

Main Fan Operation and Inspection (I-A, II-A, III, and V-A Mines)

OMB Control Number: 1219-0030

OMB Expiration Date: 7/31/2025

**Supporting Statement Main fan operation and inspection
(I-A, II-A, III, and V-A mines)
Paperwork Reduction Act Submission**

This information collection request (ICR) seeks to extend, without change, a currently approved information collection.

OMB Control Number: 1219-0030

Information Collection Request Title: Main Fan Operation and Inspection (I-A, II-A, III, and V-A Mines)

Type of OMB Review: Extension

Authority:

Part 57 Safety and Health Standards—Underground Metal and Nonmetal Mines

Subpart T—Safety Standards for Methane in Metal and Nonmetal Mines

30 CFR 57.22204 Main fan operation and inspection (I-A, II-A, III, and V-A mines)

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, metal, and nonmetal mines.

In order to fulfill the statutory mandates to promote miners' health and safety, MSHA requires the collection of information under the information request entitled Main Fan Operation and Inspection (I-A, II-A, III, and V-A Mines). The information collection is intended to ensure constant monitoring of mine ventilation and to ensure that unsafe conditions are identified early and corrected.

I. Daily Main Fan Inspection and Certification (I-A, II-A, III, and V-A mines)

Maintaining proper ventilation is critical to providing miners with a safe working environment. Potentially dangerous conditions in underground mines due to explosive gases are largely controlled by the main fans. When accumulations of explosive gases, such as methane, are not quickly removed from the mine by the main fans, they may reasonably be expected to come in contact with an ignition source and cause explosions. The results of such explosions are often severe and have previously included incidents with multiple fatalities.

Under 30 CFR 57.22204, which applies to underground metal and nonmetal mines that are categorized as I-A, II-A, III or V-A mines, the main fans must have a pressure-recording system. This standard also requires main fans to be inspected daily while operating if persons are underground, and certification of inspections must be made by signature and date. Certifications and pressure recordings must be retained for at least one year and made available to an authorized representative of the Secretary.

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.

Information collected through the pressure recordings is used by mine operators and MSHA for constant monitoring of ventilation in I-A, II-A, III or V-A mines, or "gassy" mines, and for ensuring that unsafe conditions are identified early and corrected. Technical consultants may occasionally review such information in addressing main fan or ventilation problems.

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 improved information technology has been identified that would reduce the recordkeeping burden. However, in order to comply with the Government Paperwork Elimination Act, mine operators may retain the records of certifications and pressure recordings in whatever method they choose, which may include utilizing computer technology to store the records electronically.

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

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 operations, 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. [S. Rep. No. 95-181 (1977)]. 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. Hence, MSHA believes that the information collection requirements are imposed on all mining operations and do not have a significant impact on a substantial number of small business 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.

Under 30 CFR 57.22204, mine operators must inspect main mine fans daily while operating if persons are underground. MSHA has determined that maintaining proper ventilation is critical to providing miners with a safe atmosphere to work in. To require mine operators to inspect fans and certify such inspections less frequently than on a daily basis would increase the risk that harmful gases might accumulate and create an explosion hazard.

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

- **Requiring respondents to report information to the agency more often than quarterly;**
- **Requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**

- **Requiring respondents to submit more than an original and two copies of any document;**
- **Requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years;**
- **In connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;**
- **Requiring the use of a statistical data classification that has not been reviewed and approved by OMB;**
- **That includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or**
- **Requiring respondents to submit proprietary trade secrets, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.**

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

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

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

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

In accordance with 5 CFR 1320.8(d), MSHA will publish the proposed information collection requirements in the *Federal Register*, notifying the public that the information collection requirements are being reviewed in accordance with the Paperwork Reduction Act of 1995, and providing 60 days for the public to submit comments. MSHA published a 60-day Federal Register notice on December 27, 2024 (88 FR 105632). MSHA received no comments.

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

MSHA does not provide any payment or gift to the respondents.

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

No assurance of confidentiality is 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 under Item 13.**

Respondents

In this section, an estimate is provided for the annual burden to 6 mines. All information related to quantities and inspection rates are estimated by MSHA's Headquarters Enforcement Division

based on field experience with different types of mining operations, sizes of mines, and the frequency of inspections dictated by statute. Mine operators provide MSHA Headquarters Enforcement Division the number of mines and employment, and from this information MSHA tracks the number of active and inactive mines and mine types throughout the United States.

Wage Rates Determinations¹

MSHA used data from the May 2023 Occupational Employment and Wage Statistics (OEWS) published by the Bureau of Labor Statistics (BLS) for hourly wage rates² and adjusted the rates for benefits,³ wage inflation,⁴ and overhead costs.⁵ The occupations listed below in Table 12-1 are those that were determined to be relevant for the cost calculations.

Table 12-1. Hourly Wage Rates

Occupation	NAICS Code	Mean Wage Rate	Benefit Multiplier	Inflation Multiplier	Overhead Cost Multiplier	Loaded Hourly Wage Rate
		A	B	C	D	A x B x C x D
Mining Supervisor [a]	212200, 212300	\$41.81	1.461	1.037	1.01	\$63.97
Miner [b]	212200, 212300	\$27.16	1.461	1.037	1.01	\$41.56

Notes: MSHA uses the latest 4-quarter moving average 2023Q2-2024Q2 to determine that 31.6 percent of total loaded wages are benefits for private industry workers in construction, extraction, farming, fishing, and forestry occupations. The benefit multiplier is $1.461 = 1 + (0.316 / (1 - 0.316))$. The inflation multiplier is determined by using the employment price index from the most current quarter, 2024Q2, divided by the base year and quarter of the OEWS employment and wage statistics, 2023Q2, for private industry workers in construction, extraction, farming,

¹ For all wage rates, including Federal 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. The average wage rate is calculated as the employment-weighted average of hourly mean wages for the occupation.

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 uses 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 $1 + (\text{benefit percentage} / (1 - \text{benefit percentage}))$.

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 uses an overhead rate of 1 percent. The mining environment generally involves very little overhead, especially costs associated with workers engaged in administrative or clerical tasks.

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fishing, and forestry occupations, current dollar index. The inflation multiplier is $1.037 = 163.1/157.3$. MSHA uses the overhead multiplier of 1.01.

[a] The Standard Occupation Codes (SOC) used for this occupation are 47-1011, 49-1011, 51-1011, and 53-1047.

[b] The SOC's used for this occupation are 47-5000, 49-9043, 49-9071, 51-9021 and 53-7000.

Hour Burden

I. Daily Main Fan Inspection and Certification (I-A, II-A, III, and V-A mines) (30 CFR 57.22204)

MSHA estimates that approximately six mines will be affected by this standard. MSHA's records show that there are an average of two main fans per mine and that the affected mines operate approximately 330 days per year, that is, 660 instances per mine each year. It is estimated that on average it takes a miner, earning an hourly wage of \$41.56, 30 minutes to inspect and record pressure readings in the log book per main fan. It takes two minutes for a mine supervisor, earning an hourly wage of \$63.97, to review and certify the records by countersigning for each main fan.

Table 12-2. Estimated Annual Respondent Hour and Cost Burden, Daily Main Fan Inspection and Certification (30 CFR 57.22204)

Activity (Occupation)	Number of Respondents (Mines)	Number of Responses per Respondent	Total Responses (Records)	Average Burden per Response (Hours)	Annual Burden (Hours)	Hourly Wage Rate	Burden Cost
Daily Inspection (Miner)	6	660	3,960	0.50	1,980.00	\$41.56	\$82,288.80
Certification (Supervisor)	6	660	3,960	0.03	132.00	\$63.97	\$8,444.04
Subtotal (Rounded)	6		3,960		2,112		\$90,733

Hour Burden Summary

MSHA estimates that the 6 respondents (mine operators) would incur, on average, an annual collection burden of 2,112 hours with an associated annual cost of \$90,733. The annual respondent hour and cost burden is summarized in the Summary Totals table below.

Table 12-3. Estimated Annual Respondent Hour and Cost Burden, Summary Totals

Activity	Number of Respondents	Number of Responses per Respondent	Total Responses	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
Daily Inspections	6	660	3,960	0.50	1,980.00	\$41.56	\$82,288.80
Certifications	6	660	3,960	0.03	132.00	\$63.97	\$8,444.04
Total (Rounded)	6		3,960		2,112		\$90,733

Note: The sum of the number of respondents and responses might not add up to the total reported numbers in the table due to multiple people responding to the same activity.

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

- **The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life) and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.**
- **If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collections services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.**
- **Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.**

MSHA's ventilation division at the Pittsburgh Safety and Health Technology Center estimates the average cost of a pressure-recording system to be \$2,500.00 per system with a service life of 10 years. MSHA estimates that 10 percent of the 12 pressure recorders in use will be replaced each year. The annual maintenance costs are estimated to be approximately \$250.00 per system

(10 percent of the average cost of the system).

Table 13-1 Estimated Annual Respondent or Recordkeeper Cost Burden, Capital and Maintenance Costs, 30 CFR 57.22204

Cost Component	Number of Fans	Cost per Fan	Cost to Recordkeepers
Replacement Costs	1.2	\$2,500.00	\$3,000.00
Maintenance Costs	12	\$250.00	\$3,000.00
Total (Rounded)	12		\$6,000

14. Provide estimates of annualized costs to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information. Agencies may also aggregate cost estimates from Items 12, 13, and 14 in a single table.

There are no Federal costs associated with this ICR. The examination of these records is just one aspect of an MSHA inspection. Under section 103(a) of the Mine Act, each underground mine must be inspected in its entirety at least four times per year.

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

Number of Respondents: The estimated number of respondents remains unchanged at 6. This is due to all previously classified mines remaining active, and no mines added.

Number of Responses: The estimated number of responses decreased from 5,940 to 3,960 (by 1,980) due to a methodology change.

Annual Time Burden: The estimated annual time burden increased from 2,046 to 2,112 (by 66) due to a methodology change.

Annual Burden Costs: The estimated annual other burden cost increased from \$90,130 to \$90,733 (by \$603) due to a methodology change of the estimated annual time burden.

Annual Other Burden Costs: The estimated annual burden costs remain unchanged at \$6,000.

Federal Hours: The estimated annual federal hours remain unchanged at 0.

Federal Costs: The estimated annual federal costs remain unchanged at \$0.

Table 15-1. Summary of Changes

	Previous ICR	Currently Approved ICR	Difference
Number of Respondents	6	6	0
Number of Responses	5,940	3,960	-1,980
Annual Time Burden	2,046	2,112	66
Annual Burden Costs	\$90,130	\$90,733	\$603
Annual Other Burden Costs	\$6,000	\$6,000	0
Federal Hours	0	0	0
Federal Costs	\$0	\$0	\$0

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

MSHA does not intend to publish the results of this information collection.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.

MSHA is not seeking approval to not display the expiration date for OMB approval of this information collection and there is no form associated with this collection.

18. Explain each exception to the topics of the certification statement.

There is no certification exceptions identified with this information collection.

B. Collection of Information Employing Statistical Methods

As statistical analysis is not required by the regulation, questions 1 through 5 do not apply.