

Supporting Statement

Main Fan Operation and Inspection in Gassy Underground Metal and Nonmetal Mines

<u>OMB Control</u>	<u>30 CFR Citation</u>	<u>Title</u>
1219-0030	§ 57.22204	Main fan operation and inspection (I-A, II-A, III, and V-A mines)

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.

Under Section 103 (a) of the Federal Mine Safety and Health Act of 1977 (Mine Act), “authorized representatives of the Secretary of Labor (Secretary) or the Secretary of Health, Education, and Welfare shall make frequent inspections and investigations in coal or other mines each year for the purpose of (1) obtaining, utilizing, and disseminating information relating to health and safety conditions, the causes of accidents, and the causes of diseases and physical impairments originating in such mines, (2) gathering information with respect to mandatory health or safety standards, (3) determining whether an imminent danger exists, and (4) determining whether there is compliance with the mandatory health or safety standards or with any citation, order, or decision issued under this title or other requirements of the Mine Act. In carrying out the requirements of this subsection, no advance notice of an inspection shall be provided to any person, except that in carrying out the requirements of clauses (1) and (2) of this subsection, the Secretary of Health, Education, and Welfare may give advance notice of inspections. In carrying out the requirements of clauses (3) and (4) of this subsection, the Secretary shall make inspections of each underground coal or other mine in its entirety at least four times a year, and of each surface coal or other mine in its entirety at least two times a year. The Secretary shall develop guidelines for additional inspections of mines based on criteria including, but not limited to, the hazards found in mines subject to the Mine Act, and her experience under the Mine Act and other health and safety laws. For the purpose of making any inspection or investigation under the Mine Act, the Secretary, or the Secretary of Health, Education, and Welfare, with respect to fulfilling her responsibilities under the Mine Act, or any authorized representative of the Secretary or the Secretary of Health, Education, and Welfare, shall have a right of entry to, upon, or through any coal or other mine.”

Potentially gassy (explosive) conditions underground are largely controlled by the main fans. When accumulations of explosive gases, such as methane, are not swept from

the mine by the main fans, they may reasonably be expected to contact an ignition source. The results of such contacts are usually disastrous, and multiple fatalities may be reasonably expected to occur. The standard contains significantly more stringent requirements for main fans in "gassy" mines than for main fans in other mines. 30 CFR 57.22204, which only applies to metal and nonmetal underground mines that are categorized as "gassy," requires main fans to have pressure-recording systems. This standard also requires main fans to be inspected daily while operating if persons are underground and certification made of such inspections by signature and date. Certifications and pressure recordings must be retained for one year and made available to authorized representatives 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 has been and continues to be used by mine operators and the Mine Safety and Health Administration (MSHA) for maintaining a constant vigilance on mine ventilation 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 by whatever method they choose, which may include the use of computer technology.

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.

Fan pressure recordings are required to be kept on file at the mine. There are no duplicate records that could be used. The ventilation at each mine is unique to that mine; therefore, there is no similar data that could be used.

5. If the collection of information impacts small businesses or other small entities (Item 5 of OMB Form 83-I), describe any methods used to minimize burden.

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

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

30 CFR 57.22204 requires mine operators to inspect main mine fans daily while operating if persons are underground. MSHA has determined that maintaining proper ventilation is critical to providing the miners with a safe atmosphere in which to work. 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.**

Although 30 CFR 57.22204 has no specific requirement that mine operators retain the information collection described above for more than one year, such standard requires that a mine operator make daily inspections of main fans, and record and certify that such inspections were made, while the mine is operating if persons are underground. In addition, in accordance with such standard, the certified records and the pressure recordings must be maintained at the mine for a period of one year. The requirements are consistent with the general information collection guidelines in 5 CFR 1320.5.

8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR

1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

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

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

MSHA published a 60-day Federal Register notice on July 17, 2012 (77 FR 42004). MSHA received no comments.

9. Explain any decision to provide any payment or gift to respondents, other than reenumeration 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 in Item 13 of OMB Form 83-I.

* 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.

Estimated Annualized Burden Hours and Costs								
Type of Respondent	Information Collection/ Standard	No. of Respondents	No. of Responses per Respondent	Total No. of Responses (rounded to whole numbers)	Avg. Burden per Response (in hours)	Total Annual Burden (in hours/ rounded to whole numbers)	Avg. Hourly Wage Rate*	Total Annual Respondent Cost
Business or other for-profit	Examination and Recording / § 57.22204	7	660	4,620	.5	2,310	\$28.34	\$65,465
Business or other for-profit	Supervisor Countersigning / § 57.22204	7	330	2,310	.033	76	\$66.98	\$5,090
Total		7		6,930		2,386		\$70,555

* Note: All wages in this Supporting Statement include a 1.4 multiplier to reflect a fully-loaded wage rate.

MSHA estimates that approximately seven mines will be affected by this standard. MSHA's records show that there is an average of 2 main fans per mine and that a mine operates approximately 330 days per year. It is estimated that the examination and recording of pressure readings in the log book would require an average of 30 minutes (0.5 hrs.) per main fan and an average of 2 minutes (0.033 hrs) for a supervisor to certify the records by countersigning. It has been MSHA's experience that these examinations and records are made by an hourly employee of the mine operator earning an hourly wage of \$28.34 and the certification by countersigning is done by the mine supervisor earning an hourly wage of \$66.98 (based on U.S. Metal and Nonmetal Mine Salaries, Wages, & Benefits - 2010 Survey Results).

Burden hours:

$$\begin{aligned}
 7 \text{ mines} \times 2 \text{ fans} \times 330 \text{ days} \times 0.5 \text{ hrs. (Examination and Recording)} &= 2,310 \text{ hours} \\
 7 \text{ mines} \times 330 \text{ days} \times 0.033 \text{ hrs (Supervisor Countersigning)} &= \underline{76 \text{ hours}} \\
 \text{Total Burden Hours} &= \underline{\underline{2,386 \text{ hours}}}
 \end{aligned}$$

Burden hour cost:

2,310 hours x \$28.34/hr.	= \$65,465
76 hours x \$66.98	= \$ 5,090
Total Hour Burden Cost	= \$70,555

13. Provide an estimate for the total annual cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden shown in Items 12 and 14).

*** 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.**

Based on figures received from mine operators during various inspections, MSHA estimates the average cost of a pressure-recording system to be \$1,000 per system with a service life of 10 years. MSHA estimates that 10%, of the 14 total pressure recorders in use, will be replaced each year. The annual maintenance costs are estimated to be approximately \$100 per system (10% of the average cost of the system).

Annual Replacement cost:

7 mines x 2 recording systems x 0.10 x \$1,000	= \$1,400
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Annual maintenance cost:

7 mines x 2 recording systems (1 system per fan) x \$100 per system	= <u>\$1,400</u>
Total Annual Cost	= \$2,800

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.

No Federal inspection costs have been associated specifically for this information collection. The examination of these records is just one aspect of an MSHA inspection. As mentioned in response to Item 1, above, under Section 103(a) of the Mine Act, inspections of the entire mine are required 4 times a year for underground mines and twice a year for surface mines.

15. Explain the reasons for any program changes or adjustments reported in Items 13 or 14 of the OMB Form 83-I.

Respondents: There has been an increase of 1 respondent (from 6 to 7). This is due to an increase in the Agency estimate of the number of mines affected.

Responses: There has been an increase of 2,970 responses (from 3,960 to 6,930). This is due to an increase in the Agency estimate of the number of mines affected and the addition of the burden for a supervisor to certify the inspection by countersigning.

Burden Hours: There has been an increase of 406 burden hours (from 1,980 to 2,386). This is due to the addition of the burden for a supervisor to certify the inspection by countersigning.

Cost: There has been an increase in annual costs of \$1,600 (from \$1,200 to \$2,800). This is due to an increase in the Agency estimate of the number of mines affected as well as the addition of annual replacement costs for the pressure recording devices. Even though the cost to replace the pressure recording devices had not been previously included, MSHA has determined that they are necessary to perform the collection of information and therefore the cost should be included.

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

The results from this information collection will not be published.

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.

There are no forms associated with this collection. Therefore, MSHA is not seeking approval to not display the expiration date for OMB approval of the information collection.

18. Explain each exception to the certification statement identified in Item 19, "Certification for Paperwork Reduction Act Submissions," of OMB Form 83-I.

There are 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.

Federal Mine Safety & Health Act of 1977 (Mine Act)

MANDATORY SAFETY AND HEALTH STANDARDS

SEC. 101. (a) The Secretary shall by rule in accordance with procedures set forth in this section and in accordance with section 553 of title 5, United States Code (without regard to any reference in such section to sections 556 and 557 of such title), develop, promulgate, and revise as may be appropriate, improved mandatory health or safety standards for the protection of life and prevention of injuries in coal or other mines.

(1) Whenever the Secretary, upon the basis of information submitted to him in writing by an interested person, a representative of any organization of employers or employees, a nationally recognized standards-producing organization, the Secretary of Health, Education, and Welfare, the National Institute for Occupational Safety and Health, or a State or political subdivision, or on the basis of information developed by the Secretary or otherwise available to him, determines that a rule should be promulgated in order to serve the objectives of this Act, the Secretary may request the recommendation of an advisory committee appointed under section 102(c). The Secretary shall provide such an advisory committee with any proposals of his own or of the Secretary of Health, Education, and Welfare, together with all pertinent factual information developed by the Secretary or the Secretary of Health, Education, and Welfare, or otherwise available, including the results of research, demonstrations, and experiments. An advisory committee shall submit to the Secretary its recommendations regarding the rule to be promulgated within 60 days from the date of its appointment or within such longer or shorter period as may be prescribed by the Secretary, but in no event for a period which is longer than 180 days. When the Secretary receives a recommendation, accompanied by appropriate criteria, from the National Institute for Occupational Safety and Health that a rule be promulgated, modified, or revoked, the Secretary must, within 60 days after receipt thereof, refer such recommendation to an advisory committee pursuant to this paragraph, or publish such as a proposed rule pursuant to paragraph (2), or publish in the Federal Register his determination not to do so, and his reasons therefor. The Secretary shall be required to request the recommendations of an advisory committee appointed under section 102(c) if the rule to be promulgated is, in the discretion of the Secretary which shall be final, new in effect or application and has significant economic impact.

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INSPECTIONS, INVESTIGATIONS, AND RECORDKEEPING?

SEC. 103. (a) Authorized representatives of the Secretary or the Secretary of Health, Education, and Welfare shall make frequent inspections and investigations in coal or other mines each year for the purpose of (1) obtaining, utilizing, and disseminating information relating to health and safety conditions, the causes of accidents, and the causes of diseases and physical impairments originating in such mines, (2) gathering information with respect to mandatory health or safety standards, (3) determining whether an imminent danger exists, and (4) determining whether there is compliance with the mandatory health or safety standards or with any citation, order, or decision

issued under this title or other requirements of this Act. In carrying out the requirements of this subsection, no advance notice of an inspection shall be provided to any person, except that in carrying out the requirements of clauses (1) and (2) of this subsection, the Secretary of Health, Education, and Welfare may give advance notice of inspections. In carrying out the requirements of clauses (3) and (4) of this subsection, the Secretary shall make inspections of each underground coal or other mine in its entirety at least four times a year, and of each surface coal or other mine in its entirety at least two times a year. The Secretary shall develop guidelines for additional inspections of mines based on criteria including, but not limited to, the hazards found in mines subject to this Act, and his experience under this Act and other health and safety laws. For the purpose of making any inspection or investigation under this Act, the Secretary, or the Secretary of Health, Education, and Welfare, with respect to fulfilling his responsibilities under this Act, or any authorized representative of the Secretary or the Secretary of Health, Education, and Welfare, shall have a right of entry to, upon, or through any coal or other mine. ...

(h) In addition to such records as are specifically required by this Act, every operator of a coal or other mine shall establish and maintain such records, make such reports, and provide such information, as the Secretary or the Secretary of Health, Education, and Welfare may reasonably require from time to time to enable him to perform his functions under this Act. The Secretary or the Secretary of Health, Education, and Welfare is authorized to compile, analyze, and publish, either in summary or detailed form, such reports or information so obtained. Except to the extent otherwise specifically provided by this Act, all records, information, reports, findings, citations, notices, orders, or decisions required or issued pursuant to or under this Act may be published from time to time, may be released to any interested person, and shall be made available for public inspection.

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30 CFR Part 57—SAFETY AND HEALTH STANDARDS – UNDERGROUND METAL
AND NONMETAL MINES

Subpart T – Safety Standards for Methane in Metal and Nonmetal Mines
Ventilation

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

Main fans shall be--

- (a) Provided with a pressure-recording system; and
- (b) Inspected daily while operating if persons are underground. Certification of inspections shall be made by signature and date. Certifications and pressure recordings shall be retained for at least one year and made available to an authorized representative of the Secretary.