

SUPPORTING STATEMENT

Information Collection Title: Sealing of Abandoned Areas

Provisions:

- 30 CFR 75.335 – Seal strengths, design applications, and installation
- 30 CFR 75.336 – Sampling and monitoring requirements
- 30 CFR 75.337 – Construction and repair of seals
- 30 CFR 75.338 – Training

Collection Instrument(s): 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 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.

MSHA's standards for sealing abandoned areas in underground coal mines include requirements addressing the design and construction of new seals and the examination, maintenance, and repair of all seals.

Section 75.335(b) sets forth procedures for the approval of seal design applications.

Section 75.335(c) requires the submission and certification of information for seal installation.

Section 75.336(a)(2) requires the mine operator to evaluate the atmosphere in the sealed area to determine whether sampling through the sampling pipes in seals provides appropriate sampling locations of the sealed area. The mine operator will make an evaluation for each area that has seals.

Section 75.336(c) requires that mine operators immediately notify MSHA after a sample indicates that the oxygen concentration is 10 percent or greater and methane is between 4.5 percent and 17 percent and after taking the required additional sample from the sealed atmosphere with seals of less than 120 psi.

Section 75.336(e) requires a certified person to record each sampling result, including the location of the sampling points and the oxygen and methane concentrations. Also, any hazardous conditions found must be corrected and recorded in accordance with existing Section 75.363.

Section 75.337(c)(1) – (c)(5) requires a certified person to perform several tasks during seal construction and repair and certify that the tasks were done in accordance with the approved ventilation plan. In addition, a mine foreman or equivalent mine official must countersign the record.

Section 75.337(d) requires a senior mine management official to certify that the construction, installation, and materials used were in accordance with the approved ventilation plan.

Section 75.337(e) requires the mine operator to notify MSHA of certain activities concerning the construction of a set of seals. Section 75.337(e)(1) requires the mine operator to notify the District Manager between 2 and 14 days prior to commencement of seal construction. Section 75.337(e)(2) requires the mine operator to notify the District Manager, in writing, within 5 days of completion of a set of seals and provide a copy of the certifications required in Section 75.337(d). Section 75.337(e)(3) requires the mine operator to submit a copy of the quality control test results for seal material properties specified by section 75.335 within 30 days of completion of such tests.

Section 75.337(g)(3) requires the mine operator to label sampling pipes to indicate the location of the sampling point when the mine operator installs more than one sampling pipe through a seal.

Section 75.338(a) requires mine operators to certify that persons conducting sampling were trained in the use of appropriate sampling equipment, techniques, the location of sampling points, the frequency of sampling, the size and condition of sealed areas, and

the use of continuous monitoring systems, if applicable, before they conduct sampling, and annually thereafter.

Section 75.338(b) requires mine operators to certify that miners constructing or repairing seals, designated certified persons, and senior mine management officials were trained prior to constructing or repairing a seal and annually thereafter.

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.

Seals must be designed to withstand elevated pressures from explosions, and the atmosphere behind the seal must be monitored to prevent the sealed atmosphere from reaching the explosive range. Adequate seal design and monitoring of areas behind seals are crucial requirements to prevent potentially explosive or toxic gases from migrating into the active working areas of underground coal mines. Miners rely on seals to protect them from the hazardous, and sometimes explosive, environments within the sealed area. MSHA inspectors use the records to determine that tests and examinations, required by the standards, are being done correctly.

Records collected under these standards will help ensure that the construction and maintenance of seals are done correctly, certified persons conducting sampling in sealed areas are adequately trained, and results from sampling in sealed areas are recorded, so that problems can be found and fixed.

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.

This information collection does not specify how records must be kept. Mine operators may retain records using any method they choose. Records may be kept in the traditional manner or stored electronically, provided they are secure and not susceptible to loss or alteration. No improved information technology has been identified that would reduce the 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.

The information collection requirements in these standards are not duplicative of any existing MSHA requirements, and the information collected is unique to each mine.

5. If the collection of information impacts small businesses or other small entities, describe any methods used to minimize burden.

Various sources of information, such as “Technical Assistance,” <http://www.msha.gov/TechnicalAssistance.HTM>, “Best Practice Pocket Cards,” <http://www.msha.gov/s&hinfo/bpcards/bpcards.htm>, and “Accident Prevention,” http://www.msha.gov/Accident_Prevention/appmain.htm, are available to assist with compliance and minimize the burden on small businesses. These sites provide tips and general compliance information.

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.

The standards provide for recordkeeping requirements addressing seal design, monitoring of sealed atmospheres, constructing and repairing of seals, and training. Seal designs must be submitted to MSHA for approval. A seal design application, a supporting engineering analysis, and test results for approval by MSHA Technical Support Division for each type of seal that will be used in underground coal mines are submitted to MSHA. Mine operators must revise the ventilation plan to address the installation of any new set of seals. A set of seals will range from two to more than twenty individual seals in a contiguous area. The seal installation portion of the ventilation plan must be reviewed and approved prior to the construction of any new set of seals. The ventilation plan documents mine-specific policies that affect the health and safety of miners

Mine operators are required to evaluate the methane and oxygen concentrations of the sealed atmospheres for areas with seals less than 120 psi. This atmospheric testing includes areas with 120 psi or greater seals that have not cured to the design strength. The mine operator is required to record the methane and oxygen concentrations of the sealed atmospheric samples and the actions taken to correct the conditions. This documentation allows the review of the effectiveness of the seals by the mine operator and MSHA.

The mine operator must immediately notify MSHA when a sample of the sealed atmosphere contains an oxygen concentration of 10 percent or greater and a methane concentration between 4.5 percent and 17 percent. MSHA will have the opportunity to provide additional resources and information and verify safe working conditions for miners. In addition, if a potentially hazardous sealed atmosphere is reported to MSHA, the mine operator must revise their ventilation plan to specify actions to remediate the potential explosion hazard.

Mine operators must notify MSHA prior to seal construction. Miners constructing or repairing seals, designated certified persons, senior mine management officials, and certified persons who conduct atmospheric sampling must be trained prior to performing

their tasks and annually thereafter. Annual training helps these persons retain the necessary knowledge and skills to ensure that the tasks are done correctly.

If the information collection is not conducted, or conducted less frequently, seal-related hazards could develop, risking the health and safety of miners.

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 secrets, 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.**

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

8. If applicable, provide a copy and identify the data and page number of publication in the *Federal Register* of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments.

Specifically address comments received on cost and hour burden.

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

Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years – even if the collection of information activity is the same as in prior

periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.

MSHA published a 60-day *Federal Register* notice on June 12, 2017 (82 FR 26952). 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 has provided 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.

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 in Item 13 under 'Annual Cost to Federal Government.'**

Respondents: 242

MSHA estimates that approximately 6,500 seals are installed in 242 underground coal mines.

All wage rate calculations for question twelve are from the Bureau of Labor Statistics (BLS), Occupational Employment Statistics (OES) May 2016 survey¹ increased by 1.01 for wage inflation² since the May 2016 survey and a 1.48 benefit-scaling factor³.

30 CFR 75.335 – SEAL STRENGTHS, DESIGN APPLICATIONS, AND INSTALLATION

Annual Burden Hours and Cost for Preparation and Submission of Seal Approval Applications under Section 75.335(b):

Section 75.335(b) sets forth procedures for the approval of seal designs. MSHA estimates that seal manufacturers or mine operators will submit an average of 25 applications for seal design approval per year. MSHA estimates that, on average, a mining engineer costing \$82.71/hour⁴, takes approximately 2 hours to prepare each application, and a clerical employee costing \$22.29 /hour⁵, takes 1 hour to compile and submit the application.

25 applications x 2 h x \$82.71/h = \$4,136

25 applications x 1 h x \$22.29/h = \$557

¹ Options 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 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 2016/Qtr 2 2016 = 126.7/125.5 = 1.01).

³ 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 2016Qtr1-2016Qtr4 to determine that 32.5 percent of total loaded wages are benefits. The scaling factor may be approximated with the formula and values $1 + (\text{benefit percentage}/(1-\text{benefit percentage})) = 1 + (.325/(1-.325)) = 1.48$.

⁴ For engineers, MSHA used the employment weighted mean hourly wage of \$55.33 from OES May 2016 survey, Standard Occupational Classification (SOC) codes 17-2151, Mining and Geological Engineers, Including Mining Safety Engineers; and 11-9041, Architectural and Engineering Managers. The applicable NAICS codes are 212100, Coal Mining; and 213300, Support Activities for Mining. The weighted mean was adjusted for benefits and inflation (shown in previous notes) to obtain a fully loaded rate of \$82.71 ($\$55.33 \times 1.48 \times 1.01$).

⁵ For clerks, MSHA used the mean hourly wage of \$22.07 from OES May 2016 survey, Standard Occupational Classification (SOC) code 43-9061, Office Clerks, General. The applicable NAICS code is 212100, Coal Mining. The mean was adjusted for benefits and inflation (shown in previous notes) to obtain a fully loaded rate of \$22.29 ($\$14.91 \times 1.48 \times 1.01$).

Reporting Burden

Responses = 25

Burden Hours = (50 + 25) = 75 hours

Burden Hour Cost = (\$4,136 + \$557) = \$4,693

Annual Burden Hours and Costs to Certify Seal Design and Revise the Ventilation Plan Concerning Seal Installation under Section 75.335(c)(2) and (c)(3):

Section 75.335(c)(2) requires that a professional engineer certify that the provisions in the approved seal design are addressed and a copy of the certification is submitted with the revisions to the ventilation plan for seal installation. Section 75.335(c)(3) requires the mine operator to provide information concerning seals that will be constructed for approval in the ventilation plan, including a mine map that shows the proposed seal locations. Section 75.335(c)(3)(iii) requires that a professional engineer or land surveyor certify the locations of the seals on the mine map. MSHA estimates that mine operators submit this information each time a mine has worked-out an area of the mine that it plans to seal and includes a copy of the required certifications with this information.

MSHA estimates that each underground coal mine that uses seals submits a ventilation plan revision at least annually for the construction of new seals, and the District Manager, in reviewing the proposed ventilation plan revisions, will require some changes. The mine operator will need to revise and resubmit these ventilation plans for approval. MSHA estimates that the initial and subsequent revisions and the required certifications take a mining engineer, costing \$82.71/hour, 6 hours to complete. In addition, MSHA estimates that it takes a clerical employee, costing \$22.29/hour, 30 minutes to compile and submit the initial and subsequent revision materials.

242 plan revisions x (6 + 0.5)h/revision = 1,452 h + 121 h = 1,573 hours
(1,452 h x \$82.71/h) + (121 h x \$22.29/h) = \$120,095 + \$2,697 = \$122,792

Reporting Burden

Responses = 242

Burden Hours = 1,573 hours

Burden Hour Cost = \$122,792

30 CFR 75.336 – SAMPLING AND MONITORING REQUIREMENTS

Annual Burden Hours and Cost to Write Evaluation Results under Section 75.336(a)(2):

Section 75.336(a)(2) requires the mine operator to evaluate the atmosphere in the sealed area to determine whether sampling through pipes in seals provides appropriate sampling locations of the sealed area. When the results of the evaluation indicate the need for additional locations or frequencies of sampling sealed atmospheres, the mine operator must have them approved in the mine ventilation plan. MSHA estimates that, on average, each of the 242 mines with seals would have one new worked-out area to

be sealed annually. MSHA estimates that it will take a mining engineer, costing \$82.71/hour, 1 hour to write the results of the evaluation.

Record Keeping Burden

Responses = 242

Burden Hours = 242 mines x 1 area/mine x 1 hr/area = 242 hours

Burden Hour Cost = 242 h x \$82.71/h = \$20,016

Annual Burden Hours and Cost to Notify MSHA under Section 75.336(c):

Section 75.336(c) requires that mine operators immediately notify MSHA and withdraw miners from the affected area after a sample indicates that the oxygen concentration is 10 percent or greater and methane is between 4.5 percent and 17 percent and after taking the required additional sample from the sealed atmosphere with seals of less than 120 psi. MSHA estimates mine operators will immediately notify MSHA and withdraw miners approximately 10 times per year. MSHA estimates that a supervisor costing \$57.72/hour⁶ will take 6 minutes to notify MSHA by telephone.

Reporting Burden

Responses = 10

Burden Hours = 10 x 6 mins = 1 hour

Burden Hour Cost = 1 h x \$57.72/h = \$58

Annual Burden Hours and Cost to Revise Ventilation Plan To Allow Miners to Re-enter the Mine under Section 75.336(c):

Section 75.336(c) requires that before miners re-enter the mine after a withdrawal, the mine operator must have a ventilation plan revision approved by the District Manager specifying the corrective action to be taken. MSHA estimates that, on average, the total time for a supervisor costing \$57.72/hour to make initial and subsequent revisions to the ventilation plan is 1 hour. In addition, MSHA estimates that a clerical person costing \$22.29/hour takes a total of 30 minutes to copy and submit the initial and subsequent revisions.

10 revisions x 90 minutes (60+30)/revision = 15 hours
(10 h x \$57.72/h) + (5 h x \$22.29/h) = \$577 + \$111 = \$689

⁶ For supervisors,, MSHA used the employment weighted mean hourly wage of \$38.62 from OES May 2016 survey, Standard Occupational Classification (SOC) codes 47-1011, 49-1011, and 51-1011 as representative supervisor rates. The applicable NAICS code is 212100, Coal Mining. The mean was adjusted for benefits and inflation (shown in previous notes) to obtain a fully loaded rate of \$57.72 (\$38.62 x 1.48 x 1.01).

Reporting Burden

Responses = 10

Burden Hours = 15 hours

Burden Hour Cost = \$689

Annual Burden Hours and Cost to Make a Sampling Record under Section 75.336(e):

Under Section 75.336(e), a certified person must record each sampling result, including the location of the sampling points and the oxygen and methane concentrations. MSHA estimates that approximately 12,497 samples of sealed atmospheres will be collected and recorded per year. MSHA estimates that it takes a mining supervisor, costing \$57.72/h, 3 minutes to record a sample.

Record Keeping Burden

Responses = 12,497

Burden Hours = 12,497 x 3 minutes = 625 hours

Burden Hour Cost = 625 h x \$57.72/h⁷ = \$36,066

30 CFR 75.337 – CONSTRUCTION AND REPAIR OF SEALS

Annual Burden Hours and Cost To Certify Exams, Make Record, and Countersign Seal Construction and Repair Records under Section 75.337(c):

Section 75.337(c) applies to both the construction of new seals and the repair of existing seals. Under Section 75.337(c)(1) – through (c)(5), a certified person must perform several tasks during seal construction and repair, certify that the tasks were done in accordance with the approved ventilation plan, and record the results of exams and tests. A mine foreman or equivalent mine official must countersign the record. MSHA estimates that it takes 45 minutes for the certified person to perform the tasks required under section 75.337(c)(1) through (c)(5), which include certifying that the tasks were done and making a record, and 6 minutes for a mine foreman or equivalent mine official to countersign the record made by the certified person. MSHA estimates that a certified person costs \$57.72/h and a mine foreman costs \$96.87/hour⁸. MSHA estimates that mine operators will construct or repair approximately 1,000 seals per year.

1,000 seals x 45 minutes = 750 hours x \$57.72/h = \$43,290.

1,000 seals x 6 minutes = 100 hours x \$96.87/h = \$9,687

⁷ MSHA applied the average supervisory rate. Although a certified person is not required to be a supervisor, the supervisory rate is representative of the assumption that individuals with additional qualifications earn a higher than average rate.

⁸ For foreman and managers, MSHA used the employment weighted mean hourly wage of \$64.81 from OES May 2016 survey, Standard Occupational Classification (SOC) codes 11-1021, 11-3051, 11-9021, and 11-9199 as representative rates. The applicable NAICS code is 212100, Coal Mining. The mean was adjusted for benefits and inflation (shown in previous notes) to obtain a fully loaded rate of \$96.87 (\$64.81 x 1.48 x 1.01).

Record Keeping Burden

Responses = 1,000

Burden Hours = 850 hours (750+100)

Burden Hour Cost = \$52,977 (\$43,290+\$9,687)

Annual Burden Hours and Cost, under Section 75.337(d), to Certify that Construction, Installation, and Materials Used in Constructing Seals Is in Accordance with the Ventilation Plan:

MSHA estimates that mine operators will construct or repair approximately 1,000 seals per year in underground coal mines. Under section 75.337(d), a senior mine management official must certify that the construction, installation, and materials used were in accordance with the approved ventilation plan. MSHA estimates that, on average, certification under section 75.337(d) takes a senior mine management official 3 minutes.

1,000 seals x 3 minutes/seal = 50 h x \$96.87/h = \$4,844.

Record Keeping Burden

Responses = 1,000

Burden Hours = 50 hours

Burden Hour Cost = \$4,844

Annual Burden Hours and Cost to Notify MSHA Concerning Constructing Sets of Seals under Section 75.337(e):

Section 75.337(e), requires the mine operator to notify MSHA of certain activities concerning the construction of a set of seals. MSHA estimates approximately 100 sets of seals will be constructed or repaired per year.

Section 75.337(e)(1) requires the mine operator to notify the District Manager between 2 and 14 days prior to starting seal construction. MSHA estimates that a manager, costing \$96.87/hour, takes 3 minutes to notify the District Manager between 2 and 14 days prior to commencement of seal construction.

Section 75.337(e)(2) requires the mine operator to notify the District Manager, in writing, within 5 days of completion of a set of seals and provide a copy of the certifications required in paragraph (d). (The burden hours and related cost for submitting a copy of the certifications required by paragraph (d) were determined above.)

Section 75.337(e)(3) requires the mine operator to submit a copy of the quality control test results for seal material properties specified by section 75.335 within 30 days of completion of such tests. MSHA estimates that a clerical employee takes 12 minutes to prepare and send a letter notifying the District Manager of the completion of a set of seals and to copy and send the quality control test results.

100 sets of seals x (3 minutes + 12 minutes)/set = 25 hours
(5 h x \$96.87/h) + (20 h x \$22.29/h) = (\$484 + \$446) = \$930

Reporting Burden

Responses = 100

Burden Hours = 25 hours

Burden Hour Cost = \$930

Annual Burden Hours and Cost to Revise Ventilation Plan to Permit Welding, Cutting, and Soldering Within 150 Feet of a Seal under Section 75.337(f):

Section 75.337(f) prohibits welding, cutting, and soldering within 150 feet of a seal, unless such work is approved by the District Manager in the ventilation plan. MSHA estimates that mine operators submit, on average, 1 revision annually to the ventilation plan to permit welding, cutting, and soldering within 150 feet of a seal. MSHA estimates that a supervisor, costing \$57.72/hr, takes 15 minutes to write the revision and a clerical worker, costing \$22.29/hr, takes 6 minutes to copy and submit the revision.

1 revisions x (15 minutes + 6 minutes) /revision = 1 hour
(15m x \$57.72/h) + (6m x \$22.29/h) = \$16

Reporting Burden

Responses = 1

Burden Hours = 1 hour

Burden Hour Cost = \$16

Annual Burden Hours and Cost to Label Sampling Pipes under Section 75.337(g)(3):

Section 75.337(g)(3) requires that sampling pipes be labeled to indicate the location of the sampling point when more than one sampling pipe is installed through a seal. MSHA estimates approximately 2 sets of multiple sample pipes will be labeled per year. MSHA estimates that a miner costing \$38.82⁹ per hour will take approximately 10 minutes to label the sample pipes.

2 sets of pipes labeled x 10 min/set = 1 hour * x \$38.82/hour = \$39.

3rd party Disclosure Burden

Responses = 2

Burden Hours = 1 hour

Burden Hour Cost = 1 hour x \$38.82/h = \$39

⁹ For a miner, MSHA used the employment weighted mean hourly wage of \$25.97 from the OES May 2016 survey for sixteen nonsupervisory SOCs in two major occupational groups (Construction and Extraction Occupations, SOC group 47; Production Occupations, SOC group 51) The applicable NAICS code is 212100, Coal Mining. The mean was adjusted for benefits and inflation (shown in previous notes) to obtain a fully loaded rate of \$38.82 (\$25.97 x 1.48 x 1.01).

30 CFR 75.338 – TRAINING

Annual Burden Hours and Cost to Certify that Persons Were Trained to Sample under Section 75.338(a):

Section 75.338(a) requires mine operators to certify that persons conducting sampling receive training on the use of appropriate sampling equipment, procedures, the location of sampling points, the frequency of sampling, the size and condition of sealed areas, and the use of continuous monitoring systems, if applicable, before conducting sampling, and annually thereafter. MSHA estimates that a supervisor, costing \$57.72/hour, takes 6 minutes to certify that all persons conducting sampling of seals received the required training.

MSHA estimates that, on average, there are four certified persons trained in the use of appropriate sampling equipment, procedures, the location of sampling points, the frequency of sampling, the size and condition of sealed areas, and the use of continuous monitoring systems, if applicable, at each of the 242 underground coal mines with seals. MSHA estimates that 7 percent of the certified persons are replaced annually due to turnover or approximately 68 certified persons annually ($242 \times 4 \times 0.07$). Where a miner is trained due to turnover, the certification is estimated to take 6 minutes for each person trained.

242 annual certifications + 68 certifications due to turnover = 310 certifications
310 certifications x 6 minutes/certification = 31 hours
31 h x \$57.72/h = \$1,789

Record Keeping Burden

Responses = 310

Burden Hours = 31 hours

Burden Hour Cost = \$1,789

Annual Burden Hours and Cost to Certify That Persons Were Trained in Seal Construction and Repair under Section 75.338(b):

Under section 75.338(b), mine operators must train miners constructing or repairing seals, designated certified persons, and senior mine management officials in seal construction and repair. MSHA estimates that an instructor takes 6 minutes to certify that all persons were trained in seal construction and repair under section 75.338(b). The training instructor's hourly cost is estimated to be equivalent to the manager's hourly cost of \$96.87.

MSHA estimates that, on average, there are 7 persons trained in seal construction and repair at each of the 242 underground coal mines with seals. MSHA estimates that 7 percent of the persons trained in seal construction and repair are replaced annually due to turnover or approximately 119 certified persons annually ($242 \times 7 \times 0.07$). Where

a miner is trained due to turnover, the certification is estimated to take 6 minutes for each person trained.

242 annual certifications + 119 certifications due to turnover = 361 certifications
 361 certifications x 6 minutes/certification = 36 hours
 36 h x \$96.87/h = \$3,487

Record Keeping Burden
Responses = 361
Burden Hours = 36 hours
Burden Hour Cost = \$ 3,487

SUMMARY OF PAPERWORK BURDEN HOURS AND BURDEN HOUR COSTS

Section in 30 CFR	Responses	Burden Hours	Burden Hour Costs
Requirements			
75.336(a)(2) (Record Keeping)	242	242	\$20,016
75.336(e) (Record Keeping)	12,497	625	\$36,066
75.337(c) (Record Keeping)	1,000	850	\$52,977
75.338(a) (Record Keeping)	310	31	\$1,789
75.338(b) (Record Keeping)	361	36	\$3,497
Record Keeping Burden Hours Subtotal	14,410	1,784	\$114,345
75.337(g)(3) (3 rd Party Disclosure)	2	1	\$39
3rd Party Disclosure Burden Hours Subtotal	2	1	\$39
75.335(b) (Reporting)	25	75	\$4,693
75.335(c)(3) (Reporting)	242	1,573	<u>\$122,792</u>
75.336(c) (Reporting)	10	1	<u>\$58</u>
75.336(c) (re-entry) (Reporting)	10	<u>15</u>	<u>\$689</u>
75.337(d) (Reporting)	1,000	50	<u>\$4,844</u>
75.337(e) (Reporting)	100	25	\$930
75.337(f) (Reporting)	1	<u>1</u>	\$16
Reporting Burden Hours Subtotal	1,388	1,740	\$134,022
Recordkeeping, 3rd Party Disclosure and Reporting Total	15,800	3,525	\$248,406

13. Provide an estimate for the total annual cost burden to respondents or record keepers 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 collections 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.**

Annual Cost for a Professional Engineer to Certify that Seal Designs are in Accordance with Current, Prudent Engineering Practices under Section 75.335(b):

Section 75.335(b) provides procedures for the approval of seal designs submitted to MSHA. The Agency estimates that 10 applications would be filed every year. Under section 75.335(b)(1)(ii), for each application filed, a professional engineer must certify that the design of the seal is in accordance with current, prudent engineering practices. The professional engineer would be a contractor who works for the company filing the seal application. MSHA estimates that a professional engineer, costing \$98.87¹⁰/hour, would need 80 hours to review the application and perform the certification, which

¹⁰ For engineers, MSHA used the employment weighted mean hourly wage of \$66.14 from OES May 2016 survey, Standard Occupational Classification (SOC) codes 17-2151, Mining and Geological Engineers, Including Mining Safety Engineers; and 11-9041, Architectural and Engineering Managers. The applicable NAICS code for question 13 is 213300, Support Activities for Mining. The weighted mean was adjusted for benefits and inflation (shown in previous notes) to obtain a fully loaded rate of \$98.87 (\$66.14 x 1.48 x 1.01).

results in a cost of \$7,910/application. In addition, each application would need to have 30 quality control tests analyzed at a price of \$90 for each test, which results in a cost of \$2,700/application. MSHA estimates that two copies will be made of the application at a cost of \$20 (\$10/copy), and postage is estimated at \$16/application.

10 applications x (\$7,910 + \$2,700 tests + \$20 copies + \$16 postage) = \$106,460

Annual Cost for a Professional Engineer to Examine Mine-Specific Seal Installation and the Revised Mine Map under Section 75.335(c):

Section 75.335(c)(2) requires that a professional engineer conduct or have oversight of seal installation and certify that the provisions in the approved seal design have been addressed and are applicable to the conditions at the mine. Also, section 75.335(c)(3) (iii) requires that a professional engineer certify the mine map of the sealed area and seal locations. For these certifications, the professional engineer must examine the locations where seals will be constructed and revise the mine map. MSHA estimates that, on average, these activities will take a professional engineer 40 hours/mine. MSHA estimates that, on average, each of the 242 mines would have one new worked-out area to be sealed annually.

242 mines with sealed areas x 40 hr./mine x \$98.87/h = \$957,062

Annual Cost to Notify MSHA of Constructing Sets of Seals, Certifications, and Test Results under Section 75.337(e):

Under section 75.337(e), the mine operator must notify MSHA of certain activities concerning the construction of a set of seals. Section 75.337(e)(1) requires the mine operator to notify the District Manager between 2 and 14 days prior to starting seal construction. Under section 75.337(d), on completion of the construction of each seal, a senior mine manager must certify that the construction, installation, and materials used were in accordance with the approved ventilation plan. Section 75.337(e)(2) requires the mine operator to notify the District Manager, in writing, within 5 days of completion of a set of seals and provide a copy of the certifications required in paragraph (d). Section 75.337(e)(3) requires the mine operator to submit a copy of the quality control test results for seal material properties specified by section 75.335 within 30 days of completion of such tests.

MSHA estimates that 242 sets of 5 seals will be constructed by mine operators annually. MSHA estimates that the letter of completion and the certification of construction, installation, and materials are each one page, and the quality control test results are 15 pages. Copy costs are \$0.15/page and postage costs are \$1 for 15 pages and \$0.50 for each single page. Separate postage will be charged because the letter, certification, and test results are not sent at the same time. Total copy and postage cost for the notification of the start of construction or completion of each set of seals is estimated to be \$1.30/set (2 page x \$0.15/page) + \$1 postage). Total copy and

postage cost for quality assurance tests of each seal is estimated to be \$3.25 ((15 pages at \$0.15/page) + \$1.00 postage)

484 (242 mines x 2 notifications/mine) notifications of seal sets started and completed x \$1.30/set of seals = \$629

1,210 (242 mines x 5 seals/set) x \$3.25 per seal for copying and postage = \$3,933

Responses = 1,694 (484 + 1,210)

Copying and Postage Cost = \$4,562 (\$3,933 + \$629)

SUMMARY OF PAPERWORK COST BURDEN

Section in 30 CFR	Cost
Recordkeeping Requirements	
75.335(c)(2)	\$957,062
Subtotal	\$957,062
Reporting Requirements	
75.335(b)	\$106,460
75.337(e)	\$4,562
Subtotal	\$111,022
Total	\$1,068,083

14. Provide estimates of annualized cost to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification 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.

Applicants will need to submit seal designs to MSHA for approval. In addition, mine operators will need to modify their ventilation plans to address the requirements for sampling behind the seals, and seal design, construction, maintenance, and repair. MSHA expects to review seal designs and ventilation plan revisions with existing personnel. Thus, the Federal costs associated with this collection of information is 1 GS 13 employee spending approximately 90 hours per review, 10 reviews per year, earning a wage rate of \$65.45/hour¹¹.

(90 h/review x 10 reviews/yr x \$65.45/h) = \$58,905

¹¹ Annual salary developed from Office of personnel Management (OPM) March 2016 *FedScope* employment cube, <http://www.fedscope.opm.gov/>. Average annual salary of \$98,772 for DOL-MSHA GS-13 employees. Data search qualifiers were: Agency = DLMS, Occupation = all except 0343 program analysis, Work Schedule = Full-Time, Salary Grade = GS-13, 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 1.383 (FY 2017 budget submission). Rate equals \$65.45 = \$98,772/2087 x 1.383.

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

The number of producing underground coal mines has decreased from 301 to 242. In addition, the percentage of sealed areas with seals of less than 120 psi strength continues to decrease as operators build new, stronger seals. Due to the decrease in respondents, responses decreased as well from 54,857 to 15,800, and burden hours decreased from 6,380 to 3,525. Response time increased for annual burden hours and to notify MSHA under section 75.336(c) but this increase in burden hours did not offset the overall decrease in burden hours. Costs decreased from \$1,510,674 to \$1,068,083.

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 additional 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 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

The collection of this information does not employ statistical methods.