

Supporting Statement

30 CFR 75.310, 75.312, 75.342, 75.351, 75.360, 75.361, 75.362, 75.363, 75.364, 75.370, 75.371 and 75.382 - Ventilation Plans, Tests, and Examinations in Underground Coal Mines

Final Rule: Examinations of Work Areas in Underground Coal Mines for Violations of Mandatory Health or Safety Standards

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 101(a) of the Federal Mine Safety and Health Act of 1977 (the Mine Act), the Secretary may 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. In addition, Section 303 requires that all coal mines be ventilated by mechanical ventilation equipment installed and operated in a manner approved by an authorized representative of the Secretary and such equipment be examined daily and a record be kept of such examination.

Underground coal mines usually present harsh and hostile working environments. The ventilation system is the most vital life support system in underground mining and a properly operating ventilation system is essential for maintaining a safe and healthful working environment. Lack of adequate ventilation in underground mines has resulted in fatalities from asphyxiation and explosions.

An underground mine is a maze of tunnels that must be adequately ventilated with fresh air to provide a safe environment for miners. Methane is liberated from the strata, and noxious gases and dusts from blasting and other mining activities may be present. The explosive and noxious gases and dusts must be diluted, rendered harmless, and carried to the surface by the ventilating currents. Sufficient air must be provided to maintain the level of respirable dust at or below 2 milligrams per cubic meter of air and air quality must be maintained in accordance with MSHA standards. Mechanical ventilation equipment of sufficient capacity must operate at all times while miners are in the mine. Ground conditions are subject to frequent changes, thus sufficient tests and examinations are necessary to ensure the integrity of the ventilation system and to detect any changes that may require adjustments in the system. Records of tests and

examinations are necessary to ensure that the ventilation system is being maintained and that changes which could adversely affect the integrity of the system or the safety of the miners are not occurring. These examination, reporting and recordkeeping requirements of §§ 75.310, 75.312, 75.342, 75.351, 75.360 through 75.364, 75.370, 75.371, and 75.382 also incorporate examinations of other critical aspects of the underground work environment such as roof conditions and electrical equipment which have historically caused numerous fatalities if not properly maintained and operated.

MSHA is promulgating a final rule, entitled "Examinations of Work Areas in Underground Coal Mines for Violations of Mandatory Health or Safety Standards," revising §§ 75.360 through 75.364. The final rule includes new information collection requirements that add to the existing burden and costs of the information collection package for OMB control number 1219-0088.

The final rule will require operators to identify, in addition to hazardous conditions under the existing standards, violations of nine specific mandatory health or safety standards, covering ventilation, methane, roof control, combustible materials, rock dust, guarding, and other safeguards. The nine standards represent the conditions or practices that, if uncorrected, present the greatest unsafe conditions and the most serious risks to miners. The final rule will also require that the mine operator record and correct all violations found during these examinations.

Final § 75.360 adds a requirement that mine operators find and record any violation of nine specific mandatory health or safety standards found on a preshift examination along with the corrective actions taken. The revisions to the standards for supplemental (§ 75.361) and on-shift (§ 75.362) examinations may result in new recordkeeping requirements under § 75.363 if a violation of one of the nine mandatory health or safety standards is found. Recordkeeping for the amendments to §§ 75.361 and 75.362 is required under § 75.363. Final § 75.363 requires operators to record any violations of the nine mandatory health or safety standards found on supplemental and on-shift examinations and any corrective actions taken. Final § 75.364 requires operators to record any violations of the nine mandatory health or safety standards found during a weekly examination along with the corrective actions taken.

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.

These records would be used by coal mine operators, miners, and state and federal mine inspectors. The records would provide notice to mine management and miners on the oncoming shift of mine conditions, identify hazards and violations of health or safety standards on working sections during the previous shift, and verify that proper ventilation is being maintained.

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.

Mine operators may use a computer to satisfy the recordkeeping requirements of these standards. Also, a computer-based main mine fan monitoring system can be used to reduce the required examination of the main mine fan from daily to weekly, thus reducing the associated recordkeeping burden.

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.

MSHA knows of no other Federal or State reporting requirements that would duplicate the reporting requirements contained in this final rule. The records are the results of tests and examinations conducted at individual mines by the mine operator. Similar examinations, tests, and records required by more than one section of Subpart D of 30 CFR Part 75 can be conducted simultaneously. Also, where similar tests and examinations are required by both State agencies and MSHA, the tests are conducted simultaneously and one record is accepted by both agencies. The agency has clarified that state approved books are acceptable for records required by MSHA.

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 does not have a significant impact on small businesses or other small entities. However, MSHA has made available various sources of information on our web site, such as "Technical Assistance," "Best Practices," and "Accident Prevention" to assist with compliance.

The information collection provisions of the final standards apply to all operations, both large and small. Congress intended that the Secretary enforce the law at all mining operations within its jurisdiction regardless of size and that information collection and recordkeeping requirements be consistent with efficient and effective enforcement of the Mine Act. [See Rep. No. 181, 95th Cong., 1st Sess. 28 (1977)]. Section 103(e) of the Mine Act directs the Secretary of Labor not to impose an unreasonable burden on small businesses when obtaining any information under the Act. Accordingly, MSHA takes this into consideration when developing regulatory requirements.

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

Because mining conditions are constantly changing, miners could be exposed to hazards or violations of health and safety standards that develop as mining progresses. MSHA believes that the recordkeeping requirements for ventilation tests and examinations and violations of health and safety standards observed are the minimum necessary to ensure that mines are safe and adequately ventilated. Reduction in these requirements may result in the development of unsafe conditions, thus jeopardizing miners. Section 101(a)(9) of the Mine Act prohibits the agency from reducing the protection given miners by any existing standard. The agency has clarified that once a ventilation plan is approved, the mine operator need only to submit the revised pages or sketches of the plan when proposing revisions unless the District Manager has requested, in writing, that a fully revised plan be submitted.

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's confidentiality to the extent permitted by law.**

Conditions in underground coal mines change as mining progresses. Ventilation system and methane and dust control plans are statutory requirements, some of which are required to be recorded and/or reported more frequently than quarterly.

The mine operator is required to conduct examinations at various intervals in accordance with existing regulations. Under the Mine Act, violations of mandatory health and safety standards are required to be reported continually as they occur and are observed.

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

8. If applicable, provide a copy and identify the data and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. 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 proposed rule on December 27, 2010 (75 FR 81165) "Examinations of Work Areas in Underground Coal Mines for Violations of Mandatory Health or Safety Standards" that included a summary of the paperwork burdens in the proposed requirements. The comment period closed August 1, 2011.

In general, a few commenters were concerned that under the proposal, recordkeeping requirements would increase dramatically. One specific commenter stated that the recordkeeping will require additional personnel on each shift, 7 days per week and, thus, add four people at an annual cost of \$400,000 per mine with wages and benefits. MSHA estimated additional time for identifying, correcting, and recording violations of nine standards found during preshift, supplemental, on-shift, and weekly mine examinations. Out of the additional time for examining for violations, MSHA estimates that an average of 3 minutes (0.05 hr) will be for recording the violations found and the corrective actions taken. MSHA has determined that requiring examiners to look for violations of nine standards during required examinations and recording the violations found and corrective actions taken, will increase the burden on operators, but will not require additional examiners.

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

MSHA provides no payments or gifts to the respondents identified in this collection.

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. Records are maintained by the mine operator and reviewed by MSHA inspectors during routine

inspections.

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 14.**

With promulgation of the final rule for “Examinations of Work Areas in Underground Coal Mines for Violations of Mandatory Health or Safety Standards,” several provisions in this supporting statement have changed. The number of mines affected and the way that mine size is delineated has also changed. Previously this supporting statement had listed mines as small and large, MSHA has updated the way these size categories are listed based on the number of employees. Mines with 1-19 employees, 20-500 employees and 501+ employees are the new size categories. Previously this supporting statement had included the burden hours and cost for the exams themselves, however, MSHA has determined that examinations under these standards do not constitute paperwork burden that should be counted here. Only the relevant paperwork associated with the exams, such as making a record or signing will be included in this update.

The following estimation of burden hours is based on MSHA's records and mine ventilation experience of Coal Mine Inspectors under the existing standards. There are approximately 549 underground coal mines (172 mines with 1-19 employees, 366 mines with 20-500 employees and 11 mines with more than 501 employees) affected by this final rule. MSHA's records show that on the average there is 1 fan, 1 working section and 1 shift for mines with 1-19 employees; 1.5 fans, 2.5 working sections and 2 shifts per day for mines with 20-500 employees; 1.5 fans, 2.5 working sections and 3 shifts per day for mines with 501+ employees. There are an average of 200 working days in mines with 1-19 employees; 300 working days in mines with 20-500 employees; 350 working days in mines with 501+ employees. All mines work an average of 50 weeks per year. However, the burden hour estimates are based on the total number of weeks fans operate yearly, rather than on the average work weeks.

30 CFR 75.310 - Installation of Main Mine Fans. Each mine is required to be ventilated by one or more main mine fans. This section sets forth requirements and specifications for the installation of main mine fans. Section 75.310(a)(4) requires that each main mine fan be equipped with a pressure recording device, which may be a part of a fan monitoring system, and that the resulting records be maintained for one year. The record, a pressure recording chart, will be generated an average of 50 weeks per year at mines with 1-19 employees and every week (52 weeks) at mines with 20-500 employees and mines with 501+ employees. MSHA estimates that it takes 7 minutes (0.1166 hour) per week to generate and maintain the record for each fan. A miner earning \$36.92 per hour typically performs this task.

Burden Hour

172 mines x 1 fan x 50 weeks x 0.1166 hour	=	1,003 hours
366 mines x 1.5 fans x 52 weeks x 0.1166 hour	=	3,329 hours
11 mines x 1.5 fans x 52 weeks x 0.1166 hour	=	<u>100 hours</u>
TOTAL	Burden Hour	= 4,432 hours

Burden Hour Cost

4,432 hours x \$36.92 per hour	=	\$163,629
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30 CFR 75.312 - Main Mine Fan Examinations. Section 75.312(a) and (b) require that examinations be conducted daily on main mine fans not using a monitoring system to ensure electrical and mechanical reliability and every 7 days on main mine fans where monitoring systems are used. Fan examinations are not required on days when no one enters the mine. Although production may not occur, persons enter the mine for maintenance and examinations 240 days per year at mines with 1-19 employees, 365 days per year at mines with 20-500 employees and 365 days at mines with 501+ employees.

Section 75.312(f)(1) requires that persons making main mine fan examinations certify by date and initials that the examinations were made. The fan examination certification

time is estimated at 1 minute (0.02 hours). A miner earning \$36.92 per hour typically performs this task. There are 45 mines where fan monitoring systems are used and data from the system must be reviewed and certified daily, taking 5 minutes (0.0833 hours).

Burden Hour

172 mines x 240 days x 0.02 hours	=	826 hours
366 mines x 365 days x 0.02 hours	=	2,672 hours
11 mines x 365 days x 0.02 hours	=	80 hours
45 mines (with monitoring systems) x 365 days x 0.0833 hours	=	<u>1,368 hours</u>
TOTAL		4,946 hours

Burden Hour Cost

4,946 hours x \$36.92 per hour	=	\$182,606
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Section 75.312(c) requires that the automatic fan signal device for each main mine fan be tested at least once every 31 days. Section 75.312(d) requires that automatic closing doors in multiple main mine fan systems be tested at least once every 31 days. A record of these tests is required under 75.312(g)(3), taking 5 minutes (0.0833 hours) per mine, 12 times yearly. This record can be performed by a miner earning \$36.92 per hour.

Burden Hour

Recordkeeping

549 mines x 12 monthly records x 0.0833 hours	=	549 hours
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Burden Hour Cost

549 hours x \$36.92	=	\$ 20,269
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Section 75.312(g)(1) requires a record of uncorrected defects found during an examination. Estimated recordkeeping is 5 minutes (0.0833 hour) and MSHA estimates that 306 mines will have uncorrected defects requiring a record each month.

Burden Hour

306 mines x 12 defects per year x 0.0833 hour	=	306 hours
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Burden Hour Cost

306 hours x \$36.92	=	\$ 11,298
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Section 75.312(g)(2)(ii) requires that mines using monitoring systems to monitor fan pressure must make a record concerning monitoring system malfunctions and electrical or mechanical deficiencies, and any sudden increase or loss in mine ventilating pressure. The recordkeeping is estimated to take 10 minutes (0.1666 hour).

Burden Hour:

Recordkeeping

$$45 \text{ mines (which use monitoring system)} \\ \times 12 \text{ defects per year} \times 0.1666 \text{ hour} = 90 \text{ hours}$$

Burden Hour Cost

$$90 \text{ hours} \times \$36.92 = \$3,323$$

30 CFR 75.342 - Methane Monitors. Operators must install MSHA approved methane monitors on all face cutting machines, continuous miners, longwall face equipment, loading machines, and other mechanized equipment used to extract or load coal within the working place. In addition, methane monitors must be maintained in permissible and proper operating condition and be calibrated with a known methane-air mixture at least once every 31 days. Under § 75.342(a)(4)(ii), operators are required to keep records of calibration tests. Records would be retained for one year from date of the test. Estimated time to make a record is 5 minutes (0.0833 hour) per month mines with 1-19 employees, and 8 minutes (0.1333 hours) for mines with 20-500 and 501+ employees. The record can be made by a certified/qualified electrician earning \$36.92 per hour.

Burden Hour

Recordkeeping

$$\begin{array}{rcl} 172 \text{ mines} \times 12 \text{ months} \times 0.0833 \text{ hours} & = & 172 \text{ hours} \\ 366 \text{ mines} \times 12 \text{ months} \times 0.1333 \text{ hours} & = & 585 \text{ hours} \\ 11 \text{ mines} \times 12 \text{ months} \times 0.1333 \text{ hours} & = & \underline{18 \text{ hours}} \\ \text{TOTAL} & = & \underline{\mathbf{775 \text{ hours}}} \end{array}$$

Burden Hour Cost

$$775 \text{ hours} \times \$36.92 = \$28,613$$

30 CFR 75.351(h) - Atmospheric Monitoring System. This section applies to mines (58 mines) performing monitoring which is permitted as an alternative compliance option in accordance with §§ 75.323(d)(1)(ii), 75.340(a)(2), and 75.362(f). If an alarm is generated by the system, the rule requires that an examination be conducted to determine its cause, § 75.351(d)(2), and a record must be made, § 75.351(h). The recordkeeping burden has been estimated for 58 mines averaging 7 alarm activations annually. MSHA estimates that it will take 2 minutes (0.033 hour) to make a record of the occurrence. The record can be made by a miner earning \$36.92 per hour.

Hour Burden

Recordkeeping:

$$58 \text{ mines} \times 7 \text{ alarms} \times 0.033 \text{ hours} = 13 \text{ hours}$$

Hour Burden Cost

$$13 \text{ hours} \times \$36.92 = \$480$$

30 CFR 75.360 - Preshift Examinations. Examinations are required to be conducted within 3 hours prior to the beginning of each shift. On average, a mine with 1-19 employees will conduct 1 examination per day, mines with 20- 500 employees will conduct 2 examinations per day and mines with 501+ employees will conduct 3 examinations per day. Under the existing standard, records are required to be made of the results of each preshift examination, any hazardous conditions and their locations that are encountered during the preshift examination. A record is also required to be made of the action taken to correct hazardous conditions found during the preshift examination. The recordkeeping activity is estimated to take about 15 minutes (0.25 hour) in mines with 1-19 employees and 30 minutes (0.50 hour) in mines with 20 or more employees. Records are typically made by examiners earning \$36.92 per hour. Countersigning by the mine foreman, earning \$84.69 per hour, is required and takes 5 minutes (0.0833 hours) for mines with 1-19 employees and 10 minutes (0.1666 hours) for mines with 20 or more employees.

Burden Hours

Recordkeeping:

172 mines x 1 exam x 200 days x 0.25 hours	=	8,600 hours
366 mines x 2 exams x 300 days x 0.5 hours	=	109,800 hours
11 mines x 3 exams x 350 days x 0.5 hours	=	<u>5,775 hours</u>
TOTAL	=	124,175 hours

Countersigning:

172 mines x 200 days x 0.0833 hours	=	2,866 hours
366 mines x 300 days x 0.1666 hours	=	18,293 hours
11 mines x 350 days x 0.1666 hours	=	<u>641 hours</u>
TOTAL	=	21,800 hours

TOTAL Burden Hours = 145,975 hours

Burden Hour Cost

Recordkeeping:

124,175 hours x \$36.92	=	\$4,584,541
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Countersigning:

21,800 hours x \$84.69	=	<u>\$ 1,846,242</u>
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TOTAL Burden Hour Cost = \$6,430,783

This provision has changed due to the final rule for “Examinations of Work Areas in Underground Coal Mines for Violations of Mandatory Health or Safety Standards.” Presented below are the additional burden hours and cost for the final rule. Final § 75.360 requires operators to record not only hazards, but also violations of the nine mandatory health or safety standards found during these examinations. The nine standards represent the conditions or practices that, if uncorrected, present the greatest unsafe conditions and the most serious risks to miners. The final rule also requires that operators record the corrective actions taken. MSHA estimates that it would take a certified examiner an average of 3 minutes (0.05 hrs.) out of the total time needed to

perform the examination to record the violations along with any corrective actions taken. An examiner conducting a preshift exam earns a supervisory wage of \$84.69 per hour (includes benefits). MSHA's estimates of underground coal operators' annual burden hours and related costs are presented below.

Burden Hours

Recordkeeping:

173 mines x 1 exam x 200 days x 0.05 hrs.	=	1,720 hrs.
366 mines x 2 exams x 300 days x 0.05 hrs.	=	10,980 hrs.
11 mines x 3 exams x 350 days x 0.05 hrs.	=	<u>578 hrs.</u>
TOTAL Burden Hour Cost	=	13,278 hrs.

Burden Costs

13,278 hrs. x \$84.69 wage rate	=	\$1,124,514
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30 CFR 75.361 - Supplemental Examinations. The existing rule requires a certified person to make a supplemental examination for hazardous conditions before any person enters an area of the mine which has not been preshift examined. This section has no explicit recordkeeping requirement, but if a hazard is found [or a violation of one or more of the nine specific health or safety standards identified in the new final rule] then a record must be kept under § 75.363. The burden for § 75.363 is discussed below.

30 CFR 75.362 - On-Shift Examinations. The recordkeeping requirement for this section has been transferred to 75.363.

30 CFR 75.363 - Hazardous conditions; posting, correcting and recording. The existing rule requires a record of hazardous conditions found, including any found during §§ 75.361 and 75.362 examinations, must be recorded along with corrective actions taken to abate the conditions. Also, under § 75.363, a record is required for mines for any hazardous conditions found during the examination after any unintentional fan stoppages lasting greater than 15 minutes. This record must be countersigned by the mine foreman. The time to record a hazard is estimated to be 5 minutes (0.0833 hour), and 3 minutes (0.05 hours) are needed to countersign the record. The record can be made by a person earning \$36.92 per hour and signed by the mine foreman estimated to earn \$84.69 per hour. It is estimated that 100 hazards per year will be recorded at large mines and 50 hazards per year will be recorded in small mines.

Burden Hours

Recordkeeping Time:

173 mines x 50 hazards per yr. x 0.0833 hrs.	=	721 hours
366 mines x 100 hazards per yr. x 0.0833 hrs.	=	3,049 hours
11 mines x 100 hazards per yr. x 0.0833 hrs.	=	<u>92 hours</u>
TOTAL	=	3,862 hours

Countersigning Time:

173 mines x 50 hazards per yr. x 0.05 hrs.	=	433 hours
366 mines x 100 hazards per yr. x 0.05 hrs.	=	1,830 hours
11 mines x 100 hazards per yr. x 0.05 hrs.	=	<u>55 hours</u>
TOTAL	=	2,318 hours

TOTAL Burden Hours = 6,180 hours

Burden Hour Cost

Recordkeeping

3,862 hours x \$36.92 = \$142,585

Countersigning

2,318 hours x \$84.69 = \$193,311

TOTAL Burden Hour Cost = \$335,896

This provision has changed due to the “Examinations of Work Areas in Underground Coal Mines for Violations of Mandatory Health or Safety Standards” final rule. Final § 75.363 requires operators to record any violations of nine mandatory health or safety standards found on supplemental and on-shift examinations and any corrective actions taken. The nine standards represent the conditions or practices that, if uncorrected, present the greatest unsafe conditions and the most serious risks to miners. The final supplemental (§ 75.361) and on-shift (§ 75.362) standards contain new recordkeeping requirements if a violation of any of nine mandatory health or safety standards that represent the conditions or practices that, if uncorrected, present the greatest unsafe conditions and the most serious risks to miners is found. During FY 2005 through 2009, MSHA inspectors found an annual average of 22,062 violations of the nine standards MSHA believes are most likely to be identified on preshift, supplemental, on-shift, and weekly examinations. Because conditions resulting in these violations can occur and require corrective action multiple times during the year (e.g., insufficient rock dust), MSHA multiplied the 22,062 violations found by MSHA inspectors by a factor of 1.5 to arrive at an estimated 33,093 violations that could be found by mine examiners. MSHA assumes that half of these violations, 16,547 violations, would be identified on the preshift and weekly examinations and the other half would be identified on supplemental and on-shift examinations.

MSHA estimates that 80 percent of these (13,237 violations) would be found on the on-shift examinations and 20 percent (3,309 violations) would be found on the supplemental examinations. MSHA estimates that it would take 3 minutes (0.05 hrs.) to record any violations identified and the corrective actions taken. Supervisors earning \$84.69 an hour perform on-shift exams and certified examiners earning \$36.92 perform supplemental exams.

MSHA’s estimates of underground coal operators’ annual burden hours and related costs are presented below.

Burden Hours

• 13,237 violations x 0.05 hrs.	=	662 hrs.
• 3,309 violations x 0.05 hrs.	=	165 hrs.
Total Hours	=	827 hrs.

Burden Costs

• 662 hrs. x \$84.69 wage rate	=	\$56,065
• 165 hrs. x \$36.92 wage rate	=	\$6,092
Total burden cost	=	\$62,157

30 CFR 75.364 - Weekly Examinations. The time required to make the record is estimated to be 35 minutes (0.58 hour) in mines with 1-19 employees and 60 minutes (1.0 hour) in mines with 20 or more employees. Records are completed by examiners earning \$36.92 per hour. The time needed to review and countersign the record by the mine foreman (\$84.69 per hour) is 5 minutes (0.0833 hours) at mines with 1-19 employees and 10 minutes (0.1666 hours) at mines with 20 or more employees.

Burden Hours

Recordkeeping Time:

172 mines x 50 weeks x 0.58 hours	=	4,988 hours
366 mines x 50 weeks x 1.0 hours	=	18,300 hours
11 mines x 50 weeks x 1.0 hours	=	<u>550 hours</u>
TOTAL	=	23,838 hours

Countersigning

172 mines x 50 weeks x 0.0833 hours	=	716 hours
366 mines x 50 weeks x 0.1666 hours	=	3,049 hours
11 mines x 50 weeks x 0.1666 hours	=	<u>92 hours</u>
TOTAL	=	3,857 hours

TOTAL Burden Hours = 27,695 hours

Burden Hour Cost

Recordkeeping		
23,838 hours x \$36.92	=	\$880,099

Countersigning

3,857 hours x \$84.69	=	<u>\$326,649</u>
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TOTAL Burden Hour Cost = \$1,206,748

This provision has changed due to the "Examinations of Work Areas in Underground Coal Mines for Violations of Mandatory Health or Safety Standards" final rule. Final § 75.364 requires operators to conduct examinations every seven days to record not only hazards, but also violations of nine mandatory health or safety standards found along with the corrective actions taken. The nine standards represent the conditions or

practices that, if uncorrected, present the greatest unsafe conditions and the most serious risks to miners. MSHA estimates that it would take a certified examiner 3 minutes (0.05 hrs.) out of the total time needed to perform the examinations to record violations along with any corrective actions taken. An examiner conducting these examinations earns a non-supervisory wage of \$36.92 per hour (includes benefits). MSHA also estimates that, on average, mines operate for 50 weeks out of the year.

Burden Hours

• 549 mines x 50 weeks x 0.05 hrs. = 1,373 hrs.

Burden Costs

• 1,373 hrs. x \$36.92 wage rate = \$50,691

30 CFR 75.370 - Mine Ventilation Plan Submission and Approval. The mine operator must submit a proposed ventilation plan in writing to the district manager for approval and that plan must be reviewed by both the mine operator and MSHA every six months. However, once a ventilation plan is approved, the operator needs to submit only the revised pages, sketches, and drawings of the plan when proposing revisions, unless the district manager requests in writing that the mine operator submit a new fully revised plan. The operator must update the plan as often as necessary to ensure that the plan is suitable to current conditions in the mine.

The mine operator must notify the representative of the miners of any proposed and approved ventilation plan or plan revision, and upon request, provide a copy. In addition, 3 copies of the mine ventilation map must be submitted annually including supplemental information listed in § 75.372 requiring one hour per copy. Plan updates and maps are prepared by a mine management professional earning \$84.69 per hour. Mines with 20 or more employees will submit 4 updates requiring 16 hours and 3 maps requiring 1 hour each. (Note: mines with 1-19 employees will generally contract out for this service. They will submit 2 updates annually requiring 4 hours and 3 maps requiring 1 hour each. Therefore, this is included in paragraph 13 below as a cost estimate.)

Burden Hours

Recordkeeping:

Plan updates:
 366 mines x 16 hours x 4 updates = 23,424 hours
 11 mines x 16 hours x 4 updates = 704 hours

Ventilation Map:

366 mines x 3 maps x 1 hour per map = 1,098 hours
 11 mines x 3 maps x 1 hour per map = 33 hours

Copying:

366 mines x 0.5 hours x 4 updates = 732 hours
 11 mines x 0.5 hours x 4 updates = 22 hours
TOTAL Burden Hours = 26,013 hours

Burden Hour Costs

Updates and Maps

26,013 hours x \$84.69 = \$2,203,041

Sections 75.371(r), (kk), (ll), (mm), (nn), (oo), and (pp) provide that certain information required in §§ 75.325 and 70.1900 be recorded in the mine operator's ventilation plan required by existing § 75.370. MSHA estimates that the time required to record the additional information in the existing ventilation plan will be 20 minutes (0.3333 hours) for 53 mines with 20 or more employees and 10 minutes (0.1667 hours) for 38 mines with 1-19 employees. The information is recorded by a mine supervisor earning \$84.69 per hour.

Recordkeeping Burden Hours in Existing § 75.370:

53 mines x (0.3333 hour) = 18 hours
38 mines x (0.1667 hour) = 6 hours
TOTAL Burden Hours = 24 hours

Recordkeeping Burden Hour Costs in § 75.370

18 hours x \$84.69 wage = \$ 1,524
6 hours x \$84.69 wage = \$ 508
TOTAL Burden Hour Cost = \$ 2,032

30 CFR 75.382 Mechanical Escape facilities

Section 75.382(c) requires that mines employing mechanical escape facilities must conduct a weekly examination to assure that the facility is in proper operating condition. Section 75.382(g) requires that the examiner certify by date, time, and initials, that the examination was conducted. It is estimated that 250 such facilities are in use at large mines operating 50 weeks per year and that the certification will take 1 minute (0.02 hrs.). The certification can be conducted by a miner earning \$36.92 per hour.

Burden Hours

250 facilities x 0.02 hours x 50 weeks = 250 hours

Burden Hour Cost

250 hours x \$36.92 = \$9,230

SUMMARY

30 CFR Section	Burden Hours	Burden Hour Cost
75.310	4,432	\$ 163,629
75.312	5,891	\$ 217,497
75.342	775	\$ 28,613
75.351(h)	13	\$ 480
75.360	159,253	\$ 7,555,297
75.363	7,007	\$ 397,053
75.364	29,068	\$ 1,257,439
75.370	26,013	\$ 2,203,041
75.371	24	\$2,032
75.382	250	\$ 9,230
TOTAL	232,726	11,834,311

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 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 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.**

The mine operator must submit a proposed ventilation plan in writing to the district manager for approval and that plan must be reviewed by both the mine operator and MSHA every six months. However, once a ventilation plan is approved, the operator needs to submit only the revised pages, sketches, and drawings of the plan when proposing revisions, unless the district manager requests in writing that the mine operator submit a new fully revised plan. The operator must update the plan as often as is necessary to ensure that the plan is suitable to current conditions in the mine.

Mines with 1-19 employees will generally contract out for this service. These mines will submit 2 updates annually requiring 4 hours and 3 maps requiring 1 hour each. Using

the same burden hour concept utilized for mines with 20 or more employees, the following burden cost is estimated for mines with 1-19 employees as follows:

Burden Hour Estimate:

Recordkeeping:

Plan updates:

172 mines x 4 hours x 2 updates = 1,376 hours

Ventilation Map:

172 mines x 3 maps x 1 hour per map = 516 hours

TOTAL = 1,892 hours

Copying:

172 mines x 0.5 hours x 2 updates = 172 hours

366 mines x 0.5 hours x 4 updates = 732 hours

11 mines x 0.5 hours x 4 updates = 22 hours

TOTAL = 926 hours

Burden Hour Costs

Updates and Maps 1,892 hours x \$84.69 = \$160,572

Copying

926 hours x \$26.00 = \$24,076

TOTAL COST = \$184,648

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

The review/inspection of ventilation plans, test results and examination in underground mines is just one aspect of the annual inspection. Complete inspections are required under section 103(a) of the Mine Act and are required 4 times a year for underground mines. The average time required to finish a complete inspection is 92.5 hours, and the average grade and salary of a mine inspector is GS 12/5, at \$40.66 per hour.

The recurring cost to the Federal Government each year is as follows: There are 549 mines reporting underground employment: 172 mines with 1-19 employees, 366 mines with 20-500 employees and 11 mines with 501+ employees. It is estimated that mines with 1-19 employees will average 3 revisions, or supplements (including the ventilation map) each year and mines with 20 or more employees will average 5 revisions, or supplements (including the ventilation map). On average MSHA personnel will take 3 hours to review submission. The recurring cost to the Federal Government is estimated as follows:

Reviews by MSHA:		
172 mines x 3 revisions x 3 hours/revision x \$40.66 hour	=	\$ 62,942
366 mines x 5 revisions x 3 hours/revision x \$40.66 hour	=	\$ 223,223
11 mines x 5 revisions x 3 hours/ revision X \$40.66 hour	=	\$ 6,709
TOTAL Cost	=	\$ 292,874

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

Respondents: There has been an increase of 92 in the number of Respondents (457 to 549). This is due to an increase in the number of underground coal mines.

Responses: There was an increase of 989,726 responses from the previously approved 1,374 responses to the current total request of 1,300,846. The large revision is due to the correction of an inadvertent underestimate of the previously approved 1,374 responses. An estimated increase of 309,746 responses is due to this final rule.

Hours: There was an overall decrease of 1,171,473 hours from the previously approved 1,388,721 hours. The current estimated total request of 232,726 hours includes an increase of 15,478 hours due to the new burden hours associated with this final rule. The revision in the estimate is due to a change in wages rates and an increase in the number of mines, as well as the removal of the burden hour costs for existing examinations requirements.

Costs: There was a decrease in estimated costs of \$29,979 from the previously approved \$214,627 to the current total estimate of \$184,648. This was due to a revision in the estimate of the number of mines and hourly wage rates. These changes were not due to the final rule.

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.

Not applicable; there are no forms associated with this information collection.

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

There are no certification exceptions identified with this information collection.

B. Collection of Information Employment Statistical Methods

The agency should be prepared to justify its decision not to use statistical methods in any case where such methods might reduce burden or improve accuracy of results. When Item 17 on the Form OMB 83-I is checked "Yes", the following documentation should be included in the Supporting Statement to the extent that it applies to the methods proposed:

1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection methods to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.

This collection of information does not employ statistical methods.

2. Describe the procedures for the collection of information including:

- **Statistical methodology for stratification and sample selection,**
- **Estimation procedure,**
- **Degree of accuracy needed for the purpose described in the justification,**
- **Unusual problems requiring specialized sampling procedures, and**
- **Any use of periodic (less frequently than annual) data collection cycles to reduce burden.**

3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.

4. Describe any tests of procedures or methods to be undertaken. Testing is

encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of tests may be submitted for approval separately or in combination with the main collection of information.

5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

The collection of this information does not employ statistical methods.

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.

INSPECTIONS, INVESTIGATIONS, AND RECORDKEEPING

SEC. 103(i)

Whenever the Secretary finds that a coal or other mine liberates excessive quantities of methane or other explosive gases during its operations, or that a methane or other gas ignition or explosion has occurred in such mine which resulted in death or serious injury at any time during the previous five years, or that there exists in such mine some other especially hazardous condition, he shall provide a minimum of one spot inspection by his authorized representative of all or part of such mine during every five working days at irregular intervals. For purposes of this subsection, "liberation of excessive quantities of methane or other explosive gases" shall mean liberation of more than one million cubic feet of methane or other explosive gases during a 24-hour period. When the Secretary finds that a coal or other mine liberates more than five hundred thousand cubic feet of methane or other explosive gases during a 24-hour period, he shall provide a minimum of one spot inspection by his authorized representative of all or part of such mine every 10 working days at irregular intervals. When the Secretary finds that a coal or other mine liberates more than two hundred thousand cubic feet of methane or other explosive gases during a 24-hour period, he shall provide a minimum of one spot inspection by his authorized representative of all or part of such mine every 15 working days at irregular intervals.

VENTILATION

303(a) All coal mines shall be ventilated by mechanical ventilation equipment installed and operated in a manner approved by an authorized representative of the Secretary and such equipment shall be examined daily and a record shall be kept of such examination.

* * * * *

This Final Rule's Information Collection Requirements to be Added to
Existing ICR in 1219-0088

30 CFR Part 75 – Mandatory Safety Standards – Underground Coal Mines, Subpart D –
Ventilation

Subpart D—Ventilation

§ 75.360 Preshift examination at fixed intervals.

(a) * * *

(2) Preshift examinations of areas where pumpers are scheduled to work or travel shall not be required prior to the pumper entering the areas if the pumper is a certified person and the pumper conducts an examination for hazardous conditions and violations of the mandatory health or safety standards referenced in paragraph (b)(11) of this section, tests for methane and oxygen deficiency, and determines if the air is moving in its proper direction in the area where the pumper works or travels. The examination of the area must be completed before the pumper performs any other work. A record of all hazardous conditions and violations of the mandatory health or safety standards found by the pumper shall be made and retained in accordance with § 75.363 of this part.

(b) The person conducting the preshift examination shall examine for hazardous conditions and violations of the mandatory health or safety standards referenced in paragraph (b)(11) of this section, test for methane and oxygen deficiency, and determine if the air is moving in its proper direction at the following locations:

* * * * *

(11) Preshift examinations shall include examinations to identify violations of the standards listed below:

(i) §§ 75.202(a) and 75.220(a)(1) – roof control;

(ii) §§ 75.333(h) and 75.370(a)(1) – ventilation, methane;

(iii) §§ 75.400 and 75.403 – accumulations of combustible materials and application of rock dust;

(iv) § 75.1403 – other safeguards, limited to maintenance of travelways along belt conveyors, off track haulage roadways, and track haulage, track switches, and other components for haulage;

(v) § 75.1722(a) – guarding moving machine parts; and

(vi) § 75.1731(a) – maintenance of belt conveyor components.

* * * * *

(e) The district manager may require the operator to examine other areas of the mine or examine for other hazards and violations of other mandatory health or safety standards found during the preshift examination.

* * * * *

(g) Recordkeeping. A record of the results of each preshift examination, including a record of hazardous conditions and violations of the nine mandatory health or safety standards and their locations found by the examiner during each examination, and of the results and locations of air and methane measurements, shall be made on the surface before any persons, other than certified persons conducting examinations required by this subpart, enter any underground area of the mine. The results of methane tests shall be recorded as the percentage of methane measured by the examiner. The record shall be made by the certified person who made the examination or by a person designated by the operator. If the record is made by someone other

than the examiner, the examiner shall verify the record by initials and date by or at the end of the shift for which the examination was made. A record shall also be made by a certified person of the action taken to correct hazardous conditions and violations of mandatory health or safety standards found during the preshift examination. All preshift and corrective action records shall be countersigned by the mine foreman or equivalent mine official by the end of the mine foreman's or equivalent mine official's next regularly scheduled working shift. The records required by this section shall be made in a secure book that is not susceptible to alteration or electronically in a computer system so as to be secure and not susceptible to alteration.

* * * * *

§ 75.363 Hazardous conditions and violations of mandatory health or safety standards; posting, correcting, and recording.

(a) Any hazardous condition found by the mine foreman or equivalent mine official, assistant mine foreman or equivalent mine official, or other certified persons designated by the operator for the purposes of conducting examinations under this subpart D, shall be posted with a conspicuous danger sign where anyone entering the areas would pass. A hazardous condition shall be corrected immediately or the area shall remain posted until the hazardous condition is corrected. If the condition creates an imminent danger, everyone except those persons referred to in section 104(c) of the Act shall be withdrawn from the area affected to a safe area until the hazardous condition is corrected. Only persons designated by the operator to correct or evaluate the hazardous condition may enter the posted area. Any violation of a mandatory health or safety standard found during a preshift, supplemental, on-shift, or weekly

examination shall be corrected.

(b) A record shall be made of any hazardous condition and any violation of the nine mandatory health or safety standards found by the mine examiner. This record shall be kept in a book maintained for this purpose on the surface at the mine. The record shall be made by the completion of the shift on which the hazardous condition or violation of the nine mandatory health or safety standards is found and shall include the nature and location of the hazardous condition or violation and the corrective action taken. This record shall not be required for shifts when no hazardous conditions or violations of the nine mandatory health or safety standards are found.

* * * * *

(e) Review of citations and orders. The mine operator shall review with mine examiners on a quarterly basis citations and orders issued in areas where preshift, supplemental, on-shift, and weekly examinations are required.

§ 75.364 Weekly examination.

* * * * *

(b) Hazardous conditions and violations of mandatory health or safety standards. At least every 7 days, an examination for hazardous conditions and violations of the mandatory health or safety standards referenced in paragraph (b)(8) of this section shall be made by a certified person designated by the operator at the following locations:

* * * * *

(8) Weekly examinations shall include examinations to identify violations of the standards listed below:

(i) §§ 75.202(a) and 75.220(a)(1) – roof control;

(ii) §§ 75.333(h) and 75.370(a)(1) – ventilation, methane;

(iii) §§ 75.400 and 75.403 – accumulations of combustible materials and application of rock dust; and

(iv) § 75.1403 – maintenance of off track haulage roadways, and track haulage, track switches, and other components for haulage;

(v) § 75.1722(a) – guarding moving machine parts; and

(vi) § 75.1731(a) – maintenance of belt conveyor components.

* * * * *

(d) Hazardous conditions shall be corrected immediately. If the condition creates an imminent danger, everyone except those persons referred to in section 104(c) of the Act shall be withdrawn from the area affected to a safe area until the hazardous condition is corrected. Any violation of the nine mandatory health or safety standards found during a weekly examination shall be corrected.

* * * * *

(h) Recordkeeping. At the completion of any shift during which a portion of a weekly examination is conducted, a record of the results of each weekly examination, including a record of hazardous conditions and violations of the nine mandatory health or safety standards found during each examination and their locations, the corrective action taken, and the results and location of air and methane measurements, shall be made. The results of methane tests shall be recorded as the percentage of methane measured by the examiner. The record shall be made by the person making the examination or a person designated by the operator. If made by a person other than the examiner, the examiner shall verify the record by initials and date by or at the end of

the shift for which the examination was made. The record shall be countersigned by the mine foreman or equivalent mine official by the end of the mine foreman's or equivalent mine official's next regularly scheduled working shift. The records required by this section shall be made in a secure book that is not susceptible to alteration or electronically in a computer system so as to be secure and not susceptible to alteration.

* * * * *