

SUPPORTING STATEMENT

Sealing of Abandoned Areas:

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

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.

MSHA's standards for sealing abandoned areas in underground coal mines includes requirements covering the design and construction of new seals and the maintenance and repair of all seals. Currently there are 11,685 seals installed in 361 underground coal mines.

§ 75.335(b). This provision sets forth procedures for the approval of seal design applications.

§ 75.335(c). This provision requires the submission and certification of information for seal installation.

§ 75.336(a)(2). This provision 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. This evaluation will be made for each area that has seals.

§ 75.336(c). This provision 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.

§ 75.336(e). This provision 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 § 75.363.

§ 75.337(c)(1) – (c)(5). This provision 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.

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

§ 75.337(e). This provision requires the mine operator to notify MSHA of certain activities concerning the construction of a set of seals:

- o § 75.337(e)(1) requires the mine operator to notify the District Manager between 2 and 14 days prior to commencement of seal construction.
- o § 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 § 75.337(d).
- o § 75.337(e)(3) requires the mine operator to submit a copy of the quality control test results for seal material properties specified by § 75.335 within 30 days of completion of such tests.

§ 75.337(g)(3). This provision requires sampling pipes to be labeled to indicate the location of the sampling point when more than one sampling pipe is installed through a seal.

§ 75.338(a). This provision 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.

§ 75.338(b) This provision 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 that will be collected under this rule will help assure 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 rule does not specify how records must be kept. Operators may retain records using any method they choose. Records could 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.

5. If the collection of information impacts small businesses or other small entities (Item 5 of OMB Form 83-I), describe any methods used to minimize burden.

Various sources of information, such as "Technical Assistance," "Best Practices," "Training Plan Advisor," and "Accident Prevention" are available on MSHA's website at <http://www.msha.gov> 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, construction and repair of seals, and training.

Seal designs must be submitted to MSHA for approval. The designs are reviewed by MSHA to help assure that the seals will protect miners from potential hazards within sealed areas. The mine operator must revise the ventilation plan when addressing hazards that could cause overpressures greater than 120 pounds/square inch (psi) within the area to be sealed. The District Manager must have the opportunity to: review the seal design application; review the proposed ventilation plan revision; inspect the area to be sealed; and verify that the proposals and documentation are appropriate and correct before each area is sealed. The ventilation plan documents mine specific policies that affect the health and safety of miners.

Mine operators are required to evaluate sampling results for hazardous conditions and the adequacy of the locations and frequencies of sampling and change the ventilation plan accordingly. MSHA must have the opportunity to promptly review sampling results from sealed areas and related information to verify safe working conditions for miners. In addition, the mine operator is required to record hazardous conditions and the actions taken to correct the conditions. This documentation allows the operator and MSHA to review the effectiveness of the seals.

Immediate notification to MSHA of an atmospheric sampling result from a sealed area that indicates an oxygen concentration of 10 percent or greater and a methane concentration between 4.5 percent and 17 percent gives MSHA an opportunity to help respond to the hazardous condition. MSHA will have the opportunity to provide additional resources and information and verify safe working conditions for miners. In addition, mine operators must revise their ventilation plan specifying actions to be taken to address the explosion hazard and have it approved by MSHA before miners re-enter the mine. Miners are assured healthier and safer working conditions when the mine operator follows an approved revised ventilation plan before the miners re-enter the mine.

Mine operators must notify MSHA of, or provide information related to, seal construction activities each time a seal is constructed. Physical conditions of underground coal mines are highly variable and can affect the performance of seals. Using the required information, MSHA can assess the conditions of each construction site to help assure that the seal design is appropriate and construction is performed correctly.

Miners constructing or repairing seals, designated certified persons, senior mine management officials, and certified persons who conduct sampling must be trained prior to performing their tasks and annually thereafter. Annual training helps these persons retain the necessary knowledge and skills to assure that the tasks are done correctly.

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.

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

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

MSHA 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 in Item 13 of OMB Form 83-I.**

*** Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included in Item 13.**

Currently, there are 11,685 seals installed in 361 underground coal mines.

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

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

§ 75.335(b) sets forth procedures for the approval of seal designs. During 2010, 10 applications for seal design approval were filed with MSHA. MSHA estimates that, on average, a supervisor earning \$84.70/hour, takes 2 hours to prepare each application, and a clerical employee earning \$26/hour, takes 1 hour to compile and submit the application.

10 applications x 2 hr x \$84.70/hr = \$1,694

10 applications x 1 hr x \$26/hr = \$260

Responses = 10

Burden Hours = (20 + 10) = 30 Hours

Burden Hour Cost = (\$1,694 + \$260) = \$1,954

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

§ 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. § 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. § 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.

During 2010, 361 underground coal mines constructed new seals. For the purpose of this analysis, MSHA estimates that each underground coal mine with 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 mine supervisor, earning \$84.70/hour, 6 hours to complete. In addition, MSHA estimates that it takes a clerical employee, earning \$26/hour, 0.5 hours (30 minutes) to compile and submit the initial and subsequent revision materials.

$361 \text{ plan revisions} \times (6 + 0.5)\text{hr/revision} = 2,166 \text{ hr} + 181 \text{ hr} = 2,347 \text{ hours}$
 $(2,166 \text{ hr} \times \$84.70/\text{hr}) + (181 \text{ hr} \times \$26/\text{hr}) = \$183,460 + \$4,693 = \$188,153$

Responses = 361
Burden Hours = 2,347 Hours
Burden Hour Cost = \$188,153

30 CFR 75.336 – SAMPLING AND MONITORING REQUIREMENTS

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

§ 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. 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 361 mines with seals would have one new worked-out area to be sealed annually. MSHA estimates that it will take a chief engineer 1 hour to write the results of the evaluation. MSHA estimates a chief engineer's hourly wage rate to be \$79.11.

Responses = 361

Burden Hours = 361 mines x 1 area/mine x 1 hr/area = 361 hours

Burden Hour Cost = 361 hr x \$79.11/hr = \$28,559

Annual Burden Hours and Cost To Notify MSHA under § 75.336(c):

§ 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. During 2010, there were 39 occurrences where mine operators needed to immediately notify MSHA and withdraw miners. MSHA estimates that a supervisor earning \$84.70/hour will take 0.1 hours (6 minutes) to notify MSHA by telephone.

Responses = 39

Burden Hours = 39 x 0.1 hr = 4 hours

Burden Hour Cost = 4 hr x \$84.70/hr = \$339

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

§ 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 earning \$84.70/hour to make initial and subsequent revisions to the ventilation plan is 1 hour. In addition, MSHA estimates that a clerical person earning \$26/hour takes a total of 0.5 hours (30 minutes) to copy and submit the initial and subsequent revisions.

39 revisions x (1 + 0.5)hr/revision = 59 hours

(39 hr x \$84.70/hr) + (20 hr x \$26/hr) = \$3,303 + \$520 = \$3,823

Responses = 39

Burden Hours = 59 hours

Burden Hour Cost = \$3,823

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

Under § 75.336(e), a certified person must record each sampling result, including the location of the sampling points and the oxygen and methane concentrations. During 2010, approximately 84,032 samples were taken and recorded. MSHA estimates that it takes a certified person earning \$84.70/hour 0.05 hours (3 minutes) to record a sample.

Responses = 84,032

Burden Hours = 84,032 x 0.05 hr = 4,202 hours

Burden Hour Cost = 4,202 hr x \$84.70/hr = \$355,909

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 § 75.337(c):

§ 75.337(c) applies to both the construction of new seals and the repair of existing seals. Under § 75.337(c)(1) – (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 0.75 hours (45 minutes) for the certified person to perform the tasks required under § 75.337(c)(1) through (c)(5), which include certifying that the tasks were done and making a record; and 0.1 hours (6 minutes) for a mine foreman or equivalent mine official to countersign the record made by the certified person. The certified person and mine foreman are estimated to earn \$84.70/hour. During 2010, mine operators constructed or repaired 2,057 seals.

$$2,057 \text{ seals} \times (0.75 \text{ hr} + 0.1 \text{ hr})/\text{seal} \times \$84.70/\text{hr} = 1,748 \text{ hr} \times \$84.70/\text{hr} = \$148,056$$

Responses = 2,057
Burden Hours = 1,748 hours
Burden Hour Cost = \$148,056

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

In 2010, mine operators constructed or repaired 2,057 seals in underground coal mines. Under § 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 § 75.337(d) takes a senior mine management official 0.05 hours (3 minutes). MSHA estimates that a senior mine management official earns \$112.11/hour.

$$2,057 \text{ seals} \times 0.05 \text{ hr}/\text{seal} \times \$112.11/\text{hr} = 103 \text{ hr} \times \$112.11/\text{hr} = \$11,547$$

Responses = 2,057
Burden Hours = 103 Hours
Burden Hour Cost = \$11,547

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

Under § 75.337(e), the mine operator must notify MSHA of certain activities concerning the construction of a set of seals. During 2010, 398 sets of seals were constructed or repaired.

§ 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 supervisor, earning \$84.70/hour, takes 0.05 hours (3 minutes) to notify the District Manager between 2 and 14 days prior to commencement of seal construction.

Under § 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.*) § 75.337(e)(3) requires the mine operator to submit a copy of the quality control test results for seal material properties specified by § 75.335 within 30 days of completion of such tests. MSHA estimates that a clerical employee, earning \$26/hour, takes 0.2 hours (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.

398 sets of seals x (0.05 + 0.2) hr/set = (20 + 80) = 100 hours
(20 hr x \$84.70/hr) + (80 hr x \$26/hr) = (\$1,694 + \$2,080) = \$3,774

Responses = 398
Burden Hours = 100 hours
Burden Hour Cost = \$3,774

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

§ 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, five revisions annually to the ventilation plan to permit welding, cutting, and soldering within 150 feet of a seal. MSHA estimates that a supervisor takes 0.25 hours (15 minutes) to write the revision and a clerical worker takes 0.1 hours (6 minutes) to copy and submit the revision.

5 revisions x (0.25 + 0.1) hrs/revision = 2 hours
(1 hr x \$84.70/hr) + (1 hr x \$26/hr) = \$111

Responses = 5
Burden Hours = 2 hours
Burden Hour Cost = \$111

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

§ 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. Based on MSHA's 2010 experience, MSHA expects no such labeling to take place. However, MSHA has included one burden hour of a miner's time as a placeholder.

Responses = 1

Burden Hours = 1 hour

Burden Hour Cost = 1 hour x \$35.30/hr = \$35

30 CFR 75.338 – TRAINING.

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

§ 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. The initial and annual retraining is assumed to take place at one time by one instructor. MSHA estimates that a supervisor, earning \$84.70/hour, takes 0.1 hours (6 minutes) to certify that 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 361 underground coal mines with seals. MSHA estimates that 7 percent of the certified persons are replaced annually due to turnover. Where a miner is trained due to turnover, training is assumed to be one-on-one and the certification is estimated to take 0.1 hours (6 minutes) for each person trained.

361 mines + (361 x 4 persons/mine x 7%) = 361 + 101 = 462 certifications
462 certifications x 0.1 hr/certification = 46 hours
46 hr x \$84.70/hr = \$3,896

Responses = 462

Burden Hours = 46 hours

Burden Hour Cost = \$3,896

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

Under § 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 0.1 hours to certify that persons were trained in seal construction and repair under § 75.338(b). The initial and annual retraining is assumed to take place at one time by one instructor. The training instructor's hourly wage rate is estimated to be \$84.70.

MSHA estimates that, on average, there are seven persons trained in seal construction and repair at each of the 361 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. Where a miner is trained due to turnover, training is assumed to be one-on-one and the certification is estimated to take 0.1 hours (6 minutes) for each person trained.

361 mines + (361 x 7 persons/mine x 7%) = 361 + 177 = 538 certifications
 538 certifications x 0.1 hr/certification = 54 hours
 54 hr x \$84.70/hr = \$4,574

Responses = 538
Burden Hours = 54 hours
Burden Hour Cost = 4,574

SUMMARY OF PAPERWORK BURDEN HOURS AND BURDEN HOUR COST

Section in 30 CFR	Responses	Burden Hours	Burden Hour Cost
75.335(b)	10	30	\$1,954
75.335(c)	361	2,347	\$188,153
75.336(a)(2)	361	361	\$28,559
75.336(c)-notify MSHA	39	4	\$339
75.336(c)-revise plan	39	59	\$3,823
75.336(e)	84,032	4,202	\$355,909
75.337(c)	2,057	1,748	\$148,056
75.337(d)	2,057	103	\$11,547
75.337(e)	398	100	\$3,774
75.337(f)	5	2	\$111
75.337(g)(3)	1	1	\$35
75.338(a)	462	46	\$3,896
75.338(b)	538	54	\$4,574
Total	90,360	9,057	\$750,730

13. Provide an estimate for the total annual cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden shown in Items 12 and 14).

*** The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life) and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.**

*** If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information 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 § 75.335(b):

§ 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 § 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, earning \$125/hour, would need 80 hours to review the application and perform the certification, which results in a cost of \$10,000/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 (\$10,000 + \$2,700 tests + \$20 copies + \$16 postage) = \$127,360

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

§ 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, § 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. During 2010, 361 mine operators installed seals.

361 mines with sealed areas x 40 hr/mine x \$125/hr = \$1,805,000

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

Under § 75.337(e), the mine operator must notify MSHA of certain activities concerning the construction of a set of seals. § 75.337(e)(1) requires the mine operator to notify the District Manager between 2 and 14 days prior to starting seal construction. Under § 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. § 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). § 75.337(e)(3) requires the mine operator to submit a copy of the quality control test results for seal material properties specified by § 75.335 within 30 days of completion of such tests.

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 is estimated to be \$4.55/seal ((17 pages x \$0.15/page) + \$2 postage).

2,057 new seals constructed x \$4.55/seal = \$9,359

SUMMARY OF PAPERWORK COST BURDEN

Section in 30 CFR	Cost Burden
75.335(b)	\$125,360
75.335(c)	\$1,805,000
75.337(e)	\$9,359
Total	\$1,939,719

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, there are no Federal costs associated with this collection of information package.

15. Explain the reasons for any program changes or adjustments reporting in Items 13 or 14 of the OMB Form 83-I.

In previous versions, estimations were used. After 3 years of actual experience, MSHA has included actual data and revised estimates based on this actual experience.

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 certification statement identified in Item 19, "Certification for Paperwork Reduction Act Submission," of OMB 83-I.

There are no certification exceptions identified with this information collection.

B. Collection of Information Employing Statistical Methods

The agency should be prepared to justify its decision not to use statistical methods in any case where such methods might reduce burden or improve accuracy of results. When Item 17 on the Form OMB 83-I is checked "Yes", the following documentation should be included in the Supporting Statement to the extent that it applies to the methods proposed:

- 1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection methods to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.**
- 2. Describe the procedures for the collection of information including:**
 - * Statistical methodology for stratification and sample selection,**
 - * Estimation procedure,**
 - * Degree of accuracy needed for the purpose described in the justification,**
 - * Unusual problems requiring specialized sampling procedures, and**
 - * Any use of periodic (less frequent than annual) data collection cycles to reduce burden.**
- 3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.**
- 4. Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of tests may be submitted for approval separately or in combination with the main collection of information.**
- 5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.**

The collection of this information does not employ statistical methods.

RELEVANT STATUTORY PROVISIONS

Federal Mine Safety and Health Act of 1977, Public Law 91-173, as amended by Public Law 95-164*

MANDATORY SAFETY AND HEALTH STANDARDS

SEC. 101.

(b)(1) The Secretary shall provide, without regard to the requirements of chapter 5, title 5, United States Code, for an emergency temporary mandatory health or safety standard to take immediate effect upon publication in the Federal Register if he determines (A) that miners are exposed to grave danger from exposure to substances or agents determined to be toxic or physically harmful, or to other hazards, and (B) that such emergency standard is necessary to protect miners from such danger.

(2) A temporary mandatory health or safety standard shall be effective until superseded by a mandatory standard promulgated in accordance with the procedures prescribed in paragraph (3) of this subsection.

(3) Upon publication of such standard in the Federal Register, the Secretary shall commence a proceeding in accordance with section 101 (a), and the standards as published shall also serve as a proposed rule for the proceeding. The Secretary shall promulgate a mandatory health or safety standard under this paragraph no later than nine months after publication of the emergency temporary standard as provided in paragraph (2).

INSPECTIONS, INVESTIGATIONS, AND RECORDKEEPING

SEC. 103.

(h) In addition to such records as are specifically required by this Act, every operator of a coal or other mine shall establish and maintain such records, make such reports, and provide such information, as the Secretary or the Secretary of Health, Education, and Welfare may reasonably require from time to time to enable him to perform his functions under this Act. The Secretary or the Secretary of Health, Education, and Welfare is authorized to compile, analyze, and publish, either in summary or detailed form, such reports or information so obtained. Except to the extent otherwise specifically provided by this Act, all records, information, reports, findings, citations, notices, orders, or decisions required or issued pursuant to or under this Act may be published from time to time, may be released to any interested person, and shall be made available for public inspection.

Mine Improvement and New Emergency Response Act of 2006 (Miner Act) Public Law 109-236 (S 2803)

An Act To amend the Federal Mine Safety and Health Act of 1977 to improve the safety of mines and mining.

SEC. 10. SEALING OF ABANDONED AREAS.

Not later than 18 months after the issuance by the Mine Safety and Health Administration of a final report on the Sago Mine accident or the date of enactment of the Mine Improvement and New Emergency Response Act of 2006, whichever occurs earlier, the Secretary of Labor shall finalize mandatory health and safety standards relating to the sealing of abandoned areas in underground coal mines. Such health and safety standards shall provide for an increase in the 20 psi standard currently set forth in section 75.335(a)(2) of title 30, Code of Federal Regulations.

RELEVANT REGULATORY PROVISIONS

30 CFR, PART 75

§ 75.335 Seal strengths, design applications, and installation.

(b) Seal design applications. Seal design applications from seal manufacturers or mine operators shall be in accordance with paragraphs (b)(1) or (b)(2) of this section and submitted for approval to MSHA's Office of Technical Support, Pittsburgh Safety and Health Technology Center, P.O. Box 18233, Cochran's Mill Road, Pittsburgh, PA 15236.

(1) An engineering design application shall—

(i) Address gas sampling pipes, water drainage systems, methods to reduce air leakage, pressure-time curve, fire resistance characteristics, flame spread index, entry size, engineering design and analysis, elasticity of design, material properties, construction specifications, quality control, design references, and other information related to seal construction;

(ii) Be certified by a professional engineer that the design of the seal is in accordance with current, prudent engineering practices and is applicable to conditions in an underground coal mine; and

(iii) Include a summary of the installation procedures related to seal construction; or

(2) Each application based on full scale explosion tests or other equivalent means of physical testing shall address the following requirements to ensure that a seal can reliably meet the seal strength requirements:

(i) Certification by a professional engineer that the testing was done in accordance with current, prudent engineering practices for construction in a coal mine;

(ii) Technical information related to the methods and materials;

(iii) Supporting documentation;

(iv) An engineering analysis to address differences between the seal support during test conditions and the range of conditions in a coal mine; and

(v) A summary of the installation procedures related to seal construction.

(3) MSHA will notify the applicant if additional information or testing is required. The applicant shall provide this information, arrange any additional or repeat tests, and provide prior notification to MSHA of the location, date, and time of such test(s).

(4) MSHA will notify the applicant, in writing, whether the design is approved or denied. If the design is denied, MSHA will specify, in writing, the deficiencies of the application, or necessary revisions.

(5) Once the seal design is approved, the approval holder shall promptly notify MSHA, in writing, of all deficiencies of which they become aware.

(c) *Seal installation approval.* The installation of the approved seal design shall be subject to approval in the ventilation plan. The mine operator shall—

(1) Retain the seal design approval and installation information for as long as the seal is needed to serve the purpose for which it was built.

(2) Designate a professional engineer to conduct or have oversight of seal installation and certify that the provisions in the approved seal design specified in this section have been addressed and are applicable to conditions at the mine. A copy of the certification shall be submitted to the District Manager with the information provided in paragraph (c)(3) of this

section and a copy of the certification shall be retained for as long as the seal is needed to serve the purpose for which it was built.

(3) Provide the following information for approval in the ventilation plan—

(i) The MSHA Technical Support Approval Number;

(ii) A summary of the installation procedures;

(iii) The mine map of the area to be sealed and proposed seal locations that include the deepest points of penetration prior to sealing. The mine map shall be certified by a professional engineer or a professional land surveyor.

(iv) Specific mine site information, including—

(A) Type of seal;

(B) Safety precautions taken prior to seal achieving full design strength;

(C) Methods to address site-specific conditions that may affect the strength and applicability of the seal including set-back distances;

(D) Site preparation;

(E) Sequence of seal installations;

(F) Projected date of completion of each set of seals;

(G) Supplemental roof support inby and outby each seal;

(H) Water flow estimation and dimensions of the water drainage system through the seals;

(I) Methods to ventilate the outby face of seals once completed;

(J) Methods and materials used to maintain each type of seal;

(K) Methods to address shafts and boreholes in the sealed area;

(L) Assessment of potential for overpressures greater than 120 psi in sealed area;

(M) Additional sampling locations; and

(N) Additional information required by the District Manager.

§ 75.336 Sampling and monitoring requirements.

(a) A certified person as defined in § 75.100 shall monitor atmospheres of sealed areas. Sealed areas shall be monitored, whether ingassing or outgassing, for methane and oxygen concentrations and the direction of leakage.

(2) The mine operator shall evaluate the atmosphere in the sealed area to determine whether sampling through the sampling pipes in seals and approved locations provides appropriate sampling locations of the sealed area. The mine operator shall make the evaluation immediately after the minimum 14-day required sampling, if the mine ventilation system is reconfigured, if changes occur that adversely affect the sealed area, or if the District Manager requests an evaluation. When the results of the evaluations indicate the need for additional sampling locations, the mine operator shall provide the additional locations and have them approved in the ventilation plan. The District Manager may require additional sampling locations and frequencies in the ventilation plan.

(c) Except as provided in § 75.335(d), when a sample is taken from the sealed atmosphere with seals of less than 120 psi and the sample indicates that the oxygen concentration is 10 percent or greater and methane is between 4.5 percent and 17 percent, the mine operator shall immediately take an additional sample and then immediately notify the District Manager. When the additional sample indicates that the oxygen concentration is 10 percent or greater and methane is between 4.5 percent and 17 percent, persons shall be withdrawn from the affected area which is the entire mine or other affected area identified by the operator and approved by the District Manager in the ventilation plan, except those persons referred to in § 104(c) of the

Act. The operator may identify areas in the ventilation plan to be approved by the District Manager where persons may be exempted from withdrawal. The operator's request shall address the location of seals in relation to: (1) areas where persons work and travel in the mine; (2) escapeways and potential for damage to the escapeways; and (3) ventilation systems and controls in areas where persons work or travel and where ventilation is used for escapeways. The operator's request shall also address the gas concentration of other sampling locations in the sealed area and other required information. Before miners reenter the mine, the mine operator shall have a ventilation plan revision approved by the District Manager specifying the actions to be taken.

(e) Recordkeeping. (1) The certified person shall promptly record each sampling result including the location of the sampling points, whether ingassing or outgassing, and oxygen and methane concentrations. The results of oxygen and methane samples shall be recorded as the percentage of oxygen and methane measured by the certified person and any hazardous condition found in accordance with § 75.363.

(2) The mine operator shall retain sampling records at the mine for at least one year from the date of the sampling.

§ 75.337 Construction and repair of seals.

(c) A certified person designated by the mine operator shall directly supervise seal construction and repair and—

(1) Examine each seal site immediately prior to construction or repair to ensure that the site is in accordance with the approved ventilation plan;

(2) Examine each seal under construction or repair during each shift to ensure that the seal is being constructed or repaired in accordance with the approved ventilation plan;

(3) Examine each seal upon completion of construction or repair to ensure that construction or repair is in accordance with the approved ventilation plan;

(4) Certify by initials, date, and time that the examinations were made; and

(5) Make a record of the examination at the completion of any shift during which an examination was conducted. The record shall include each deficiency and the corrective action taken. The record shall be countersigned by the mine foreman or equivalent mine official by the end of the mine foreman's or equivalent mine official's next regularly scheduled working shift. The record shall be kept at the mine for one year.

(d) Upon completion of construction of each seal a senior mine management official, such as a mine manager or superintendent, shall certify that the construction, installation, and materials used were in accordance with the approved ventilation plan. The mine operator shall retain the certification for as long as the seal is needed to serve the purpose for which it was built.

(e) The mine operator shall—

(1) Notify the District Manager between two and fourteen days prior to commencement of seal construction;

(2) Notify the District Manager, in writing, within five days of completion of a set of seals and provide a copy of the certification required in paragraph (d) of this section; and

(3) Submit a copy of quality control results to the District Manager for seal material properties specified by § 75.335 within 30 days of completion of quality control tests.

(f) Welding, cutting, and soldering. Welding, cutting, and soldering with an arc or flame are prohibited within 150 feet of a seal. An operator may request a different location in the ventilation plan to be approved by the District Manager. The operator's request must address methods the mine operator will use to continuously monitor atmospheric conditions in the sealed area during welding or burning; the airflow conditions in and around the work area; the rock dust and water application methods; the availability of fire extinguishers on hand; the procedures to maintain safe conditions, and other relevant factors.

(g) Sampling pipes.

(3) The sampling pipes shall be labeled to indicate the location of the sampling point when more than one sampling pipe is installed through a seal.

§ 75.338 Training.

(a) Certified persons conducting sampling shall be trained in the use of appropriate sampling equipment, procedures, location of sampling points, frequency of sampling, size and condition of the sealed area, and the use of continuous monitoring systems if applicable before they conduct sampling, and annually thereafter. The mine operator shall certify the date of training provided to certified persons and retain each certification for two years.

(b) Miners constructing or repairing seals, designated certified persons, and senior mine management officials shall be trained prior to constructing or repairing a seal and annually thereafter. The training shall address materials and procedures in the approved seal design and ventilation plan. The mine operator shall certify the date of training provided each miner, certified person, and senior mine management official and retain each certification for two years.