	4	184.00	$40.80	$7,508.02
3	46	1	46	4	184.00	$40.80	$7,508.02
Yearly Average	31	1	31	4	122.67	$40.80	$5,005.34
Coal - Recordkeeping for New Respiratory Protection Programs (Clerk)							
1	0	1	0	4	0.00	$44.49	$0.00
2	22	1	22	4	88.00	$44.49	$3,915.05
3	22	1	22	4	88.00	$44.49	$3,915.05
Yearly Average	15	1	15	4	58.67	$44.49	$2,610.03
Total - Recordkeeping for New Respiratory Protection Programs (Clerk)							
1	0		0		0.00		$0.00
2	68		68		272.00		$11,423.07
3	68		68		272.00		$11,423.07
Yearly Average (Rounded)	***45***		***45***		***181***		***$7,615***

V-4. Recordkeeping for Existing Respiratory Protection Programs

In Year 1 all existing mines (2,305 MNM mines and 1,106 coal mines) will keep records related to the respiratory protection program. In Year 2 and Year 3, MSHA estimates that 2 percent of mines will exit the industry and the remaining 98 percent of mines will keep records related to respiratory protection programs (2,259 MNM mines and 1,084 coal mines).

MSHA estimates it takes a clerk, earning $40.80 per hour at MNM mines and $44.49 per hour at coal mines, 4 hours in Year 1 and 2 hours in Year 2 and Year 3 to carry out recordkeeping relating to existing respiratory protection programs.

Table 12-14. Estimated Annual Respondent Hour and Cost Burden, Recordkeeping for Existing Respiratory Protection Programs (30 CFR 60.14(c)(2))

Year	No. of Respondents (Mines)	No. of Responses per Respondent	Total Responses (Records)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Monetized Value of Time
MNM - Recordkeeping for Existing Respiratory Protection Programs (Clerk)							
1	2,305	1	2,305	4	9,220.00	$40.80	$376,216.95
2	2,259	1	2,259	2	4,518.00	$40.80	$184,354.47
3	2,259	1	2,259	2	4,518.00	$40.80	$184,354.47
Yearly Average	2,274	1	2,274		6,085.33	$40.80	$248,308.63
Coal - Recordkeeping for Existing Respiratory Protection Programs (Clerk)							
1	1,106	1	1,106	4	4,424.00	$44.49	$196,820.17
2	1,084	1	1,084	2	2,168.00	$44.49	$96,452.56
3	1,084	1	1,084	2	2,168.00	$44.49	$96,452.56
Yearly Average	1,091	1	1,091		2,920.00	$44.49	$129,908.43
Total - Recordkeeping for Existing Respiratory Protection Programs (Clerk)							
1	3,411		3,411		13,644.00		$573,037.12
2	3,343		3,343		6,686.00		$280,807.03
3	3,343		3,343		6,686.00		$280,807.03
Yearly Average (Rounded)	***3,366***		***3,366***		***9,005***		***$378,217***

VI. Providing Access (30 CFR 60.16)

Under proposed 30 CFR 60.16(b), mine operators shall promptly provide access to any record upon request from an authorized representative of the Secretary, from an authorized representative of miners, or from miners. MSHA assumes the records under sections 60.12 through 60.15 will be kept electronically; therefore, the cost for retaining and accessing records is de minimis.

Hour Burden Summary

MSHA estimates that the 12,631 respondents (active MNM and coal mine operators) would incur, on average, an annual collection burden of 54,574 hours. The annual respondent hour and cost burden of this information collection are summarized in the table below.

Table 12-15. Estimated Annual Respondent Hour and Cost Burden, Summary

Activity (Occupation)	No. of Respondents	No. of Responses per Respondent	Total Responses	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Monetized Value of Time
MNM							
I. Exposure monitoring – sampling records and notifications (30 CFR 60.12)							
I-1. First-time sampling records (Industrial hygienist)	3,995	5.4	21,543	0.25	5,385.83	$81.62	$439,584.82
I-2. As-needed sampling records (Industrial hygienist)	11,525	0.4	5,172	0.25	1,293.03	$81.62	$105,535.72
I-3. Above-action-level sampling records (Industrial hygienist)	1,943	19.4	37,719	0.25	9,429.75	$81.62	$769,644.09
I-4. Corrective actions sampling records (Industrial hygienist)	969	40.3	39,023	0.25	9,755.75	$81.62	$796,251.80
I-5. Sampling notifications (Clerk)	969	40.3	39,023	0.08	3,251.92	$40.80	$132,692.64
II. Corrective actions (30 CFR 60.13)							
Corrective actions records (Clerk)	969	40	39,023	0.08	3,252	$40.80	$132,692.64
III. Respiratory protection - written determination records (30 CFR 60.14)							
III-1. Written determination records above the PEL (Industrial hygienist)	2,122	1	2,122	0.50	1,060.89	$81.62	$86,588.66
III-2. Written determination records between the action level and the PEL (Industrial hygienist)	1,943	1	1,943	0.50	971.48	$81.62	$79,290.84
IV. Medical surveillance – Confirmation of medical examination records (30 CFR 60.15)							
IV-3. Confirmation of medical examination records for new MNM miners (Industrial hygienist)	11,525	0.4	4,196	0.25	1,049.00	$81.62	$85,618.03
IV-3. Confirmation of medical examination records for existing MNM miners (Industrial hygienist)	3,842	7.6	29,371	0.25	7,342.63	$81.62	$599,295.63
IV-3. Confirmation of medical examination records for exposed MNM miners (Industrial	11,525	0.03	300	0.25	74.95	$81.62	$6,117.22

hygienist)							
V. OSHA Respiratory Protection Standard updates (30 CFR 60.14(c)(2))							
V-1. Written new SOPs (Industrial hygienist)	415	1	415	4	1,660.00	$81.62	$135,487.07
V-2. Revised existing SOPs (Industrial hygienist)	384	1	384	1	384.33	$81.62	$31,368.79
V-3. Recordkeeping for new respiratory protection programs (Clerk)	31	1	31	4	122.67	$40.80	$5,005.34
V-4. Recordkeeping for existing respiratory protection programs (Clerk)	2,274	1	2,274		6,085.33	$40.80	$248,308.63
MNM Total (Rounded)	***11,525***		***222,539***		***51,119***		***$3,653,482***
Coal							
I. Exposure monitoring – sampling records and notifications (30 CFR 60.12)							
I-1. First-time sampling records (Industrial hygienist)	383	13.5	5,165	0.25	1,291.15	$81.20	$104,836.99
I-2. As-needed sampling records (Industrial hygienist)	1,106	1.6	1,816	0.25	454.01	$81.20	$36,864.03
I-3. Above-action-level sampling records (Industrial hygienist)	143	36.7	5,230	0.25	1,307.42	$81.20	$106,157.81
I-4. Corrective actions sampling records (Industrial hygienist)	127	25.7	3,265	0.25	816.33	$81.20	$66,283.51
I-5. Sampling notifications (Clerk)	127	25.7	3,265	0.08	272.11	$44.49	$12,106.00
II. Corrective actions (30 CFR 60.13)							
Corrective actions records (Clerk)	127	25.7	3,265	0.08	272.11	$44.49	$12,106.00
III. Respiratory protection - written determination records (30 CFR 60.14)							
III-1. Written determination records above the PEL (Industrial hygienist)	127	1	127	0.50	63.63	$81.20	$5,166.92
III-2. Written determination records between the action level and the PEL (Industrial hygienist)	143	1	143	0.50	71.28	$81.20	$5,787.34
IV. Medical surveillance – Confirmation of medical examination records (30 CFR 60.15)							
IV-3. Confirmation of medical examination records	1,106	0.2	192	0.25	47.89	$81.20	$3,888.87

for exposed coal miners (Industrial hygienist)							
V. OSHA Respiratory Protection Standard updates (30 CFR 60.14(c)(2))							
V-1. Written new SOPs (Industrial hygienist)	199	1	199	4	796.00	$81.20	$64,632.51
V-2. Revised existing SOPs (Industrial hygienist)	184	1	184	1	184.33	$81.20	$14,967.24
V-3. Recordkeeping for new respiratory protection programs (Clerk)	15	1	15	4	58.67	$44.49	$2,610.03
V-4. Recordkeeping for existing respiratory protection programs (Clerk)	1,091	1	1,091		2,920.00	$44.49	$129,908.43
Coal Total (Rounded)	***1,106***		***23,957***		***8,555***		***$565,316***
Total							
I. Exposure monitoring – sampling records and notifications (30 CFR 60.12)							
I-1. First-time sampling records (Industrial hygienist)	4,379		26,708		6,676.98		$544,421.81
I-2. As-needed sampling records (Industrial hygienist)	12,631		6,988		1,747.04		$142,399.75
I-3. Above-action-level sampling records (Industrial hygienist)	2,086		42,949		10,737.17		$875,801.91
I-4. Corrective actions sampling records (Industrial hygienist)	1,097		42,288		10,572.08		$862,535.30
I-5. Sampling notifications (Clerk)	1,097		42,288		3,524.03		$144,798.65
II. Corrective actions (30 CFR 60.13)							
Corrective actions records (Clerk)	1,097		42,288		3,524.03		$144,798.65
III. Respiratory protection - written determination records (30 CFR 60.14)							
III-1. Written determination records above the PEL (Industrial hygienist)	2,249		2,249		1,124.53		$91,755.58
III-2. Written determination records between the action level and the PEL (Industrial hygienist)	2,086		2,086		1,042.75		$85,078.19
IV. Medical surveillance – Confirmation of medical examination records (30 CFR 60.15)							
IV-3. Confirmation of medical	11,525		4,196		1,049.00		$85,618.03

examination records for new MNM miners (Industrial hygienist)						
IV-3. Confirmation of medical examination records for existing MNM miners (Industrial hygienist)	3,842		29,371		7,342.63	$599,295.63
IV-3. Confirmation of medical examination records for exposed MNM miners (Industrial hygienist)	11,525		300		74.95	$6,117.22
IV-3. Confirmation of medical examination records for exposed coal miners (Industrial hygienist)	1,106		192		47.89	$3,888.87
V. OSHA Respiratory Protection Standard updates (30 CFR 60.14(c)(2))						
V-1. Written new SOPs (Industrial hygienist)	614		614		2,456.00	$200,119.58
V-2. Revised existing SOPs (Industrial hygienist)	569		569		568.67	$46,336.04
V-3. Recordkeeping for new respiratory protection programs (Clerk)	45		45		181.33	$7,615.38
V-4. Recordkeeping for existing respiratory protection programs (Clerk)	3,366		3,366		9,005.33	$378,217.06
MNM and Coal Total (Rounded)	***12,631***		***246,496***		***59,674***	***$4,218,798***

Note: The total number of respondents does not correspond to the sum of correspondents from each row because some respondents are part of the total MNM and coal mines. The number of responses per respondent is calculated by dividing the number of responses by the number of respondents and rounded.

Table 12-16. Estimated Annual Respondent Hour and Cost Burden, Yearly Summary

Activity	No. of Respondents	No. of Responses per Respondent	Total Responses	Average Burden (Minutes)	Total Burden (Hours)	Hourly Wage Rate	Monetized Value of Time
Year 1							
I. Exposure monitoring – sampling records and notifications (30 CFR 60.12)							
I-1. First-time sampling records	12,631		77,042		19,260.47		$1,570,442.83
I-2. As-needed sampling records	12,631		6,988		1,747.04		$142,399.75
I-3. Above-action-level sampling records	2,319		47,506		11,876.50		$968,772.43
I-4. Corrective actions sampling records	1,174		27,929		6,982.25		$569,672.19
I-5. Sampling notifications	1,174		27,929		2,327.42		$95,580.30
II. Corrective actions (30 CFR 60.13)							
Corrective actions records	1,174		27,929		2,327.42		$95,580.30
III. Respiratory protection - written determination records (30 CFR 60.14)							
III-1. Written determination records above the PEL	2,327		2,327		1,163.39		$94,927.58
III-2. Written determination records between the action level and the PEL	2,319		2,319		1,159.57		$94,611.20
IV. Medical surveillance – Confirmation of medical examination records (30 CFR 60.15)							
IV-3. Confirmation of medical examination records for new MNM miners	11,525		4,196		1,049.00		$85,618.03
IV-3. Confirmation of medical examination records for existing MNM miners	11,525		88,112		22,027.88		$1,797,886.89
IV-3. Confirmation of medical examination records for exposed MNM miners	11,525		346		86.52		$7,061.93
IV-3. Confirmation of medical examination records for exposed coal miners	1,106		197		49.13		$3,989.28
V. OSHA Respiratory Protection Standard updates (30 CFR 60.14(c)(2))							
V-1. Written new SOPs	1,706		1,706		6,824.00		$556,032.45
V-2. Revised existing SOPs	1,706		1,706		1,706.00		$139,008.11
V-3. Recordkeeping	0		0		0.00		$0.00

for new respiratory protection programs						
V-4. Recordkeeping for existing respiratory protection programs	3,411		3,411		13,644.00	$573,037.12
Year 1 Total	***12,631***		***319,642***		***92,231***	***$6,794,620***
Year 2						
I. Exposure monitoring – sampling records and notifications (30 CFR 60.12)						
I-1. First-time sampling records (Industrial hygienist)	253		1,541		385.24	$31,411.30
I-2. As-needed sampling records (Industrial hygienist)	12,631		6,988		1,747.04	$142,399.75
I-3. Above-action-level sampling records (Industrial hygienist)	2,086		42,949		10,737.25	$875,808.68
I-4. Corrective actions sampling records (Industrial hygienist)	1,122		52,024		13,006.00	$1,061,117.90
I-5. Sampling notifications (Clerk)	1,122		52,024		4,335.33	$178,108.84
II. Corrective actions (30 CFR 60.13)						
Corrective actions records (Clerk)	1,122		52,024		4,335.33	$178,108.84
III. Respiratory protection - written determination records (30 CFR 60.14)						
III-1. Written determination records above the PEL (Industrial hygienist)	2,275		2,275		1,137.28	$92,796.75
III-2. Written determination records between the action level and the PEL (Industrial hygienist)	2,086		2,086		1,042.75	$85,078.19
IV. Medical surveillance – Confirmation of medical examination records (30 CFR 60.15)						
IV-3. Confirmation of medical examination records for new MNM miners (Industrial hygienist)	11,525		4,196		1,049.00	$85,618.03
IV-3. Confirmation of medical examination records for existing MNM miners (Industrial hygienist)	0		0		0.00	$0.00
IV-3. Confirmation of medical examination records for exposed MNM miners (Industrial hygienist)	11,525		299		74.66	$6,093.45

IV-3. Confirmation of medical examination records for exposed coal miners (Industrial hygienist)	1,106		192		47.93	$3,891.54
V. OSHA Respiratory Protection Standard updates (30 CFR 60.14(c)(2))						
V-1. Written new SOPs (Industrial hygienist)	68		68		272.00	$22,163.15
V-2. Revised existing SOPs (Industrial hygienist)	0		0		0.00	$0.00
V-3. Recordkeeping for new respiratory protection programs (Clerk)	68		68		272.00	$11,423.07
V-4. Recordkeeping for existing respiratory protection programs (Clerk)	3,343		3,343		6,686.00	$280,807.03
Year 2 Total	***12,631***		***220,076***		***45,128***	***$3,054,827***
Year 3						
I. Exposure monitoring – sampling records and notifications (30 CFR 60.12)						
I-1. First-time sampling records (Industrial hygienist)	253		1,541		385.24	$31,411.30
I-2. As-needed sampling records (Industrial hygienist)	12,631		6,988		1,747.04	$142,399.75
I-3. Above-action-level sampling records (Industrial hygienist)	1,852		38,391		9,597.75	$782,824.62
I-4. Corrective actions sampling records (Industrial hygienist)	993		46,912		11,728.00	$956,815.83
I-5. Sampling notifications (Clerk)	993		46,912		3,909.33	$160,706.80
II. Corrective actions (30 CFR 60.13)						
Corrective actions records (Clerk)	993		46,912		3,909.33	$160,706.80
III. Respiratory protection - written determination records (30 CFR 60.14)						
III-1. Written determination records above the PEL (Industrial hygienist)	2,146		2,146		1,072.90	$87,542.42
III-2. Written determination records between the action level and the PEL (Industrial hygienist)	1,852		1,852		925.94	$75,545.17
IV. Medical surveillance – Confirmation of medical examination records (30 CFR 60.15)						

IV-3. Confirmation of medical examination records for new MNM miners (Industrial hygienist)	11,525		4,196		1,049.00	$85,618.03
IV-3. Confirmation of medical examination records for existing MNM miners (Industrial hygienist)	0		0		0.00	$0.00
IV-3. Confirmation of medical examination records for exposed MNM miners (Industrial hygienist)	11,525		255		63.67	$5,196.28
IV-3. Confirmation of medical examination records for exposed coal miners (Industrial hygienist)	1,106		187		46.63	$3,785.79
V. OSHA Respiratory Protection Standard updates (30 CFR 60.14(c)(2))						
V-1. Written new SOPs (Industrial hygienist)	68		68		272.00	$22,163.15
V-2. Revised existing SOPs (Industrial hygienist)	0		0		0.00	$0.00
V-3. Recordkeeping for new respiratory protection programs (Clerk)	68		68		272.00	$11,423.07
V-4. Recordkeeping for existing respiratory protection programs (Clerk)	3,343		3,343		6,686.00	$280,807.03
Year 3 Total	***12,631***		***199,770***		***41,665***	***$2,806,946***
Annual Average						
I. Exposure monitoring – sampling records and notifications (30 CFR 60.12)						
I-1. First-time sampling records (Industrial hygienist)	4,379		26,708		6,677	$544,421.81
I-2. As-needed sampling records (Industrial hygienist)	12,631		6,988		1,747	$142,399.75
I-3. Above-action-level sampling records (Industrial hygienist)	2,086		42,949		10,737	$875,801.91
I-4. Corrective actions sampling records (Industrial hygienist)	1,097		42,288		10,572	$862,535.30
I-5. Sampling notifications (Clerk)	1,097		42,288		3,524	$144,798.65

II. Corrective actions (30 CFR 60.13)						
Corrective actions records (Clerk)	1,097		42,288		3,524	$144,798.65
III. Respiratory protection - written determination records (30 CFR 60.14)						
III-1. Written determination records above the PEL (Industrial hygienist)	2,249		2,249		1,124.53	$91,755.58
III-2. Written determination records between the action level and the PEL (Industrial hygienist)	2,086		2,086		1,042.75	$85,078.19
IV. Medical surveillance – Confirmation of medical examination records (30 CFR 60.15)						
IV-3. Confirmation of medical examination records for new MNM miners (Industrial hygienist)	11,525		4,196		1,049	$85,618.03
IV-3. Confirmation of medical examination records for existing MNM miners (Industrial hygienist)	3,842		29,371		7,343	$599,295.63
IV-3. Confirmation of medical examination records for exposed MNM miners (Industrial hygienist)	11,525		300		75	$6,117.22
IV-3. Confirmation of medical examination records for exposed coal miners (Industrial hygienist)	1,106		192		48	$3,888.87
V. OSHA Respiratory Protection Standard updates (30 CFR 60.14(c)(2))						
V-1. Written new SOPs (Industrial hygienist)	614		614		2,456.00	$200,119.58
V-2. Revised existing SOPs (Industrial hygienist)	569		569		568.67	$46,336.04
V-3. Recordkeeping for new respiratory protection programs (Clerk)	45		45		181.33	$7,615.38
V-4. Recordkeeping for existing respiratory protection programs (Clerk)	3,366		3,366		9,005.33	$378,217.06
Annual Average (Rounded)	***12,631***		***246,496***		***59,674***	***$4,218,798***

Note: Total number of respondents is not a sum of respondents from each row. The respondents (mine operators) carrying out corrective actions and adhering to respiratory protection program requirements are a subset of the respondents carrying out exposure monitoring. The responses and burden hours column totals might not add up to the sum of the items in each column due to rounding.

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.**

I. Exposure Monitoring – Sampling Records and Notifications (30 CFR 60.12)

I-6. Sampling Records (30 CFR 60.12(e))

Under proposed 30 CFR 60.12(e), the mine operator shall make a record of each sample, including the sample date, the occupations sampled, and the concentrations of respirable crystalline silica and respirable dust and post the record and the laboratory report on the mine bulletin board and, if applicable, by electronic means, for the next 31 days, upon receipt.

MSHA estimates that printing the results of sampling, posting the record on the mine bulletin board will cost each of the 11,525 active MNM mines and 1,106 coal mines $2.28 (in 2024 dollars) in terms of paper, ink, and folders.

Table 13-1. Estimated Annual Recordkeeping Costs, Printing and Posting Sampling Records (30 CFR 60.12)

Cost components	No. of Respondents (Mines)	No. of Responses per Respondent	No. of Responses (Records)	Unit Cost in 2021$	Unit Cost in 2024$	Cost to Recordkeepers in 2024 $
MNM						
Printing and posting sampling records	11,525	1	11,525	$2.00	$2.28	$26,244.15
Coal						
Printing and posting sampling records	1,106	1	1,106	$2.00	$2.28	$2,518.53
Subtotal (Rounded)	***12,631***		***12,631***			***$28,763***

Note: The unit costs were updated to 2024 constant dollars using the change in the GDP deflator - 1.139 (125.422/110.157) - between 2021 and 2024.

IV. Medical Surveillance (30 CFR 60.15)

IV-2. Medical Examinations Results (30 CFR 60.15(d))

Under existing 30 CFR 60.15(d), mine operators shall ensure that the results of medical examinations or tests shall be provided from the PLHCP or specialist within 30 days of the medical examination to the miner, and at the request of the miner, to the miner's designated physician or another designee identified by the miner.

MSHA estimates that this would result in a cost of $11.39 per miner (in 2024 dollars) for the PLHCP or specialist to send a medical examination result to the miner.

MSHA estimates that the number of medical examination results sent to miners would be the same as written confirmation of medical examination records sent to mine operators in Question 12. MSHA assumes that on average PLHCP would provide 34,058 examination results to miners or their designees each year.

Table 13-2. Estimated Annual Recordkeeping Costs, Providing Medical Examination Results (30 CFR 60.15(d))

Year	No. of Respondents (Miners)	No. of Responses per Respondent	No. of Responses (Results)	Unit Cost in 2021$	Unit Cost in 2024$	Cost to Recordkeepers in 2024 $
Providing medical exam results to new MNM miners						
1	11,525	0.36	4,196	$10.00	$11.39	$47,774.60
2	11,525	0.36	4,196	$10.00	$11.39	$47,774.60
3	11,525	0.36	4,196	$10.00	$11.39	$47,774.60
Yearly Average	11,525	0.36	4,196	$10.00	$11.39	$47,774.60
Providing medical exam results to existing MNM miners						
1	11,525	7.65	88,112	$10.00	$11.39	$1,003,215.46
2	0	0.00	0	$10.00	$11.39	$0.00
3	0	0.00	0	$10.00	$11.39	$0.00
Yearly Average	3,842	7.65	29,371	$10.00	$11.39	$334,405.15
Providing medical exam results to exposed MNM miners						
1	11,525	0.03	346	$10.00	$11.39	$3,939.47
2	11,525	0.03	299	$10.00	$11.39	$3,398.65
3	11,525	0.02	255	$10.00	$11.39	$2,897.67
Yearly Average	11,525	0.03	300	$10.00	$11.39	$3,411.93
Providing medical exam results to exposed Coal miners						
1	1,106	0.18	197	$10.00	$11.39	$2,237.30
2	1,106	0.17	192	$10.00	$11.39	$2,180.37
3	1,106	0.17	187	$10.00	$11.39	$2,123.44
Yearly Average	1,106	0.17	192	[redacted]		$2,180.37
Subtotal (Rounded)	***12,631***	[redacted]	***34,058***	[redacted]		***$387,772***

Note: The unit costs were updated to 2024 constant dollars using the change in the GDP deflator - 1.139 (125.422/110.157) - between 2021 and 2024.

Other sections of the rule require that mine operators retain and store the records in electronic formats if applicable, and make them available to MSHA personnel, if requested. MSHA assumes that all records will be provided in electronic formats and, therefore, does not expect additional cost burden to respondents or recordkeepers.

The annual cost burden for recordkeeping is summarized in the table below.

Table 13-3. Estimated Annual Recordkeeping Costs, Summary

Cost components	No. of Respondents	No. of Responses	Cost to Recordkeepers in 2024 $
Printing and posting records	12,631	12,631	$28,762.68
Providing medical examination results	12,631	34,058	$387,772.06
Total (Rounded)	***12,631***	***46,689***	***$416,535***

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.

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.

Number of Respondents: The estimated number of respondents decreases from 47,596 to 12,631 due to the changes in the proposed rule.

Number of Responses: The estimated number of responses decreased from 265,509 to 246,496 due to the changes in the proposed rule.

Annual Time Burden: The estimated annual time burden decreased from 63,972 hours to 59,674 hours due to the changes in the proposed rule.

Annual Recordkeeping Costs: The estimated annual recordkeeper costs decreased from $775,683 to $416,535 due to the changes in the proposed rule.

Table 15-1. Summary of Changes

	Currently Approved ICR	Revised ICR	Difference
Number of Respondents	47,596	12,631	-34,965
Number of Responses	265,509	246,496	-19,013
Annual Time Burden	63,972	59,674	-4,298
Annual Recordkeeping Costs	$775,683	$416,535	-$359,149

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.