Supporting Statement

OMB No.: 1219-0088

Information Collection Title: Ventilation Plans, Tests, and Examinations in

Underground Coal Mines

<u>Citations</u>: 30 CFR 75.310, 75.312, 75.342, 75.351, 75.360, 75.361, 75.362, 75.363,

75.364, 75.370, 75.371, 75.382

Collection Instruments: None

General Instructions

A Supporting Statement, including the text of the notice to the public required by 5 CFR 1320.5(a)(i)(iv) and its actual or estimated date of publication in the *Federal Register*, must accompany each request for approval of a collection of information. The Supporting Statement must be prepared in the format described below, and must contain the information specified in Section A below. If an item is not applicable, provide a brief explanation. When the question "Does this ICR contain surveys, censuses or employ statistical methods" is checked "Yes", Section B of the Supporting Statement must be completed. OMB reserves the right to require the submission of additional information with respect to any request for approval.

Specific Instructions

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.

Section 103(h) of the Federal Mine Safety and Health Act of 1977 (Mine Act), 30 U.S.C. 813(h), authorizes the Mine Safety and Health Administration (MSHA) to collect information necessary to carry out its duty in protecting the safety and health of miners. Further, section 101(a) of the Mine Act, 30 U.S.C. 811, authorizes the Secretary of Labor (Secretary) to 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) of the Mine Act requires that all underground coal mines be ventilated by mechanical ventilation equipment installed and operated in a manner approved by an authorized representative of the Secretary and such equipment must be examined daily and a record be kept of such examination.

Underground coal mines usually present harsh and hostile working environments. The mine 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, 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 a level of respirable dust at or below specific exposure limits 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 ventilation system or the safety of the miners are not occurring. These examination, reporting, and recordkeeping requirements 30 CFR 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 coal mine environment such as roof conditions and electrical equipment which have historically caused numerous fatalities if not properly maintained and operated.

Section 75.362, On-shift Examinations, was revised at section 75.362(a)(2) and (g)(2)-(4) by MSHA's rule titled "Lowering Miners' Exposure to Respirable Coal Mine Dust, Including Continuous Personal Dust Monitors," published May 1, 2014 (79 FR 24813). This rule also revised section 75.371(f) and (j).

Section 75.362(a)(2) requires that a person designated by the mine operator conduct an examination and record the results and the corrective actions taken, if any, to assure compliance with the respirable dust control parameters specified in the approved mine ventilation plan. Section 75.362(a)(2) requires mine operators to perform an examination and take corrective actions if needed, but it does not require a record of the examination or corrective actions.

Under section 75.362(g)(2)(i), the certified person directing the on-shift examination

must certify by initials, date, and time on a board maintained at the section load out or similar location showing that the examination was made prior to resuming production. No increased burden is estimated for this requirement in this Information Collection Request (ICR) because the Agency does not expect the burden to be different from the burden in existing section 75.362(g)(2)).

Under section 75.362(g)(2)(ii), the certified person directing the on-shift examination must verify, by initials, date and time, the record of the results of the examination required under section 75.362(a)(2) to assure compliance with the respirable dust control parameters specified in the mine ventilation plan. Further, section 75.362(g)(3) requires a mine foreman or equivalent mine official to countersign each examination record required under section 75.362(a)(2) after it is verified by the certified person under section 75.362(g)(2)(ii), and no later than the end of the mine foreman's or equivalent mine official's next regularly scheduled working shift. Section 75.362(g)(2)(ii) and (g)(3) are additional burdens that are accounted for in this ICR and section75.362(g)(2)(ii)(4) requires the records be retained at a surface location at the mine for at least 1 year and must be made available for inspection by authorized representatives of the Secretary and the representative of miners.

Section 75.371 Mine Ventilation Plan; Contents

Section 75.370(a)(2) (Mine ventilation plan; submission and approval) contains the burden for underground coal mine operators to submit mine ventilation plan revisions for District Manager approval. Each mine ventilation plan must include information that is specified by section 75.371 (Mine ventilation plan; contents).

Section 75.371(f) adds the following information that a mine operator must include in the mine ventilation plan: the minimum quantity of air that will be delivered to the working section for each mechanized mining unit (MMU), and the identification by make and model, of each different dust suppression system used on equipment on each working section, including: (1) the number, types, location, orientation, operating pressure, and flow rate of operating water sprays; (2) the maximum distance that ventilation control devices will be installed from each working face when mining or installing roof bolts in entries and crosscuts; (3) procedures for maintaining the roof bolter dust collection system in approved condition; and, (4) recommended best work practices for equipment operators to minimize dust exposure.

Section 75.371(j) adds a requirement that for machine mounted dust collectors, the ventilation plan must include the type and size of dust collector screens used and a description of the procedures to be followed to properly maintain dust collectors used on the equipment.

Section 75.370(a)(2) requires all underground coal mine operators to submit revisions for mine ventilation plans to MSHA. The burden to submit the additional information

required by section 75.371(f) and (j) as proposed revisions to the plan is accounted for in this package under section 75.370(a)(2). In addition, section 75.370(a)(3)(i) requires underground coal mine operators to notify the miners' representative at least 5 days prior to submission of mine ventilation plan revisions and, if requested, provide a copy of the revisions to the miners' representative at the time of notification. Section 75.370(a)(3)(iii) and (f)(3) require the operator to post a copy of the plan revisions, and section 75.370(f)(1) requires that the operator provide a copy of the revisions to the miners' representative, if requested. MSHA assumes that a copy of the revisions will be requested. The burdens for notification, providing requested copies, and posting associated with mine ventilation plan revisions resulting from section 75.371(f) and (j) are accounted for in this package under section 75.370(a)(3)(i), (f)(1), (a)(3)(iii), and (f) (3), respectively.

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.

Each underground coal mine operator is required to keep records of on-shift examinations to assure compliance with respirable dust control parameters specified in the mine ventilation plan.

These records are used by coal mine operators, miners, and State and Federal mine inspectors. The records provide notice to mine management and miners on the oncoming shift of mine conditions, identify hazards and violations of health or safety standards on working sections during the previous shift, and verify that proper ventilation is being maintained. The information is available to all interested persons at the mine to assure them that the integrity of the ventilation system is being maintained. MSHA inspectors use the records to determine that required tests and examinations are made and that systems used to ventilate underground coal mines are maintained.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.

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

4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes

described in Item 2 above.

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

5. If the collection of information impacts small businesses or other small entities, 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.

Miners could be exposed to hazards or violations of health and safety standards because of constantly changing mining conditions that develop as mining progresses. MSHA believes that the recordkeeping requirements for ventilation tests and examinations and violations of health and safety standards observed are the minimum necessary to ensure that mines are safe and adequately ventilated to protect miners' health. Reductions in these requirements may result in the development of unsafe and unhealthy conditions, thus jeopardizing the health and safety of 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 submit the revised pages or sketches of the plan when proposing revisions unless the District Manager has requested that, in writing, a fully revised plan be submitted.

Records and signatures required under section 75.362(a)(2), (g)(2), and (g)(3) ensure that the required on-shift examinations are made. The frequency of the information collection requirements is necessary to ensure that respirable dust control parameters specified in the mine's approved ventilation plan are maintained on every shift so that miners are not overexposed to coal mine dust.

Section 75.371(f) and (j) requires additional information regarding dust control measures be included in the mine ventilation plan. This information assists miners in determining the types of dust controls being used, assists on-shift mine examiners in conducting adequate on-shift examinations of the dust controls, and allows mine operators, miners, and MSHA to observe and measure specific dust control parameters

to better evaluate the effectiveness of dust control systems. In addition, if a respirable dust standard is exceeded, the mine operator and MSHA can better evaluate and adjust, as necessary, dust controls to protect miners from exposure to excessive dust levels. Revisions to mine ventilation plans resulting from section 75.371(f) and (j) are submitted under section 75.370(a)(2) to ensure miners are protected by up-to-date mine ventilation plans.

- 7. Explain any special circumstances that would cause an information collection to be conducted in a manner:
- Requiring respondents to report information to the agency more often than quarterly;
- Requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;
- Requiring respondents to submit more than an original and two copies of any document;
- Requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years;
- In connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;
- Requiring the use of a statistical data classification that has not been reviewed and approved by OMB;
- That includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or
- Requiring respondents to submit proprietary trade secret, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

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

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

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

8. If applicable, provide de a copy and identify the data and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission

to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

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

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

MSHA published a 60-day *Federal Register* notice on July 17, 2018 (83 FR 33252). MSHA received no public comments.

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

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

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

There is no assurance of confidentiality provided to respondents. Records are maintained by the mine operator and reviewed by MSHA inspectors during routine inspections.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

There are no questions of a sensitive nature.

- 12. Provide estimates of the hour burden of the collection of information. The statement should:
 - Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain

information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.

- If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens.
- 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 under Item 13.

Annual burden hours and related costs calculations is shown below. MSHA used data from the Occupational Employment Statistics (OES) published by the Bureau of Labor Statistics (BLS) for hourly wage rates¹ and adjusted the rates for benefits² and wage inflation³.

The following estimate of burden hours is based on MSHA's records and the mine ventilation inspection experience of Coal Mine Inspectors under the existing standards. There are approximately 344 underground coal mines. Of that number, 255 underground coal mines report active employment (80 mines with 1-19 employees, 168 mines with 20-500 employees, and 7 mines with more than 500 employees) and are affected by these provisions. On average, there is 1 fan, 1 working section, and 1 shift per day at mines with 1-19 employees; 1.5 fans, 2.5 working sections, and 2 shifts per day at mines with 20-500 employees; 1.5 fans, 2.5 working sections, and 3 shifts per day at mines with 501+ employees. There are averages of 200 working days in mines with 1-19 employees; 300 working days in mines with 20-500 employees; and 350 working days in mines with 501+ employees. All mines work an average of 50 weeks

¹Options for obtaining OES data are available at item "E3. How to get OES data. What are the different ways to obtain OES estimates from this website?" at https://www.bls.gov/oes/oes_ques.htm.

² The benefit-scaler comes from BLS Employer Costs for Employee Compensation access by menu http://www.bls.gov/data/ or directly with http://download.bls.gov/pub/time.series/cm/cm.data.0.Current. The data series CMU2030000405000P, Private Industry Total benefits for Construction, extraction, farming, fishing, and forestry occupations, is divided by 100 to convert to a decimal value. MSHA used the latest 4-quarter moving average 2017Qtr1-2017Qtr4 to determine that 32.9 percent of total loaded wages are benefits. MSHA computes the scaling factor with a number of detailed calculations but it may be approximated with the formula and values 1 + (benefit percentage/(1-benefit percentage)) = 1+(.329/(1-.329)) =1.49.

³ Wage inflation is the change in Series ID: CIS2020000405000I; Seasonally adjusted; Series Title: Wages and salaries for Private industry workers in Construction, extraction, farming, fishing, and forestry occupations, Index. (https://data.bls.gov/cgi-bin/srgate; Qtr 4 2017/Qtr 2 2017).

per year. However, the burden hour estimates are based on the total number of weeks ventilation fans operate yearly, rather than on the average number of workweeks.

30 CFR 75.310 - Installation of Main Mine Fans. Each mine is required to be ventilated by one or more main mine fans. This section sets forth requirements and specifications for the installation of main mine fans. Section 75.310(a)(4) requires that each main mine fan be equipped with a pressure recording device, which may be a part of a fan monitoring system, and that the resulting records be maintained for one year. The record, a pressure recording chart, will be generated an average of 50 weeks per year at mines with 1-19 employees, and every week per year (52 weeks) at mines with 20-500 employees and mines with 501+ employees. MSHA estimates that it takes 7 minutes per week to generate and maintain the record for each fan. A miner earning \$40.95⁴ per hour typically performs this task.

Responses

TOTAL	=	17,650 records
7 mines x 1.5 fans x 52 weeks	<u>=</u>	546 records
168 mines x 1.5 fans x 52 weeks	=	13,104 records
80 mines x 1 fan x 50 weeks	=	4,000 records

Burden Hours

17,650 records at 7 minutes/record = 2,059 hours

Burden Hour Cost

2,059 hours x \$40.95 per hour = \$84,316

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

Sections 75.312(f)(1) and 75.321(f)(2) require that persons making main mine fan examinations certify that the examinations were made. The fan examination

_

⁴ The miner wage is the employment weighted average for 16 separate Standard Occupational Classification Codes (SOC) for the general categories 47, 49, and 51 from the BLS May 2017 OES data for NAICS 212100, coal mining. Weighted average rate \$40.95=\$26.97 x 1.49 benefit adjustment x 1.019 inflation adjustment.

certification time is estimated at 1 minute. A miner earning \$52.81 per hour⁵ typically performs this task.

Responses

80 mines x 240 days x 1 fan = 19,200 certifications 168 mines x 365 days x 1.5 fans = 91,980 certifications 7 mines x 365 days x 1.5 fans = 3,833 certifications TOTAL 115,013 certifications

Burden Hours

115,013 certifications x 1 minute = 1,917 hours

Burden Hour Cost

1,917 hours x \$52.81 per hour = \$101,237

Section 75.312(c) requires that the automatic fan signal device for each main mine fan be tested at least once every 31 days. Section 75.312(d) requires that automatic closing doors in multiple main mine fan systems be tested at least once every 31 days. A record of these tests is required under 75.312(g)(3), taking 5 minutes per mine, 12 times yearly. This record can be performed by a miner earning \$52.81 per hour.

Responses

255 mines x 12 monthly records = 3,060 records

Burden Hours

3.060 records x 5 minutes = 255 hours

Burden Hour Cost

255 hours x \$52.81 = \$13.467

Section 75.312(g)(1) requires a record of uncorrected defects found during an examination. Estimated recordkeeping is 5 minutes and MSHA estimates that 140 mines will have uncorrected defects requiring a record each month.

Responses

140 mines x 12 defects per year = 1,680 records

Burden Hours

1,680 records x 5 minutes = 140 hours

Burden Hour Cost

140 hours x \$52.81 = \$7,393

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

⁵ Some examinations can be done by a wide range of occupational specialties. For these examinations, the wage is the employment weighted average of the rates for supervisor, miner, and electrician used elsewhere in this document and developed from the BLS May 2017 OES data for NAICS 212100, coal mining. Weighted average rate \$52.81=\$34.78 x 1.49 benefit adjustment x 1.019 inflation adjustment.

or mechanical deficiencies, and any sudden increase or loss in mine ventilating pressure. MSHA estimates the recordkeeping to take 10 minutes.

Responses		
20 mines x 12 defects per year	=	240 records
Burden Hours		
240 records x 10 minutes	=	40 hours
Burden Hour Cost		
40 hours x \$52.81	=	\$2,112

<u>30 CFR 75.342 - Methane Monitors</u>. 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 in the working place. In addition, methane monitors must be maintained in permissible and proper operating condition and be calibrated with a known methane-air mixture at least once every 31 days. Under section 75.342(a)(4)(ii), operators are required to keep records of calibration tests. Records are required to be retained for one year from date of the test. Estimated time to make a record is 5 minutes per month for mines with 1-19 employees, and 8 minutes for mines with 20-500 and 501+ employees. The record can be made by a certified/qualified electrician earning \$44.82 per hour⁶.

<u>Responses</u>		
80 mines x 12 months	=	960 records
168 mines x 12 months	=	2,016 records
7 mines x 12 months	=	84 records
TOTAL	=	3,060 records
Burden Hours		
960 records x 5 minutes	=	80 hours
2,016 records x 8 minutes	=	269 hours
84 records x 8 minutes	= _	11 hours
TOTAL	=	360 hours
Burden Hour Cost		
360 hours x \$44.82	=	\$16,135

<u>30 CFR 75.351(o)</u> - Recordkeeping. This section applies to mines performing monitoring which is permitted as an alternative compliance option in accordance with sections 75.323(d)(1)(ii), 75.340(a)(1)(ii), 75.340(a)(2)(ii), and 75.362(f), and to mines with approval to ventilate working sections with air from the belt air course under section 75.350(b) and associated point-feed regulators under section 75.350(d). If an alarm is generated by the system, the provision requires that an examination be conducted to determine its cause, section 75.351(d)(2), and a record must be made, section

 $^{^6}$ The electrician wage is for the SOC 47-2111 from the BLS May 2017 OES data for NAICS 212100, coal mining. Weighted average rate \$44.82=\$29.52 x 1.49 benefit adjustment x 1.019 inflation adjustment.

75.351(o). The recordkeeping burden has been estimated for 27 mines averaging 7 alarm activations annually. MSHA estimates that it will take 2 minutes to make a record of the occurrence. The record can be made by a miner earning \$52.81 per hour.

Responses
27 mines x 7 alarms = 189 records
Burden Hours
189 records x 2 minutes = 6 hours
Burden Hour Cost
6 hours x \$52.81 = \$317

30 CFR 75.360 - Preshift Examinations. Preshift examinations are required to be conducted within 3 hours prior to the beginning of each shift. On average, a mine with 1-19 employees will conduct 1 examination per day, mines with 20- 500 employees will conduct 2 examinations per day, and mines with 501+ employees will conduct 3 examinations per day. Under the standard, records of the results of preshift examinations, including hazardous conditions observed during the examinations and their locations, are required to be made. Section 75.360 also requires operators to record violations of nine specific mandatory health or safety standards found during these examinations. The nine standards represent the conditions or practices that, if uncorrected, present the greatest unsafe conditions and the most serious risks to miners. Records are also required to be made of the action taken to correct hazardous conditions and violations of the nine standards observed during the preshift examination. MSHA estimates the recordkeeping activity to take about 18 minutes in mines with 1-19 employees and 33 minutes in mines with 20 or more employees. Records are typically made by examiners earning \$52.81 per hour. Countersigning by the mine foreman, earning \$101.11 per hour⁷, is required and takes an estimated 5 minutes for mines with 1-19 employees, 10 minutes for mines with 20-500 employees, and 15 minutes for mines with 501+ or more employees.

Responses

80 mines x 1 exam x 200 days
168 mines x 2 exams x 300 days
7 mines x 3 exams x 350 days

TOTAL

= 16,000 records
100,800 records
- 7,350 records
- 124,150 records

TOTAL Responses = 124,150 responses

Burden Hours
Recordkeeping:

16,000 records x 18 minutes = 4,800 hours

⁷ The mine foreman or supervisory rate is the employment weighted average of the 90th percentile for 4 separate Standard Occupational Classification Codes (SOC) for the supervisory and management occupational general categories 11, 47, and 49 from the BLS May 2017 OES data for NAICS 212100, coal mining. Weighted average rate \$101.11=\$66.59 x 1.49 benefit adjustment x 1.019 inflation adjustment.

100,80	00 records x 33 minutes	=	55,440 hours
7,350	records x 33 minutes	=	4,043 hours
TOTAL		=	64,283 hours
Countersigni	ing:		
16,00	0 signatures x 5 minutes	=	1,333 hours
100,8	00 signatures x 10 minutes	=	16,800 hours
7,350	signatures x 15 minutes	=	<u> 1,838 hours</u>
TOTAL		=	19,971 hours
TOTAL	Burden Hours	=	84,254 hours
TOTAL	Burden Hours	=	84,254 hours
		=	84,254 hours
Burden Hou		=	84,254 hours
	· Cost	=	84,254 hours
Burden Houi Recordkeepi	· Cost	= =	84,254 hours \$3,394,785
Burden Houi Recordkeepi	<u>r Cost</u> ing: 3 hours x \$52.81	=	·
Burden Hour Recordkeepi 64,28 Countersigni	<u>r Cost</u> ing: 3 hours x \$52.81	= =	·
Burden Hour Recordkeepi 64,28 Countersigni	<u>Cost</u> ing: 3 hours x \$52.81 ing:	= = = = =	\$3,394,785

<u>30 CFR 75.361 - Supplemental Examinations</u>. This requires a certified person to make a supplemental examination for hazardous conditions before any person enters an area of the mine that has not been preshift examined. This section has no explicit recordkeeping requirement, but if a hazard is found or a violation of one or more of the nine specific health or safety standards is identified then a record must be kept under section 75.363. The burden for section 75.363 is discussed below.

On-Shift Examinations – Section 75.362

Record Results of On-Shift Examinations – Section 75.362. Section 75.362(a)(2) requires that a person designated by the operator conduct an examination and record the results and the corrective actions taken to assure compliance with the respirable dust control parameters specified in the mine ventilation plan. This requirement impacts only underground coal mines.

MSHA estimates that a supervisor, earning \$101.11 per hour, takes 3 minutes to make a record of the examination for the average mine in all mine sizes. On average, MSHA estimates that: 42 MMUs in mines with 1-19 employees have 1 shift per day (or 42 shifts per day); 386 MMUs in mines with 20-500 employees have 2 shifts per day (or 772 shifts per day); and 40 MMUs in mines with 501+ employees have 3 shifts per day (or 120 shifts per day). Records of the examinations will need to be made of these shifts each working day. On average, MSHA estimates that the number of workdays per year is: 200 days for mines with 1-19 employees; 300 days for mines with 20-500 employees; and 350 days for mines with 501+ employees. The annual burden hours and burden hour costs for underground coal mines are shown below.

<u>Underground Coal Mine Operators</u>

Responses

 $\begin{array}{rcl} 42 \text{ MMUs x 1 shift/day x 200 days} & = & 8,400 \text{ records} \\ 386 \text{ MMUs x 2 shifts/day x 300 days} & = & 231,600 \text{ records} \\ 40 \text{ MMUs x 2 shifts/day x 350 days} & = & \frac{42,000 \text{ records}}{282,000 \text{ records}} \end{array}$

Burden Hours

282,000 records x 3 minutes = 14,100 hours

Burden Hour Costs

14,100 hours x \$101.11 wage rate = \$1,425,651

Section 75.362(g)(2)(i) requires that the record required under section 75.362(a) (2) be certified by initials, date and time on a board maintained at the section load-out or similar location showing that the examination was made prior to resuming production. This standard does not add any additional burden because the record is already required under section 75.362(g)(2).

Section 75.362(g)(2)(ii) requires that the record required under section 75.362(a) (2) be verified, by initials, date and time, by the certified person directing the onshift examination. Section 75.362(g)(3) requires that the mine foreman or equivalent official countersign each examination record under section 75.362(a) (2) after it is verified by a certified person in accordance with section 75.362(g)(2) (ii). MSHA estimates that it takes 1 minute for a certified person earning \$52.81 per hour to verify the record; and another 1 minute for a mine foreman or equivalent mine official earning \$101.11 per hour to review and countersign the record.

The annual burden hours and burden hour costs for underground coal mines are shown below.

<u>Underground Coal Mine Operators</u>

Responses

Certification and countersigning of records required by section 75.362(a) = 282,000

Burden Hours

282,000 records x 1 minute (verify) = 4,700 hours

282,000 records x 1 minute (sign) = 4,700 hours

Burden hours = 9,400 hours

Burden Hour Costs

4,700 hours x \$52.81 wage rate= \$ 248,2074,700 hours x \$101.11 wage rate= \$ 475,217Burden hour cost= \$ 723,424

<u>30 CFR 75.362 - On-Shift Examinations</u>. The recordkeeping requirement for hazardous conditions and violations of the nine mandatory health or safety standards found during on-shift examinations under section 75.362(a)(1) are accounted for in section 75.363. Recordkeeping required under section 75.362(g)(2)(i), 75.362(g)(2)(ii) and 75.362(g)(3) and (g)(4) are included below.

These requirements include that a person designated by the operator must conduct an examination and record the results and the corrective actions taken to assure compliance with the respirable dust control parameters specified in the mine ventilation plan. These requirements impact only underground coal mines. The examinations are made on the sections and these sections include MMUs.

MSHA estimates that a supervisor, earning \$101.11 per hour, takes 3 minutes to make a record of the examination for the average mine in all mine sizes. On average, MSHA estimates that: 42 MMUs in mines with 1-19 employees have 1 shift per day (or 42 shifts per day); 386 MMUs in mines with 20-500 employees have 2 shifts per day (or 772 shifts per day); and 18 MMUs in mines with 501+ employees have 2 shifts per day (or 206 shifts per day). Records of the examinations will need to be made of these shifts each working day. On average, MSHA estimates that the number of workdays per year is: 200 days for mines with 1-19 employees; 300 days for mines with 20-500 employees; and 350 days for mines with 501+ employees and these records are retained at a surface location at the mine for at least 1 year.

<u>Underground Coal Mine Operators</u>

Responses = 282,000

Burden Hours

282,000 records x 3 minutes = 14,100 hours

Hour Burden Costs

14,100 hours x \$101.11 wage rate = \$1,425,651

Section 75.362(g)(2)(i) requires that the record required under section 75.362(a) (2) be certified by initials, date and time on a board maintained at the section load-out or similar location showing that the examination was made prior to resuming production. This standard does not add any new burden because the record is already required under existing section 75.362(g)(2).

Section 75.362(g)(2)(ii) requires that the record required under section 75.362(a) (2) be verified, by initials, date and time, by the certified person directing the onshift examination. Section 75.362(g)(3) requires that the mine foreman or equivalent official countersign each examination record under section 75.362(a) (2) after it is verified by a certified person in accordance with section 75.362(g)(2) (ii). MSHA estimates that it takes 1 minute (for a certified person earning \$52.81 per hour to verify the record; and another 1 minute for a mine foreman or equivalent mine official earning \$101.11 per hour to review and countersign the record.

MSHA estimates that 282,000 records will be verified and countersigned per year: 8,400 records in mines with 1-19 employees (42 shifts per day x 200 days per year); 231,600 records in mines with 20-500 employees (772 shifts per day x 300 days per year); and 28,000 records in mines with 501+ employees (80 shifts per day x 350 days per year). The annual burden hours and hour burden costs for underground coal mines are shown below.

Underground Coal Mine Operators

Burden Hours

282,000 records x 1 minute	= 4,700 hours
282,000 records x 1 minute	= 4,700 hours
Burden Hours	= 9,400 hours

Hour Burden Costs

4,700 hours x \$52.81 wage rate	=	\$248,207
4,700 hours x \$101.11 wage rate	=_	\$475,217
	=	\$723,424

TOTAL	Burden Hours	= 23,500
TOTAL	Burden Cost	=\$2,149,075
TOTAL	Responses	=846,000

30 CFR 75.363 - Hazardous conditions; posting, correcting and recording. The provision requires a record of hazardous conditions found, including any found during section 75.361 supplemental examinations and any of the nine mandatory health or safety standards found during 75.362 on-shift examinations must be recorded along with corrective actions taken to abate the conditions. Under Section 75.363, a record is required for any hazardous condition found by the mine examiner. This record must be countersigned by the mine foreman. The time to record a hazard is estimated to be 5 minutes, and 3 minutes to countersign the record. The record can be made by a person earning \$52.81 per hour and signed by the mine foreman estimated to earn \$101.11 per hour. MSHA estimates that 100 hazards per year will be recorded at large mines and 50 hazards per year will be recorded in small mines.

Responses 80 mines x 50 hazards per 168 mines x 100 hazards p 7 mines x 100 hazards per TOTAL	er yr.	= = = =	4,000 records 16,800 records <u>700 records</u> 21,500 records
TOTAL Responses		=	21,500 responses
Burden Hours Recordkeeping			
21,500 records x 5 minute Countersigning	es	=	1,792 hours
21,500 signatures x 3 min	nutes	=	<u>1,075 hours</u>
TOTAL Burden Hou	rs	=	2,867 hours
Burden Hour Cost Recordkeeping			
1,792 hours x \$52.81		=	\$ 94,636
Countersigning 1,075 hours x \$101.11		=	<u>\$108,693</u>
TOTAL Burden Hour Cos	t	=	\$203,329

Section 75.363 requires operators to record any violations of nine mandatory health or safety standards found on supplemental and on-shift examinations and any corrective actions taken. The nine standards represent the conditions or practices that, if uncorrected, present the greatest unsafe conditions and the most serious risks to miners. The supplemental (section 75.361) and on-shift (section 75.362) standards contain recordkeeping requirements if a violation of any of the nine noted mandatory health or safety standards is found. During FY 2013 through 2017, MSHA inspectors found an annual average of 15,462 violations of the nine standards MSHA believes are

most likely to be identified on preshift, supplemental, on-shift, and weekly examinations. Because conditions resulting in these violations can occur and require corrective action multiple times during the year (e.g., insufficient rock dust), MSHA multiplied the 15,462 violations found by MSHA inspectors by a factor of 1.5 to arrive at an estimated 23,193 violations that could be found by mine examiners. MSHA assumes that half of these violations, 11,597 violations, would be identified on the preshift and weekly examinations and the other half would be identified on supplemental and on-shift examinations.

MSHA estimates that 80 percent of these (9,277 violations) would be found on the onshift examinations and 20 percent (2,319 violations) would be found on the supplemental examinations. MSHA estimates that it would take 3 minutes to record any violations identified and the corrective actions taken. Supervisors earning \$101.11 an hour perform on-shift exams and certified examiners earning \$52.81 perform supplemental exams.

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

<u>Res</u>	<u>00</u>	ns	<u>ses</u>
		_	~ -

9,277 violations	=	9,277 records
2,319 violations	=	<u>2,319 records</u>
Total Responses	=	11,596 records
Burden Hours		
9,277 records x 3 minutes	=	464 hours
2,319 records x 3 minutes	=	<u>116 hours</u>

580 hours

Burden Hour Costs

Total Hours

464 hours x \$101.11 wage rate	=	\$46,915
116 hours x \$52.81 wage rate	=	\$ 6,126
Total Burden Hour Cost	=	\$53,041

30 CFR 75.364 - Weekly Examinations. MSHA estimates the time required to make the record to be 35 minutes in mines with 1-19 employees and 60 minutes in mines with 20 or more employees. Records are completed by examiners earning \$52.81 per hour. The time needed to review and countersign the record by the mine foreman (\$101.11 per hour) is 5 minutes at mines with 1-19 employees and 10 minutes at mines with 20 or more employees.

Responses

80 mines x 50 weeks	=	4,000 records
168 mines x 52 weeks	=	8,736 records
7 mines x 52 weeks	=	364 records

TOTAL		=	13,100 records
TOTAL	Responses	=	13,100 responses
Burden Hou			
Recordkeep	oing		
4,00	0 records x 35 minutes	=	2,333 hours
8,73	6 records x 1.0 hour	=	8,736 hours
364	records x 1.0 hour	=	<u>364 hours</u>
TOTAL		=	11,433 hours
Countersign	ning		
4,00	0 signatures x 5 minutes	=	333 hours
8,73	6 signatures x 10 minutes	=	1,456 hours
364	signatures x 10 minutes	=	<u>61 hours</u>
TOTAL		=	1,850 hours
TOTAL	Burden Hours	=	13,283 hours
Burden Hou	<u>ur Cost</u>		
Recordkeep	oing		
11,433 hc	ours x \$52.81	=	\$ 603,777
Countersign	ning		
1,850 hou	ırs x \$101.11	=	<u>\$ 187,054</u>
TOTAL	Burden Hour Cost	=	\$ 790,831

Section 75.364 requires operators to also record violations of nine mandatory health or safety standards found along with the corrective actions taken. The nine standards represent the conditions or practices that, if uncorrected, present the greatest unsafe conditions and the most serious risks to miners. MSHA estimates that it would take a certified examiner 3 minutes to record violations along with any corrective actions taken. An examiner conducting these examinations earns a wage of \$52.81 per hour (includes benefits). MSHA also estimates that, on average, mines with 1-19 employees operate for 50 weeks out of the year and mines with 20+ employees operate 52 weeks out of the year.

Responses:

No additional responses as this requirement increases the time required for the Weekly Examination record keeping

Burden Hours 13,100 records x 3 minutes	=	655 hours
Burden Hour Costs	_	ታጋ 4 ፫01
655 hours x \$52.81 wage rate	=	\$34.591

<u>30 CFR 75.370 - Mine Ventilation Plan Submission and Approval</u>. 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 6 months. However, once a ventilation plan is approved, the operator needs to submit only the revised pages, sketches, and drawings of the plan when proposing revisions, unless the district manager requests in writing that the mine operator submit a new fully revised plan. The operator must update the plan as often as necessary to ensure that the plan is suitable to current conditions in the mine.

The mine operator must notify the representative of the miners of any proposed and approved ventilation plan or plan revision, and upon request, provide a copy. In addition, 3 copies of the mine ventilation map must be submitted annually including supplemental information listed in section 75.372 requiring 1 hour per copy. Plan updates and maps are prepared by a mine management professional earning \$101.11 per hour. Mines with 20 or more employees will submit 4 updates requiring 16 hours and 3 maps requiring 1 hour each. (Note: mines with 1-19 employees will generally contract out for this service. The contract costs are included in question 13 below as a cost estimate, rather than here.)

Responses Recordkeeping: Plan updates:		
168 mines x 4 updates	=	672 updates
7 mines x 4 updates	=	28 updates
TOTAL	=	700 updates
Ventilation Map:		
168 mines x 3 maps	=	504 maps
7 mines x 3 maps	=	<u>21 maps</u>
TOTAL	=	525 maps
TOTAL Responses	=	1,225 responses
Burden Hours		
Recordkeeping:		
Plan updates:		
700 updates x 16 hours	=	11,200 hours
Ventilation Map:		
525 maps x 1 hour per map	=	525 hours
Copying:		0501
700 updates x 30 minutes per copy	=	<u>350 hours</u>
TOTAL Burden Hours	=	12,075 hours

Burden Hour Costs
Updates and Maps
12,075 hours x \$101.11

= \$1,220,903

Sections 75.371(r), (kk), (ll), (mm), (nn), (oo), and (pp) provide that certain information required in sections 75.325 and 70.1900 be recorded in the mine operator's ventilation plan required by section 75.370. MSHA estimates that the time required to record the additional information in the ventilation plan will be 20 minutes for 41 mines with 20 or more employees and 10 minutes for 23 mines with 1-19 employees. The information is recorded by a mine supervisor earning \$101.11 per hour.

Recordkeeping Burden in Section 75.370:

Responses		
41 mines	=	41 records
23 mines	=	23 records
TOTAL Responses	=	64 records
Burden Hours		
41 records x 20 minutes	=	14 hours
23 records x 10 minutes	=	4 hours
TOTAL Burden Hours	=	18 hours
Burden Hour Costs		
18 hours x \$101.11 wage	=	\$ 1,820

Mine Ventilation Plans

30 CFR 75.370 - Mine Ventilation Plan; submission and approval and 30 CFR 75.371 - Mine Ventilation Plan; contents. This is a one-time only cost for plan revisions. Operators will need to revise their mine ventilation plan to include additional engineering controls that are used to comply with sections 75.371(f) and (j). After initial revisions have been made, further updates can be made when operator's normally revise their ventilation plan.

All underground coal mine operators must make the above revisions in accordance with section 75.370(a)(2). On average, MSHA estimates that 1 hour is sufficient for a supervisor, earning \$101.11 per hour, to make the plans revisions and any notifications of intent to use continuous personal dust monitors for designated area sampling. On average, MSHA estimates that a clerical employee, earning \$27.50 per hour⁸, will take 15 minutes to prepare and send

⁸ Clerical Wage is the employment weighted average for 6 separate Standard Occupational Classification Codes (SOC) for the clerical occupational general category 43 from the BLS May 2017 OES data for NAICS 212100, coal mining. Weighted average rate \$27.50=\$18.11 x 1.49 benefit adjustment x 1.019

the revisions to MSHA. Annual burden hours and burden hour costs for underground coal mines are shown below.

Responses

255 plan revisions = 255 responses

Burden Hours

255 plans x 1 hours = 255 hours 255 plans x 15 minutes = 64 hours Total burden hours = 319 hours

Burden Hour Costs

255 hours x \$101.11 wage rate = \$25,783 64 hours x \$27.50 wage rate = $\frac{1,760}{2}$ Total burden hour costs = \$27,543

Under sections 75.370(a)(3)(i) and (f)(1), underground coal mine operators are required to notify the miners' representative at least 5 days prior to submission of a mine ventilation plan revision for MSHA approval and, if requested, provide a copy of the proposed and approved revisions to the miners' representative. MSHA assumes that a copy of the revisions will be requested. The number of copies provided to miners' representatives is estimated to be 255 plans, and equals the number of revisions noted above. MSHA estimates that a clerical employee will take 15 minutes to notify and provide a copy of the revisions. Annual burden hours and burden hour costs for underground coal mines are shown below.

Responses

255 plan revisions = 255 responses

Burden Hours

255 plans x 15 minutes = 64 hours

Burden Hour Costs

64 hours x \$27.50 wage rate = \$1,760

Underground coal operators must post a copy of the revisions of the mine ventilation plan under section 75.370(a)(3)(iii) and (f)(3). The number of postings is equal to the number of revisions. MSHA estimates that it takes a clerical employee 15 minutes to post a copy of the revisions to the mine ventilation plan. Annual burden hours and burden hour costs for underground coal mines are shown below.

inflation adjustment.

Responses

255 plan revisions = 255 responses

Burden Hours

255 plans x 15 minutes = 64 hours

Burden Hour Costs

64 hours x \$27.50 wage rate = \$1,760

30 CFR 75.382 Mechanical Escape Facilities. Section 75.382(c) requires that mines employing mechanical escape facilities must conduct a weekly examination to assure that the facility is in proper operating condition. Section 75.382(g) requires that the examiner certify by date, time, and initials, that the examination was conducted. It is estimated that 108 such facilities are in use at large mines operating 52 weeks per year and that the certification will take 1 minute. The certification can be conducted by a miner earning \$52.81 per hour.

Responses

108 facilities x 52 weeks = **5,616 records**

Burden Hours

5,616 records x 1 minutes = **94 hours**

Burden Hour Cost

112hours x \$52.81 = **\$4,964**

Summary

Section	Responses	Burden Hours	Burden Hour Cost
75.310	17,650	2,059	\$ 84,316
75.312	119,993	2,352	\$124,209
75.342	3,060	360	\$16,135
75.351(0)	189	6	\$317
75.360	124,150	84,254	\$5,414,053
75.362	846,000	23,500	\$2,149,075
75.363	33,096	3,447	\$256,370
75.364	13,100	13,938	\$825,422
75.370	2,054	12,540	\$1,253,786
75.382	5,616	94	\$4,964
Total	1,164,908	142,550	\$10,128,647

- 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 already reflected on the burden worksheet).
 - 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.

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

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

Record	l/ΔΔN	ina.
1 CCOI U	ヘロロル	ııı ıu.

Pla	ท เม	nda	ates	ς.
i iu	ı u	pa	$\lambda \cup \lambda$	J.

80 mines x 4 hours x 2 updates	=	640 hours
--------------------------------	---	-----------

Ventilation Map:

80 mines x 3 maps x 1 hour per map = $\frac{240 \text{ hours}}{880 \text{ hours}}$

Copying:

80 mines x 30 minutes x 2 updates = **80 hours**

Contractor Costs

TOTAL	=	\$ 91,270
Copying 80 hours x \$28.67	=	<u>\$ 2,294</u>
Updates and Maps 880 hours x \$101.11	=	\$ 88,977

Mine Ventilation Plans

30 CFR 75.370 - Copy and Transmission Costs for Revising Mine Ventilation Plan; submission and approval and 30 CFR 75.371 - Mine Ventilation Plan; contents. This is a one-time only cost for plan revisions. Under section 75.370(a)(2), all underground coal mines must revise approved mine ventilation plans. The operator must revise the mine ventilation plan to include additional engineering controls, specified in section 75.371(f) and (j). After initial revisions have been made, further updates can be made when operators normally revise their ventilation plan. On average, MSHA estimates that a plan revision will be three pages. Copying will cost \$0.15 per page and \$1.00 for postage, for a total cost of \$1.45 per plan revision. Annual costs for underground coal mines are shown below.

255 plans x \$1.45 for copy and transmission costs = \$370

30 CFR 75.370(a)(3)(i) and (f)(1) - Copy Costs for Notifying Miners' Representative of Plan Revisions and Provide Copy if Requested. Underground coal mine operators are required to notify the miners' representative at least 5 days prior to submission of a mine ventilation plan revision and, if requested, provide a copy of the revisions to the miners' representative under Section 75.370(a)(3)(i) and (f)(1). MSHA assumes that a copy of the revisions will be requested. The number of copies provided equals the number of revisions noted above. MSHA estimates that costs of copying will be \$0.45 for three pages. Annual costs for underground coal mines are shown below.

255 plans x \$0.45 per copy = \$115

30 CFR 75.370(a)(3)(iii) and (f)(3) - Copy Costs Related to Posting Revision of Mine Ventilation Plan. Underground coal mine operators must post a copy of the revisions of the mine ventilation plan under section 75.370(a)(3)(iii) and (f)(3). The number of postings is equal to the number of revisions noted above. MSHA estimates that costs of copying will be \$0.45 for three pages. Annual costs for underground coal mines are shown below.

255 plans x \$0.45 per copy

= \$115

SUMMARY

Section/Activity	Cost
75.370	\$ 91,270
Mine Ventilation Plans	\$600
Total	\$91,870

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.

Mine Ventilation Plan Submission and Approval. The review/inspection of ventilation plans, test results and examination in underground mines is just one aspect of the annual inspection. The plans are reviewed by a GS-12 mine inspector with an average salary (including benefits) of at \$55.25 per hour⁹.

The recurring cost to the Federal Government each year is as follows: There are 255 underground mines reporting active employment: 80 mines with 1-19 employees, 168 mines with 20-500 employees and 7 mines with 501+ employees. It is estimated that mines with 1-19 employees will average 3 revisions, or supplements (including the ventilation map) each year and mines with 20 or more employees will average 5 revisions, or supplements (including the ventilation map). On average, MSHA personnel will take 3 hours to review a submission. The recurring cost to the Federal Government is estimated as follows:

⁹Hourly rate developed from office of Personnel Management (OPM), December 2017 *FedScope* employment cube, http://www.fedscope.opm.gov/. Data search qualifiers were: Agency = DLMS, Occupation = 18xx, Work Schedule = Full-Time, Salary Grade = GS-12, Measure = Average Salary. The hourly wage is the annual salary divided by 2,087. In order to include the cost of benefits, MSHA multiplied the average annual salary by a federal benefit scaler for MSHA of 1.392 (FY 2019 budget submission). Rate equals \$55.25 = (\$82,839 / 2,087 x 1.392).

Reviews by MSHA:

80 mines x 3 revisions x 3 hours/revision		
x \$55.25 hour	=	\$ 39,780
168 mines x 5 revisions x 3 hours/revision		
x \$55.25 hour	=	\$139,230
7 mines x 5 revisions x 3 hours/ revision		
X \$55.25 hour	=	\$ 5,801
TOTAL Cost	=	\$ 184,811

15. Explain the reasons for any program changes or adjustments reported on the burden worksheet.

Respondents: There has been a decrease in the number of respondents from 434 to 255 underground coal mines.

Responses: Due to a reduction in underground coal respondents there is a decrease of 737,104 responses from the previously approved 1,902,012 responses to the current total request of 1,164,908 for ventilation plan development as well as certification of mine examinations.

Hours: Due to a reduction in underground coal respondents there is a decrease of 171,074 burden hours from the previously approved 313,624 hours to the current total request of 142,550 for ventilation plan development as well as certification of mine examinations.

Costs: Due to the decrease in underground coal mines, there was a \$27,112 decrease in estimated costs from the previously approved \$118,982 to the current total estimate of \$91,870.

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.

18. Explain each exception to the topics of the certification statement identified in, "Certification for Paperwork Reduction Act Submissions."

There are no certification exceptions identified with this information collection.

B. Collection of Information Employing Statistical Methods

This collection of information does not employ statistical methods.

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

MANDATORY SAFETY AND HEALTH STANDARDS

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

INSPECTIONS, INVESTIGATIONS, AND RECORDKEEPING

SEC. 103(i)

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

VENTILATION

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

* * * * *