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), "[t]he 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." In addition, Section 303(a) requires that "[a]ll 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, 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, improving the usefulness of information, and facilitating 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.

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, maps 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.**

Ventilation system and methane and dust control plans and examinations 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.

In accordance with 5 CFR 1320.8 (d), MSHA will publish the proposed information collection requirements in the Federal Register, notifying the public that these information collection requirements are being reviewed in accordance with the Paperwork Reduction Act of 1995, and giving interested persons 60 days to submit comments.

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

MSHA does not provide payments or gifts to respondents.

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 457 underground coal mines (183 small mines and 274 medium or large mines) affected by this rule. MSHA's records show that on average there is 1 fan, 1 working section and 1 shift per small mine and there are 1.5 fans, 2.5 working sections and 2.5 shifts per large mine. There is an average of 200 working days in a small mine that operates 40 weeks per year and 250 working days in a large mine that operates 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 number of weeks mines operate yearly. Wages for underground coal mine clerical

workers, miners and mine supervisors are derived from InfoMine USA, Inc.'s publication "US Coal Mine Salary Wages and Benefits (2008 Survey Results).

30 C.F.R. § 75.310 - Installation of Main Mine Fans. Section 75.302 requires each coal mine 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, is required to be generated at least every seven days and with an average of 50 per year at small mines and 52 per year 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 $34.17 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	=	2,492 hours
TOTAL Hour Burden	=	**3,559**

Hour Burden Cost

3,559 hours x $34.17 per hour	=	**$121,611**

30 C.F.R. § 75.312 - Main Mine Fan Examinations. Section 75.312(a) requires 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 if a main mine fan monitoring system is used, the data provided by the fan monitoring system be reviewed daily to ensure that the fan and the fan 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 where monitoring systems are used, the monitoring system be tested for proper operation and each main mine fan and its associated components be examined to assure electrical and mechanical reliability of main mine fans every 7 days

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 $34.17 per hour typically performs this task. At the 45 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 large 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 hours (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 s x 0.25 hours	=	877 hours
TOTAL		51,413 hours

Hour Burden Cost

51,413 hours x $34.17 per hour	=	$1,756,782

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 $34.17 per hour.

Hour Burden

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 $34.17	=	$46,847

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

Hour Burden Cost

457 hours x $33.70	=	$ 15,401

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. A miner earning $34.17 per hour typically performs this task.

Hour Burden

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	=	204 hours
TOTAL	=	306 hours

Hour Burden Cost

306 hours x $34.17 = $ 10,456

Section 312(g)(2)(ii) requires that mines using monitoring systems to monitor fan pressure must make a record concerning monitoring system malfunctions, electrical or mechanical deficiencies in the monitoring system, and any sudden increase or loss in mine ventilating pressure. The recordkeeping is estimated to take 10 minutes (0.1666 hour).

Hour Burden:

Recordkeeping

45 large mines (which use monitoring system) x 12 defects per year x 0.1666 hour	=	90 hours

Hour Burden Cost

90 hours x $34.17	=	$3,075

TOTAL Hour Burden	**=**	**53,637**
TOTAL Hour Burden Cost	**=**	**$1,829,486**

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, § 75.342(a)(4) requires that methane monitors 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 of methane monitors. 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 $34.17 per hour.

Burden Hours

Examinations

183 small mines x 1.5 methane monitors x 12 months (every 31 days) x 0.3333 hour	=	1,098 hours
274 large mines x 3 methane monitors x 12 month x 0.3333 hour	=	3,288 hours
TOTAL	=	4,386 hours

Burden Hour Cost

4,386 hours x $34.17	=	$149,870

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	=	438 hours
TOTAL	=	621 hours

Burden Hour Cost

621 hours x $34.17	=	$21,220

TOTAL Burden Hours	**=**	**5,007**
TOTAL Burden Hour Cost	**=**	**$171090**

30 C.F.R. §75.351 - Atmospheric Monitoring System. This section applies to mines (58 mines) using atmospheric monitoring systems (AMS) to fulfill the requirements of §§ 75.323(d)(1)(ii), 75.340(a)(1)(ii), 75.340(a)(2)(ii), 75.350(b), 75.350(d) or75.362(f). Section 75.351(n)(2) requires that at least every seven days alarms for AMS installed in accordance with §§ 75.350(b) and 75.350(d) be functionally tested for proper operation; § 75.351(n)(3)(i), ((ii), and (iii) require that at least every 31 days requires the calibration of carbon monoxide, smoke and methane sensors; § 75.351(n)3)(iv); § 75.351(b)(2) requires that the operator to designate an AMS operator whose primary duty id monitor the malfunction, alert and alarm signals of the AMS and to notify the appropriate personnel of these signals; § 75.352(f) requires that upon notification of an AMS malfunction, alert, or alarm signal, an investigation must be initiated to determine the cause of the signal. Section 75.351(o) requires the following a record consisting of the identification of the sensor and the cause for activation if an alert or alarm signal occurs, a record of the date and cause of malfunction and the corrective action taken if an AMS malfunctions, a record of the seven-day tests of alert and alarm signals and a record of calibrations and maintenance of the AMS. The recordkeeping burden has been estimated for 58 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 $34.17 per hour.

Hour Burden

Examination:		
58 mines x 7 alarms x 0.5 hours	=	203 hours
Calibration:		
58 mines x 12 month x 8 hours	=	5,568 hours
Recordkeeping:		
58 mines x 7 alarms x 0.033 hours	=	13 hours
TOTAL Burden Hours	=	**5,784 hours**

Hour Burden Cost

5,784 hours x $34.17		
TOTAL Burden Hour Cost	=	**$197,639**

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 the 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 mine will conduct 2.5 examinations per day. Records are required to be made of the results of each preshift examination, including any hazardous conditions found, and their locations, that are encountered during the preshift examination. In addition, a record is required to be made of the action taken to correct hazardous conditions found during the preshift examination and a record must also be made of the results and locations of air and methane measurements. 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 certified examiners earning $34.17 per hour. Countersigning by the mine foreman, earning $76.21 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	=	513,750 hours
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	=	85,625 hours
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	=	11,412 hours
TOTAL	=	14,461 hours
TOTAL Burden Hours	**=**	**737,361**

Burden Hour Cost

Examination:		
623,550 hours x $34.17	=	$21,306,703
Recordkeeping:		
99,350 hours x $34.17	=	$3,394,790
Countersigning:		
14,461 hours x $76.21	=	$ 1,102,073
TOTALBurden Hour Cost	=	**$25,803,566**

30 C.F.R. §75.361 - Supplemental Examinations. This rule requires, a certified person to make a supplemental examination for hazardous conditions within 3 hours before any person enters an area of the mine in which preshift examination has not been made for that shift 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:

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	=	3,288 hours
TOTAL Burden Hours	=	**3,654**

TOTAL Burden Hour Cost

3,654 hours x $34.17	=	**$124,857**

30 C.F.R. §75.362 - On-Shift Examinations. **§75.362(a)(1) requires that** at least once during each 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. **§75.362 (b)** requires the examination of belt conveyor haulageways in which belts are operated, and § 75.362(a)(2) requires an examination to assure compliance with the respirable dust control parameters specified in the mine ventilation plan. In addition § 75.362(g) requires certification (by date, time and initials) that the required examinations were made. 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,. The examination is performed by the shift supervisor earning $76.21 per hour. The recordkeeping requirement for this section has been transferred to 75.363 and applies if a hazardous condition is discovered during the examination.

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 2.3 working section x 2.5 shifts x 250 days x 0.75 hours	=	295,406 hours
TOTALBurden Hours	=	**319,818**

TOTAL Burden Hour Cost

319,818 hours x $76.21	=	**$24,373,329**

Section 75.363, Hazardous conditions; posting, correcting and recording. § 75.363(b) requires a record of any hazardous conditions found, including any found during 75.361 and 75.362 examinations 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 $34.17 per hour and countersigned by the mine foreman estimated to earn $76.21 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	=	2,282 hours
TOTAL	=	3,044 hours

Countersigning Time:

183 small 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	=	1,370 hours
	=	1,828 hours
TOTAL Burden Hours	**=**	**4,872**

Burden Hour Cost

Recordkeeping 3,044 hours x $34.17	=	$104,013
Countersigning 1,828 hours x $76.21	=	$139,312
TOTAL Burden Hour Cost	=	**$243,325**

30 C.F.R. §75.364 - Weekly Examinations. Section 75.364(a) outlines a series of weekly examinations required to be made by the operator. § 75.364(g) requires that the person making the weekly examination to certify by initials, date and time that the examination was made, and § 75.364(h) requires that a record be made of the results of each weekly examination at the completion of any shift during which a portion of a weekly examination is conducted. 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 certified examiners earning $34.17 per hour. The time needed to review and countersign the record by the mine foreman ($76.21 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	=	139,740 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	=	13,700 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	=	2,282 hours
		2,892 hours
TOTALBurden Hours	=	**197,910**
Burden Hour Cost		
Examination and Recordkeeping		
195,018 hours x $34.17	=	$6,663,765
Countersigning		
2,892 hours x $76.21	=	$ 220,399
TOTALBurden Hour Cost	=	**$6,884,164**

30 C.F.R. §75.370 - Mine Ventilation Plan Submission and Approval. Section 75.370 (a)(2) requires the mine operator to submit a proposed ventilation plan in writing to the district manager for approval and § 75.370(g) requires that the ventilation plan be reviewed by MSHA to assure that it is suitable to current conditions in the mine. Once a ventilation plan is approved, the operator needs only to submit the revised pages, maps, or sketches of the plan when proposing revisions to the plan, unless the district manager requests in writing that the mine operator submit a new fully revised plan

Sections 75.370(a)(3)(i) and 75.370(f) require 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, § 75.372(a)(1) requires the operator to submit 3 copies of an up-to-date map of the mine, including the supplemental information listed in § 75.372, to the district manager every 12 months and that a registered engineer or surveyor certify that the map is accurate. Plan updates and maps are prepared by a mine management professional earning $76.21 per hour and copying is performed by a clerical person earning $24.17 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 response to question no. 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	=	548 hours
TOTAL Burden Hours	=	**18,906**

Burden Hour Costs

Updates and Maps		
18,358 hours x $76.21	=	$1,399,063
Copying		
548 hours x $24.17	=	$ 13,245
TOTALBurden Hour Costs	=	**$1,412,308**

Sections 75.371(r), (kk), (ll), (mm), (nn), (oo), (pp), (qq), (ss), (tt), (uu), (vv), (ww), and (xx) provide that certain information required in §§ 75.325, 75.350, 75.351, 75.352, 75.380, 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 $76.21 per hour.

Recordkeeping Burden Hours in Existing § 75.370:

274 large mines x (0.3333 hour)	=	91 hours
183 small mines x (0.1667 hour)	=	31 hours
TOTAL Burden Hours	**=**	**122 hours**

Recordkeeping Burden Hour Costs in Existing § 75.370

122 hours x $76.21 wage	=	**$ 9,298**

75.382 Mechanical Escape facilities

Section 75.382(c) requires mechanical escape facilities, including elevators, be examined weekly and § 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 $34.17 per hour.

Burden Hours

250 facilities x 1 hour x 50 weeks	=	**12,500 hours**

Burden Hour Cost

12,500 hours x $34.17	=	**$427,125**

SUMMARY

30 C.F.R. Section	Burden Hours	Burden Hour Cost
75.310	3,559	$ 121,611
75.312	53,637	$ 1,829,486
75.342	5,007	$ 170,065
75.351(h)	5,784	$ 197,639
75.360	737,361	$ 25,803,566
75.361	3,654	$ 124,857
75.362	319,818	$ 24,373,329
75.363	4,872	$ 243,325
75.364	197,910	$ 6,884,164
75.370	18,906	$ 1,412,308
75.371	122	$9,298
75.382	12,500	$ 427,125
TOTAL	**1,363,130**	**$61,596,773**

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.**

Section 75.363 To make the record of any hazardous conditions (e.g., 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, and assuming the average life of a large mine is 5 years and the average life of a small mines is two years, it is estimated that 7 large mines and 23 small mines will open per year. The large mines will have two analyzers and the small mines will require one analyzer. 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 x 7 large mines x 2 analyzers x 0.142	=	$ 3,976
Annual Calibration Costs For Large Mines:		
$780 x 2 analyzers x 7 large mines	=	$ 10,920
Annualized Equipment Costs For Small Mines:		
$2,000 x 23 small mines x 1 analyzer x 0.142	=	$ 6,532
Annual Calibration Costs For Small Mines:		
$780 x 1 analyzer x 23 small mines	=	$ 17,940
		$ 39,368

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 MSHA every six months. However, once a ventilation plan is approved, the operator needs to submit only the revised pages, maps, or sketches of the plan when proposing revisions, unless the district manager requests in writing that the mine operator submit a new fully revised plan. In addition, § 75.372 requires the operator to submit to the district manager 3 copies of an up-to-date map of the mine at least every 12 months. This map is required to be certified as accurate by a registered engineer or surveyor.

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	=	549 hours
TOTAL	=	2,013 hours
Copying:		
183 small mines x 0.5 hours x 2 updates	=	183 hours
Burden Hour Costs		
Updates and Maps 2,013 hours x $85.14	=	$171,387
Copying		
183 hours x $26.37	=	$ 4,826
TOTAL COST	=	**$176,213**

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 $32.25 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 $32.25 hour	=	$ 53,116
274 x 5 revisions x 3 hours/revision x $47.35 hour	=	$132,548
		$185,664

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.

Responses: There has been a decrease in the number of Responses (1,848,393 to 1,022,636). This is due to a decrease in the number of underground coal mines.

Hours: There was a decrease of 461,326 hours (1,824,456 to 1,363,130). 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 $16,010 ($160,203 to $176,213). This is due to an increase in hourly wage rates.

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.