

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 (MSHA) 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

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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.

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 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 standards, 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-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 on our web-site various sources of information, such as "Technical Assistance," "Best Practices," and an "Accident Prevention" site. To assist with compliance, these provide tips and general information on various topics.

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 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;**

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- ! **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 required to be 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.

As required by the Paperwork Reduction Act of 1995, a Notice of Request for Extension of a Currently Approved Information Collection was published on January 12, 2010, Volume 75, No. 7, Page 1655. One comment was received and a copy of the Notice is attached.

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

No gifts or payments have been provided to respondents , and none are contemplated.

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 request for any information of a sensitive nature involved in this collection.

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 457 underground coal mines (183 small mines and 274 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 200 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) per week to generate and maintain the record for each fan. A miner earning \$33.57 per hour typically performs this task.

Hour Burden

183 small mines x 1 fan x 50 weeks			
	x 0.1166 hour	=	1,067 hours
274 large mines x 1.5 fans x 52 weeks			
	x 0.1166 hour	=	<u>2,492 hours</u>
TOTAL	Hour Burden	=	3,559

Hour Burden Cost

3,559 hours x \$33.57 per hour	=	\$119,476
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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.

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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 \$33.57 per hour typically performs this task. At the 274 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 45 mines using monitoring systems must examine the fan once a week, taking 15 minutes (0.25 hours).

Hour Burden

183 small mines x 1 fan x 240 days		
x 0.25 hour (without monitoring systems)	=	10,980 hours
274 large mines (without monitoring systems)		
x 1.5 fans x 365 days x 0.25 hour	=	37,504 hours
45 large mines (with monitoring systems)		
x 1.5 fans x 365 days x 0.0833 hours	=	2,052 hours
45 large mines (with monitoring systems)		
x 1.5 fans x 52 weeks x 0.25 hour	=	<u>878 hours</u>
TOTAL		51,414
	hours	

Hour Burden Cost

51,414 hours x \$33.57 per hour	=	\$1,725,968
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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 \$33.57 per hour.

Hour Burden

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Testing
183 small mines x 12 monthly tests
x 0.25 hour = 549 hours
274 large mines x 12 monthly tests
x 0.25 hour = 822 hours
TOTAL = 1,371 hours

Hour Burden Cost
1,371 hours x \$33.57 = \$46,024

Hour Burden
Recordkeeping
183 small mines x 12 monthly records
x 0.0833 hour = 183 hours
274 large mines x 12 monthly records
x 0.0833 hour = 274 hours
TOTAL = 457 hours

<u>Hour Burden Cost</u>		
457 hours x \$33.57	=	\$ 15,341

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 (102 small and 204 large mines) will have uncorrected defects requiring a record each month.

<u>Hour Burden</u>		
102 small mines x 12 defects per year		
x 0.0833 hour	=	102 hours
204 large mines x 12 defects per year		
x 0.0833 hour	=	<u>204 hours</u>
TOTAL	=	306 hours

<u>Hour Burden Cost</u>		
306 hours x \$33.57	=	\$ 10,272

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).

<u>Hour Burden:</u>		
Recordkeeping		
45 large mines (which use monitoring system)		
x 12 defects per year x 0.1666 hour	=	90 hours

<u>Hour Burden Cost</u>		
90 hours x \$33.57	=	\$3,021

TOTAL	Hour Burden	=	53,638
TOTAL	Hour Burden Cost	=	\$1,800,626

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, 3 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 \$33.57 per hour.

Burden Hours

Examinations

183 small mines x 1.5 methane monitors x 12 month		
x 0.3333 hour	=	1,098 hours
274 large mines x 3 methane monitors x 12 month		
x 0.3333 hour	=	<u>3,288 hours</u>
TOTAL	=	4,386 hours

Burden Hour Cost

4,386 hours x \$33.57	=	\$147,238
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Burden Hour

Recordkeeping

183 small mines x 12 months x 0.0833 hour	=	183
	hours	
274 large mines x 12 months x 0.1333 hour	=	<u>438</u>
	hours	
TOTAL	=	621 hours

Burden Hour Cost

621 hours x \$33.57	=	\$20,847
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TOTAL Burden Hours

= 5,007

TOTAL Burden Hour Cost

= \$168,085

30 C.F.R. §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 65 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 \$33.57 per hour.

Hour Burden

Examination:

58 mines x 7 alarms x 0.5 hours	=	203 hours
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Calibration:

58 mines x 12 month x 8 hours	=	5,568 hours
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Recordkeeping:

58 mines x 7 alarms x 0.033 hours	=	=	<u>13 hours</u>
TOTAL Burden Hours	=	5,784	

Hour Burden Cost

5,784 hours x \$33.57	=	\$194,169
TOTAL Burden Hour Cost		

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 are typically performed by examiners earning \$33.57 per hour. Countersigning by the mine foreman, earning \$84.70 per hour, is required and takes 5 minutes (0.0833 hours) for a small mine and 10 minutes (0.1666 hours) for a large mine daily.

Burden Hours

Examination:

183 small mines x 1.5 exams x 200 days x 2 hours	=	109,800 hours
274 large mines x 2.5 exams x 250 days x 3 hours	=	
<u>513,750 hours</u>		
TOTAL	=	623,550 hours

Recordkeeping:

183 small mines x 1.5 exams x 200 days x 0.25 hours	=	13,725 hours
274 large mines x 2.5 exams x 250 days x 0.5 hours	=	
		<u>85,625 hours</u>
TOTAL	=	99,350 hours

Countersigning:

183 small mines x 200 days x 0.0833 hours	=	3,049 hours
274 large mines x 250 days x 0.1666 hours	=	<u>11,412 hours</u>
TOTAL	=	14,461 hours

TOTAL	Burden Hours	=	737,361
<u>Burden Hour Cost</u>			
Examination:			
	623,550 hours x \$33.57	=	\$20,932,574
Recordkeeping:			
	99.350 hours x \$33.57	=	\$3,335,180
Countersigning:			
	14,461 hours x \$84.70	=	<u>\$ 1,224,847</u>
TOTAL	Burden Hour Cost	=	\$25,492,601

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.

<u>Burden Hours</u>			
Examination Time:			
	183 small mines x 4 exams per yr. x 0.50 hour	=	366
		hours	
	274 large mines x 24 exams per yr. x 0.50 hour	=	<u>3,288</u>
		hours	
TOTAL	Burden Hours	=	3,654
<u>TOTAL Burden Hour Cost</u>			
	3,654 hours x \$33.57	=	\$122,665

30 C.F.R. §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 \$84.70 per hour.

Burden Hours

Examination Time:

183 small mines x 1 working section x 1 shift x 200 days x 0.667 hours	=	24,412
	hours	
274 large mines x 2.5 working section x 2.5 shifts x 250 days x 0.75 hours	=	<u>321,094</u>
	hours	
TOTAL Burden Hours	=	345,506

TOTAL Burden Hour Cost

345,506 hours x \$84.70	=	\$29,264,358
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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 \$33.57 per hour and signed by the mine foreman estimated to earn \$84.70 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:

183 small mines x 50 hazards found per yr. x 0.0833 hours	=	762 hours
274 large mines x 100 hazards found per yr. x 0.0833 hour	=	<u>2,282</u>
	hours	
TOTAL	=	3,044 hours

Countersigning Time:

183 sm. mines x 50 hazards found per yr. x 0.05 hours	=	458 hours
274 large mines x 100 hazards found per yr. x 0.05 hour	=	<u>1,370 hours</u>

TOTAL	Burden Hours	=	4,872
<u>Burden Hour Cost</u>			
Recordkeeping	3,044 hours x \$33.57	=	\$102,187
Countersigning	1,828 hours x \$84.70	=	<u>\$154,832</u>
TOTAL Burden Hour Cost		=	\$257,019

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 \$33.57 per hour. The time needed to review and countersign the record by the mine foreman (\$84.70 per hour) is 5 minutes (0.0833 hours) at a small mine and 10 minutes (0.1666 hours) at a large mine.

Burden Hours

Examination Time:

183 small mines x 40 weeks x 5.1 hours	=	37,332
	hours	
274 large mines x 50 weeks x 10.2 hours	=	<u>139,740</u>
	hours	

177,072 hours

Recordkeeping Time:

183 small mines x 40 weeks x 0.58 hours	=	4,246
	hours	
274 large mines x 50 weeks x 1.0 hours	=	<u>13,700</u>
	hours	

17,946

hours

Countersigning

183 small mines x 40 weeks x 0.0833 hours	=	610
	hours	
274 large mines x 50 weeks x 0.1666 hours	=	<u>2,282</u>
	hours	

2,892

hours

TOTAL	Burden Hours	=	
	197,910		
<u>Burden Hour Cost</u>			
Examination and Recordkeeping	195,018 hours x \$33.57	=	\$6,546,754
Countersigning	2,892 hours x \$84.70	=	\$
	<u>244,952</u>		
TOTAL	Burden Hour Cost	=	
			\$6,791,706

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 \$84.70 per hour and copying is performed by a clerical person earning \$26.00 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:

274 large mines x 16 hours x 4 updates	=	
		17,536 hours

Ventilation Map:

274 large mines x 3 maps x 1 hour per map	=	822
	hours	

Copying:	274 large mines x 0.5 hours x 4 updates	=	<u>548</u>
		<u>hours</u>	
TOTAL	Burden Hours	=	18,906
 <u>Burden Hour Costs</u>			
	Updates and Maps		
	18,358 hours x \$84.70	=	\$1,554,923
	Copying		
	548 hours x \$26.00	=	\$
	<u>14,248</u>		
TOTAL	Burden Hour Costs	=	\$1,569,171

30 C.F.R. §75.371 - Mine Ventilation Plan Contents.

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 \$84.70 per hour.

Recordkeeping Burden Hours in Existing § 75.371:

53 large mines x (0.3333 hour)		=	18 hours
38 small mines x (0.1667 hour)		=	<u>6 hours</u>
TOTAL Burden Hours			=
	24 hours		

Recordkeeping Burden Hour Costs in Existing § 75.371

17.67 hours x \$84.70 wage		=	\$
1,497			
6.33 hours x \$84.70 wage		=	<u>\$</u>
<u>536</u>			
TOTAL Burden Hour Cost		=	\$ 2,033

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 weekly examination, including certification, will take 1 hour. The examination can be conducted by a miner at \$33.57 per hour.

Burden Hours

250 facilities x 1 hour x 50 weeks

=

hours

12,500

Burden Hour Cost

12,500 hours x \$33.57

=

\$419,625

SUMMARY

13.	30 C.F.R. Section	Burden Hours	Burden Hour Cost		
	75.310	3,559	\$ 119,476	Provide an estimate of the annual cost to respondents recordkeepers resulting from collection of information. (Do include the cost hour burden in Items 12 and	
total burden or	75.312	53,638	\$ 1,800,626		
the	75.342	5,007	\$ 168,085		
not of any shown 14).	75.351(h)	5,784	\$ 194,169		
	75.360	737,361	\$ 25,492,601		
	75.361	3,654	\$ 122,665		
	75.362	345,506	\$ 29,264,358		
!	75.363	4,872	\$ 257,019		
	75.364	197,910	\$ 6,791,706		
a	75.370	18,906	\$ 1,569,171		
	75.371	24	\$2,033		
	75.382	12,500	\$ 419,625		
	TOTAL	1,388,721	66,202,526		The cost estimate should be split into two components: (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.**

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:

$$\begin{array}{r} \$2,000 \times 7 \text{ large mines} \times 2 \text{ analyzers} \times 0.142 \\ 3,976 \end{array} = \quad \$$$

Annual Calibration Costs For Large Mines:

$$\begin{array}{r} \$780 \times 2 \text{ analyzers} \times 7 \text{ large mines} \\ \\ \\ \end{array} = \quad \$$$

10,920

Annualized Equipment Costs For Small Mines:

$$\begin{array}{r} \$2,000 \times 23 \text{ small mines} \times 1 \text{ analyzer} \times 0.142 \\ 6,532 \end{array} = \quad \$$$

Annual Calibration Costs For Small Mines:

$$\begin{array}{r} \$780 \times 1 \text{ analyzer} \times 23 \text{ small mines} \\ \\ \\ \end{array} = \quad \$ \underline{17,940}$$

\$ 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:

183 small mines x 4 hours x 2 updates	=	1,464
hours		

Ventilation Map:

183 small mines x 3 maps x 1 hour per map	=	<u>549</u>
		<u>hours</u>

TOTAL	=	2,013 hours
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Copying:

183 small mines x 0.5 hours x 2 updates	=	183
		hours

Burden Hour Costs

Updates and Maps 2,013 hours x \$84.70	=	\$170,501
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Copying

183 hours x \$26.00	=	<u>\$ 4,758</u>
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TOTAL COST	=	\$214,627
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- 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 \$32.73 per hour.

The recurring cost to the Federal Government each year is as follows: There are 457 active mines of which 183 are small mines and 274 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:

183 x 3 revisions x 3 hours/revision x \$32.73 hour	=	\$ 53,906
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274 x 5 revisions x 3 hours/revision x \$32.73 hour	=	<u>\$ 134,520</u> \$ 188,426
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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 (612 to 457). This is due to a decrease in the number of underground coal mines.

Hours: There was a decrease of 454,922 hours (1,824,456 to 1,388,746). The decrease in the number of mines has a direct reflection on the number of hours.

Costs: Although the number of mines has decreased there has been an increase of \$2M (\$63M to \$66M). This is due to an increase in employee wages.

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.

B. COLLECTIONS OF INFORMATION EMPLOYING 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 numerical estimate) the potential respondent universe and any sampling or other respondent selection method 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.**

- 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,
Public Law 91-173,
as amended by Public Law 95-164*An 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.

VENTILATION

SEC. 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.