

1219-0088

**NOTE TO REVIEWER**

MSHA is requesting approval of the attached collection of information based upon the existing regulations.

In the spring of 2003 MSHA submitted an ICR for the Plan Verification proposed rule published on March 6, 2003. In response to public comment, MSHA stopped work on finalizing the proposed rule while research continues on the Personal Dust Monitor, a promising new technology for measuring coal mine respirable dust under development by the National Institute for Occupational Safety and Health. If a new rule is proposed incorporating the use of Personal Dust monitors, or if MSHA proceeds with the Plan Verification proposed rule at a later date, a revised ICR will be submitted for 1219-0088.

**SUPPORTING STATEMENT**

30 C.F.R. §§ 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

**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 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 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.

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 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.

**2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.**

The records give notice to mine management and the miners on the oncoming shift of mine conditions, identify hazards on working sections during the previous shift, and verify that proper ventilation is being maintained. The information is available to all interested persons at the mine to assure them that the

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integrity of the ventilation system is being provided for the miners. MSHA inspectors use the records to determine that tests and examinations, required by the regulations, are made.

**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.**

The regulations incorporate the option for electronic (computer-based) recordkeeping which has the capability of reducing certain facets of the recordkeeping burden and can improve the usefulness of information and can facilitate reviews of the records. 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.

**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 exists. 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 C.F.R. 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 83-1), describe any methods used to minimize burden.**

This information collection does not have a significant impact on a substantial number of small entities. However, MSHA has made available on our web-site various sources of information for example Ventilation safety ideas and tips under the Accident Prevention link.

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

MSHA believes that the recordkeeping requirements for ventilation tests and examinations are the minimum necessary to ensure that mines are safe and adequately ventilated. Reduction in these requirements may result in unsafe conditions developing, thus jeopardizing miners. Section 101(a)(9) of the Mine Act forbids the agency to reduce 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;

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- ! 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.

Ventilation system and methane and dust control plans are statutory requirements, some of which are recorded and/or reported more frequently than quarterly.

**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 C.F.R. 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 will publish a 60-day pre-clearance Federal Register notice soliciting public comments regarding the extension of this information collection.

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

MSHA has decided not to provide payments or gifts to respondents.

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**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.**

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 711 underground coal mines (283 small mines and 428 medium or large mines) affected by this rule. MSHA's records show that on the average there is 1 fan, 1 working section and 1 shift per small mine and 1.5 fans, 2.5 working sections and 2.5 shifts per large mine. There are an average of 160 working days in a small mine that works 40 weeks per year and 250 working days in a large mine that works 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 C.F.R. § 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 small mines and every week (52 weeks) at large mines. MSHA estimates that it takes 7 minutes (0.1166 hour)

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per week to generate and maintain the record for each fan. A miner earning \$28.66 per hour typically performs this task.

Hour Burden

283 small mines x 1 fan x 50 weeks		
x 0.1166 hour	=	1,650 hours
428 large mines x 1.5 fans x 52 weeks		
x 0.1166 hour	=	<u>3,893 hours</u>
TOTAL	=	<b>5,543 hours</b>

Hour Burden Cost

5,543 hours x \$28.66 per hour	=	<b>\$158,862</b>
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30 C.F.R. § 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 small mines and 365 days per year at large mines.

Where main mine fan monitoring systems are provided, 30 C.F.R. § 75.312(b) requires that data provided by the monitoring system be reviewed daily to ensure that the fan and monitoring system are operating properly. Reviews 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 small mines and 365 days per year at large mines. Section 75.312(b) also requires that the monitoring system be tested for proper operation and each main mine fan be examined every 7 days where monitoring systems are used.

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 and certification time is estimated at 15 minutes (0.25 hour). A miner earning \$28.66 per hour typically performs this task. At the 428 large mines where fan monitoring systems are used, data from the system must be reviewed and certified daily, taking 5 minutes (0.0833 hours). Also, the 22 mines using monitoring systems must examine the fan once a week, taking 15 minutes (0.25 hours).

Hour Burden

283 small mines x 1 fan x 240 days		
x 0.25 hour (without monitoring systems)	=	16,980 hours
428 large mines (without monitoring systems)		
x 1.5 fans x 365 days x 0.25 hour	=	58,583 hours
22 large mines (with monitoring systems)		
x 1.5 fans x 365 days x 0.0833 hours	=	1,003 hours
22 large mines (with monitoring systems)		
x 1.5 fans x 52 weeks x 0.25 hour	=	<u>429 hours</u>
TOTAL		<b>76,995 hours</b>

Hour Burden Cost

76,995 hours x \$28.66 per hour	=	<b>\$2,206,677</b>
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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. The tests for 75.312(c) and (d) can be done concurrently with the testing process taking 15 minutes (0.25 hours). A record of these tests is required under 75.312(g)(3), taking 5 minutes (0.0833 hours) per mine, 12 times yearly. These tasks can be performed by a miner earning \$28.66 per hour.

Hour Burden

Testing

283 small mines x 12 monthly tests		
x 0.25 hour	=	849 hours
428 lg. mines x 12 monthly tests		
x 0.25 hour	=	<u>1,284 hours</u>
TOTAL	=	2,133 hours

Hour Burden Cost

2,133 hours x \$28.66	=	\$61,132
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Hour Burden

Recordkeeping

283 small mines x 12 monthly records		
x 0.0833 hour	=	283 hours
428 lg. mines x 12 monthly records		
x 0.0833 hour	=	<u>428 hours</u>
TOTAL	=	711 hours

Hour Burden Cost

711 hours x \$28.66	=	\$ 20,377
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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 479 mines (161 small and 318 large mines) will have uncorrected defects requiring a record each month.

Hour Burden

161 small mines x 12 defects per year		
x 0.0833 hour	=	161 hours
318 large mines x 12 defects per year		
x 0.0833 hour	=	<u>318 hours</u>
TOTAL	=	479 hours

Hour Burden Cost

479 hours x \$28.66	=	\$ 13,728
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Section 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).

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Hour Burden:

Recordkeeping

22 large mines (which use monitoring system)  
x 12 defects per year x 0.1666 hour = 44 hours

Hour Burden Cost

44 hours x \$28.66 = \$1,261

**TOTAL = 80362 hours**

**TOTAL = \$2,303,175**

30 C.F.R. §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. On average, a small mine maintains 1.5 monitors and a large mine, three monitors. Examination time related to calibration of each methane monitor is 20 minutes (0.3333 hour) per month. 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 for recordkeeping for a small mine, and 8 minutes (0.1333 hours) for a large mine. The exam can be conducted and recorded by a certified/qualified electrician earning \$28.66 per hour.

Burden Hours

Examinations

283 sm. mines x 1.5 methane monitors x 12 month  
x 0.3333 hour = 1,698 hours

428 lg. mines x 3 methane monitors x 12 month  
x 0.3333 hour = 5,135 hours

TOTAL = 6,833 hours

Burden Hour Cost

6,833 hours x \$28.66 = \$195,834

Burden Hour

Recordkeeping

283 sm. mines x 12 months x 0.0833 hour = 283 hours

428 lg. mines x 12 months x 0.1333 hour = 685 hours

TOTAL = 968 hours

Burden Hour Cost

968 hours x \$28.66 = \$27,743

**TOTAL = 7,801 hours**

**Burden Hour Cost = \$223,577**

30 C.F.R. §75.351(h) - Atmospheric Monitoring System. This section applies to mines (60 mines) performing monitoring which is permitted as an alternative compliance option in accordance with

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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 xx mines averaging 7 alarm activations annually. MSHA estimates that it will take 30 minutes (0.5 hour) for the examination and 2 minutes (0.033 hour) to make a record of the occurrence. Monthly calibration of each sensor is required by 75.351(f), typically taking 1 person one full shift (8 hours). The examination and record can be made by a miner earning \$28.66 per hour.

Hour Burden

Examination:		
65 mines x 7 alarms x 0.5 hours	=	228 hours
Calibration:		
65 mines x 12 month x 8 hours	=	6,240 hours
Recordkeeping:		
65 mines x 7 alarms x 0.033 hours	=	<u>15 hours</u>
TOTAL	=	<b>6,483 hours</b>

Hour Burden Cost

6,483 hours x \$28.66	=	<b>\$185,803</b>
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30 C.F.R. §75.360 - Preshift Examinations. Examinations are required to be conducted within 3 hours prior to the beginning of each shift. The examination time is 3 hours in a large mine and 2 hours in a small mine, including required certification within examined areas by date, time, and initials. On average, a small mine will conduct 1.5 examinations per day while a large will conduct 2.5 examinations per day. 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 30 minutes (0.50 hour) in a large mine and 15 minutes (0.25 hour) in a small mine. Examinations and records typically by examiners earning \$28.66 per hour. Countersigning by the mine foreman, earning \$58.96 per hour, is required and daily takes 5 minutes (0.0833 hours) for a small mine and 10 minutes (0.1666 hours) for a large mine.

Burden Hours

Examination:		
283 sm. mines x 1.5 exams x 160 days x 2 hours	=	135,840 hours
428 lg. mines x 2.5 exams x 250 days		
x 3 hours	=	<u>802,500 hours</u>
TOTAL	=	938,340 hours

Recordkeeping:		
283 sm. mines x 1.5 exams x 160 days x 0.25 hours	=	16,980 hrs
428 lg. mines x 2.5 exams x 250 days x 0.5 hours	=	<u>133,750 hrs</u>
TOTAL	=	150,730 hrs

Countersigning:		
283 sm. mines x 160 days x 0.0833 hours	=	3,772 hours
428 lg. mines x 250 days x 0.1666 hours	=	<u>17,826 hours</u>
TOTAL	=	21,598 hours

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**TOTAL = 1,110,668 hours**

Burden Hour Cost

Examination:

938,340 hours x \$28.66 = \$26,892,824

Recordkeeping:

150,730 hours x \$28.66 = \$4,319,922

Countersigning:

21,598 hours x \$58.96 = \$ 1,273,418

**TOTAL = \$32,486,164**

30 C.F.R. §75.361 - Supplemental Examinations. The 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. The examination time is estimated to take 30 minutes (0.5 hour). Within the examined area, the examiner is required to certify by date, time, and initials, that the examination was made. The time for certification is included in the examination time estimate. Records are not required under this section. If, however, a hazardous condition is found, a record would be required under 75.363.

Burden Hours

Examination Time:

283 sm. mines x 4 exams per yr. x 0.50 hour = 566 hours

428 lg. mines x 24 exams per yr. x 0.50 hour = 5,136 hours

**TOTAL = 5,702 hours**

Burden Hour Cost

5,702 hours x \$28.66 = **\$163,419**

30 C. F. F. §75.362 - On-shift Examinations. The recordkeeping requirement for this section has been transferred to 75.363 and applies if a hazardous condition is discovered during the examination. At least once during each coal producing shift, or more often if necessary for safety, a certified person is required to conduct an on-shift examination of each section where anyone is assigned to work during the shift and any area where mechanized mining equipment is being installed or removed during the shift. The certified person must check for hazardous conditions and test for methane and oxygen deficiency and determine if the air is moving in its proper direction. Also included is the examination of belt conveyor haulageways in which belts are operated. An examination to assure compliance with the respirable dust control parameters specified in the mine ventilation plan is required by 75.362(a)(2). The examination time is estimated to take 40 minutes (0.667 hour) at a small mine and 45 minutes (0.75 hour) at a large mine. The examination time estimate includes time for certification by date, time and initials, which is required under the rule. The examination is performed by the shift supervisor earning \$58.96 per hour.

Burden Hours

Examination Time:

283 sm. mines x 1 working section x 1 shift  
x 160 days x 0.667 hours = 30,202 hours

428 lg. mines x 2.3 working section  
x 2.5 shifts x 250 days x 0.75 hours = 461,438 hours

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TOTAL = 491,640 hours

Burden Hours Cost

491,640 hours x \$58.96 = \$28,987,094

Section 75.363, Hazardous conditions; posting, correcting and recording. The 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 section 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 \$28.66 per hour and signed by the mine foreman estimated to earn \$58.96 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:

283 sm. mines x 50 hazards found per yr. x  
0.0833 hours = 1,179 hours

428 lg. mines x 100 hazards found per yr. x  
0.0833 hour = 3,565 hours

TOTAL = 4,744 hours

Countersigning Time:

283 sm. mines x 50 hazards found per yr. x  
0.05 hours = 708 hours

428 lg. mines x 100 hazards found per yr. x  
0.05 hour = 2,140 hours

= 2,848 hours

TOTAL = 7,592 hours

Burden Hour Cost

Recordkeeping

4,744 hours x \$28.66 = \$135,963

Countersigning

2,848 hours x \$58.96 = \$167,918

Total = \$303,881

30 C.F.R. §75.364 - Weekly Examinations. The weekly examination time is estimated to be 5.1 hours in a small mine and 10.2 hours in a large mine. Included in this exam time is the time for taking weekly ventilation air measurements. Also included is time necessary for the examiner to certify that the examination was made by leaving date, time, and initials at locations within the examined area. The time required to make the record is estimated to be 35 minutes (0.58 hour) in a small mine and 60 minutes (1.0 hour) in a large mine. Records are completed by examiners earnings \$28.66 per hour. The time needed to review and countersign the record by the mine foreman (\$58.96 per hour) is 5 minutes (0.0833 hours) at a small mine and 10 minutes (0.1666 hours) at a large mine.

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Burden Hours

Examination Time:

283 sm. mines x 40 weeks x 5.1 hours	=	57,732 hours
428 lg. mines x 50 weeks x 10.2 hours	=	<u>218,280 hours</u>
		276,012 hours

Recordkeeping Time:

283 sm. mines x 40 weeks x 0.58 hours	=	6,566 hours
428 lg. mines x 50 weeks x 1.0 hours	=	<u>21,400 hours</u>
		27,966 hours

Countersigning

283 sm. mines x 40 weeks x 0.0833 hours	=	943 hours
428 lg. mines x 50 weeks x 0.1666 hours	=	<u>3,565 hours</u>
		4,508 hours

TOTAL = **308,486 hours**

Burden Hour Cost

Examination and Recordkeeping

303,978 hours x \$28.66	=	\$8,712,009
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Countersigning

4,508 hours x \$58.96	=	\$ <u>265,792</u>
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TOTAL = **\$8,977,801**

30 C.F.R. §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 is 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 \$58.96 per hour and copying is performed by a clerical person earning \$20.39 per hour. A large mine will submit 4 updates requiring 16 hours and 3 maps requiring 1 hour each. (Note: A small mine will generally contract out for this service. The small mine operator 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:

428 lg. mines x 16 hours x 4 updates	=	27,392 hours
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Ventilation Map:  
428 lg. mines x 3 maps x 1 hour per map = 1,284 hours

Copying:  
428 lg. mines x 0.5 hours x 4 updates = 856 hours  
TOTAL = **29,532 hours**

Burden Hour Costs

Updates and Maps  
28,676 hours x \$58.96 = \$1,690,737

Copying  
856 hours x \$20.39 = \$ 17,454  
TOTAL = **\$1,708,191**

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) in a large mine and 10 minutes (0.1667 hours) in a small mine. The information is recorded by a mine supervisor earning \$54.92 per hour.

Recordkeeping Burden Hours in Existing § 75.370:

65 large mines x (0.3333 hour) = 22 hours  
46 small mines x (0.1667 hour) = 8 hours  
**30 hours**

Recordkeeping Burden Hour Costs in Existing § 75.370

22 hours x \$58.96 wage = \$ 1,297  
8 hours x \$58.96 wage = \$ 472  
**\$ 1,769**

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 300 such facilities are in use at large mines operating 50 weeks per year and that the weekly examination, including certification, will take 1 hour. The examination can be conducted by a miner at \$28.66 per hour.

Burden Hours

300 facilities x 1 hour x 50 weeks = **15,000 hours**

Burden Hour Cost

15,000 hours x \$28.66 = **\$429,900**

## SUMMARY

30 CFR Section	Burden Hours	Burden Hour Cost
75.310	5,543	\$ 158,862
75.312	80,362	\$ 2,303,175
75.342	7,801	\$ 223,577
75.351(h)	6,483	\$ 185,803
75.360	1,110,668	\$ 32,486,164
75.361	5,702	\$ 163,419
75.362	491,640	\$ 28,987,094
75.363	7,592	\$ 303,881
75.364	308,486	\$ 8,977,801
75.370	29,532	\$ 1,708,191
75.371	30	\$1,769
75.382	15,000	\$ 429,900
<b>TOTAL</b>	<b>2,068,839</b>	<b>\$ 75,929,636</b>

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.

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- ! 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.

**Section 75.363** To make the record of sampling results required by § 75.363, mine operators are required to purchase instantaneous gas analyzers that cost about \$2,000 per instrument. However all existing mines have obtained these devices. To account for new mines which will have to purchase these devices, an average life of 5 years for large mines and an average life for small mines of two years is used to estimate that 7 large mines will start-up annually and 23 small mines will open per year. The large mines will have two analyzers and the small mines will require one unit. The sampling devices will last 10 years, and costs are therefore annualized at 0.142. The devices need to be maintained and calibrated at a cost of \$780 per year.

Annualized Equipment Costs For Large Mines:

$$\$2,000 \times 7 \text{ large mines} \times 2 \text{ analyzers} \times 0.142 = \$ 3,976$$

Annual Calibration Costs For Large Mines:

$$\$780 \times 2 \text{ analyzers} \times 7 \text{ large mines} = \$ 10,920$$

Annualized Equipment Costs For Small Mines:

$$\$2,000 \times 23 \text{ small mines} \times 1 \text{ analyzer} \times 0.142 = \$ 6,532$$

Annual Calibration Costs For Small Mines:

$$\$780 \times 1 \text{ analyzer} \times 23 \text{ small mines} = \underline{\$ 17,940}$$
$$\underline{\$ 39,368}$$

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.

A small mine will generally contract out for this service. The small mine operator will submit 2 updates annually requiring 4 hours and 3 maps requiring 1 hour each. Using the same burden hour concept utilized for large mines the following burden cost is estimated for small mine operators as follows:

Cost Estimate:

Recordkeeping:

Plan updates:

$$283 \text{ sm. mines} \times 4 \text{ hours} \times 2 \text{ updates} = 2,264 \text{ hours}$$

Ventilation Map:

$$283 \text{ sm. mines} \times 3 \text{ maps} \times 1 \text{ hour per map} = \underline{849 \text{ hours}}$$

$$\text{TOTAL} = \underline{3,133 \text{ hours}}$$

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Copying:

283 sm. mines x 0.5 hours x 2 updates = 283 hours

Burden Hour Costs

Updates and Maps 3,133 hours x \$58.96 = \$184,722

Copying

283 hours x \$20.39 = \$ 63,882

**TOTAL COST** = **\$190,492**

**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.**

No new equipment is required in the future.

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 MOD 12/5, at \$58,376 per annum or \$27.97 per hour.

The recurring cost to the Federal Government each year is as follows: There are 711 active mines of which 283 are small mines and 428 are medium/large mines. It is estimated that small mines will average 3 revisions, or supplements (including the ventilation map) each year and large mines 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:

283 x 3 revisions x 3 hours/revision  
x \$27.97 hour = \$71,240

428 x 5 revisions x 3 hours/revision  
x \$27.97 hour = \$17,956,740  
\$18,027,980

**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 a decrease in the number of Respondents for 269 (980 to 711). This is due to a decrease in the number of underground coal mines.

**Responses:** There has been a 7,281 increase in the number of Responses (2,262,566 to 2,269,847). There was a very slight increase due to the merging of 1219-0119 into this ICR. The increase is primarily due to a difference in how the number of responses was calculated. MSHA feels that the 2,269,847 is a more accurate reflection of the number of responses.

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**Hours:** There was a decrease of 657,244 hours (2,726,083 to 2,068,839). This is due to two reasons. The decrease in the number of mines has a direct reflection on the number of hours and as a result of merging two ICRs 1219-0119 & 1219-0088, it was discovered there was a duplication of burden. This has been removed.

**Costs:** There has been a decrease of \$4 (\$194K to \$190K). This again, is due to the number of mines decreasing. However, because of the merging of the two ICRs 75.363 transferred a cost not previously accounted for in this package. This accounted for the slight decrease in costs.

**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.**

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