

## SUPPORTING STATEMENT

**Information Collection Title:** Mine Mapping and Records of Opening, Closing, and Reopening of Mines

<b>OMB Control</b>	<b>30 CFR Citations</b>	<b>Title</b>
1219-0073	Part 75	Underground Coal Mines.
	Section 75.372(a)(1), (a)(2), and (c)	Mine ventilation map.
	Section 75.373	Reopening mines.
	Section 75.1200	Mine map.
	Section 75.1200-1	Additional information on mine map.
	Section 75.1201	Certification.
	Section 75.1202	Temporary notations, revisions, and supplements.
	Section 75.1202-1(a) and (b)	Temporary notations, revisions, and supplements.
	Section 75.1203	Availability of mine map.
	Section 75.1204	Mine closure; filing of map with Secretary.
	Section 75.1204-1	Places to give notice and file maps.
	Section 75.1721(a), (b) and (c)	Opening of new underground coal mines, or reopening and reactivating of abandoned or deactivated coal mines, notification by the operator; requirements.
	Part 77	Surface Coal Mines and Surface Work Areas of Underground Coal Mines.
	Section 77.1200	Mine map.
	Section 77.1201	Certification of mine maps.
	Section 77.1202	Availability of mine map.

**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. Provide a detailed description of the nature and source of the information to be collected.**

This information collection protects miners by assuring that up-to-date, accurate mine maps contain the information needed to clarify the best alternatives for action during an emergency operation. Also, coal mine operators routinely use maps to create safe and effective development plans.

Mine maps are schematic depictions of critical mine infrastructure, such as water, power, transportation, ventilation, and communication systems. Using accurate, up-to-date maps during a disaster, mine emergency personnel can locate refuges for miners and identify sites of explosion potential; they can know where stationary equipment was placed, where ground was secured, and where they can best begin a rescue operation. During a disaster, maps can be crucial to the safety of the emergency personnel who must enter a mine to begin a search for survivors.

Mine maps may describe the current status of an operating mine or provide crucial information about a long-closed mine that is being reopened.

Coal mine operators use map information to develop safe and effective plans and to help determine hazards before beginning work in areas, such as abandoned underground mines or the worked-out and inaccessible areas of an active underground or surface mine. Abandoned mines or inaccessible areas of active mines may have

water inundation potentials and explosive levels of methane or lethal gases. If an operator, unaware of the hazards, were to mine into such an area, miners could be killed or seriously injured.

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:

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 [of Labor] 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 [of Labor] 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.

Further, section 101(a) of the Mine Act, 30 U.S.C. 811, authorizes the Secretary of Labor (Secretary) to develop, promulgate, and revise as may be appropriate, improved mandatory health or safety standards for the protection of life and prevention of injuries in coal or other mines.

#### MAPS

Sections 312(a), (b), and (c) of Mine Act, 30 U.S.C. Section 872, address MSHA's collection of information concerning mapping of mines and the opening, closure, and reopening of mines necessary to carry out its duty to protect the safety and health of miners as follows:

SECTION 312 (a) The operator of a coal mine shall have in a fireproof repository located in an area on the surface of the mine chosen by the mine operator to minimize the danger of destruction by fire or other hazard, an accurate and up-to-date map of such mine drawn on scale. Such map shall show the active workings, all pillared, worked out, and abandoned areas, except as provided in this section, entries and aircourses with the direction of airflow indicated by arrows, contour lines of all elevations, elevations of all main and cross or side entries, dip of the coalbed, escapeways, adjacent mine workings within one thousand feet, mines above or below, water pools above, and either producing or abandoned oil and gas wells located within five hundred feet of such mine and any underground area of such mine, and such other information as the Secretary may require. Such map shall identify those areas of the mine which have been pillared, worked out, or abandoned which are inaccessible or cannot be entered safely and on which no information is available. Such map shall be made or certified by a registered engineer or a registered surveyor of the State in which the mine is located. Such map shall be kept up to date by temporary notations

and such map shall be revised and supplemented at intervals prescribed by the Secretary on the basis of a survey made or certified by such engineer or surveyor.

(b) The coal mine map and any revision and supplement thereof shall be available for inspection by the Secretary or his authorized representative, by coal mine inspectors of the State in which the mine is located, by miners in the mine and their representatives and by operators of adjacent coal mines and by persons owning, leasing, or residing on surface areas of such mines or areas adjacent to such mines. The operator shall furnish to the Secretary or his authorized representative and to the Secretary of Housing and Urban Development, upon request, one or more copies of such map and any revision and supplement thereof. Such map or revision and supplement thereof shall be kept confidential and its contents shall not be divulged to any other person, except to the extent necessary to carry out the provisions of this Act and in connection with the functions and responsibilities of the Secretary of Housing and Urban Development.

(c) Whenever an operator permanently closes or abandons a coal mine, or temporarily closes a coal mine for a period of more than ninety days, he shall promptly notify the Secretary of such closure. Within sixty days of the permanent closure or abandonment of the mine, or, when the mine is temporarily closed, upon the expiration of a period of ninety days from the date of closure, the operator shall file with the Secretary a copy of the mine map revised and supplemented to the date of the closure. Such copy of the mine map shall be certified by a registered surveyor or registered engineer of the State in which the mine is located and shall be available for public inspection.

The referenced provisions from Title 30, Code of Federal Regulations are attached at the end of this document.

**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. Provide a detailed description of: how the information will be shared, if applicable, and for what programmatic purpose.**

The information collection addressed by this notice is intended to protect miners by assuring that up-to-date, accurate mine maps contain the information needed to clarify the best alternatives for action during an emergency operation. The information collections in this package are interwoven with those in OMB 1219-0088, Ventilation Plans, Tests, and Examinations in Underground Coal Mines.

Mine maps are schematic depictions of critical mine infrastructure, such as water, power, transportation, ventilation, and communication systems. Using accurate, up-to-date maps during a disaster, mine emergency personnel can locate refuges for miners and identify sites of explosion potential; they can know where stationary equipment was placed, where ground was secured, and where they can best begin a rescue operation. During a disaster, maps provide information critical to the safety of the emergency

personnel who must enter a mine to begin a search for survivors.

Mine maps may describe the current status of an operating mine or provide crucial information about a long-closed mine that is being reopened. Coal mine operators use map information to develop safe and effective plans and to recognize hazards before approaching areas, such as abandoned underground mines or the worked out and inaccessible areas of an active underground or surface mine. Abandoned mines or inaccessible areas of active mines may have water inundation potential and explosive levels of methane or lethal gases. If an operator, unaware of the hazards, were to mine into such an area, miners could be killed or seriously injured.

MSHA requires mine operators to provide the Agency with certified underground mine maps annually, with access to inspect surface mine maps and to file mine closure maps, providing essential information for MSHA to plan and conduct mandatory inspections and to review and approve mandatory mine plans and permits.

The notifications requiring the opening of new mines and reopening of abandoned mines provide information for the same purpose. Mine maps accurately depicting the most recent, up-to-date conditions are essential to the planning and safe operation of mines, and therefore, to the health and safety of miners.

**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.**

MSHA's requirements provide a range for scaling maps appropriate for underground coal mines which can encompass hundreds of square miles of active and abandoned workings. Mine mapping depicts critical mine safety and health elements with a potential to interact with extensive infrastructures, fire, and emergency hazards. The maps must be in accessible forms capable of being used in an emergency.

To be useful, most mine maps must be large. Technology does not exist or been identified that can reduce the burden of transmitting large mine maps to all segments of the mining industry without imposing increased burdens on others. Facsimile machines capable of scanning and transmitting documents greater than 8.5" x 11" in size are not commonly used and are not cost effective. Similarly, digital/electronic files used for computer generated maps are huge and require sophisticated printers or plotters and computer software.

Photocopy or mylar copies, hand delivered or mailed are the most practical and economical means to transmit mine maps. These prints can be as small as 24" x 36" or

in segments as large as 48" x 120" (as many segments and as large as the mine size and map scale dictates). MSHA provides copies of the mine abandonment maps submitted to the District Managers under 30 CFR 75.1204-1 to the U.S. Department of Interior, Office of Surface Mining, Reclamation and Enforcement (OSM). OSM microfilms and retains the maps in a repository which is available to the public and to mine operators of adjacent properties upon request.

**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 can only be provided by the mine operators who develop the areas, plan and conduct the mining, and create the mine workings which are eventually worked out and finally abandoned. MSHA requires underground mine operators to submit maps when an area is abandoned. This information is microfilmed and retained in a Department of Interior map repository and made available to the public and to the mine operators of adjacent properties. In addition, some States require underground mine operators to submit final, mine closure maps and retain them in map repositories. However, the microfilm repository maintained by OSM containing copies of the maps submitted to the MSHA District Managers, is the best organized, indexed, and complete source of information available.

Maps are unique to each mine. There is no other source for this information.

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

This information does not have a significant impact on small businesses or other small entities.

**6. Describe the consequence to Federal/MSHA program or policy activities if the collection of information is not conducted, or is conducted less frequently as well as any technical or legal obstacles to reducing burden.**

Mine operators are required to maintain accurate, up-to-date mine maps. The maps must be revised and supplemented at intervals of not more than 6 months and must be certified accurate by a registered engineer or surveyor. Copies of the certified underground maps should be submitted to MSHA annually. Up-to-date and revised mine closure maps must also be provided to the Secretary whenever an operator permanently closes or abandons a coal mine, or temporarily closes a coal mine for a period of more than 90 days.

In addition, mine operators must notify MSHA when a new mine is opened or a previously abandoned or inactive mine is reopened so that an inspection can be

conducted. The information gathered and recorded on mine maps is essential for the safe operation of the mine and is essential for assuring compliance with the safety standards imposed by the Mine Act and MSHA regulations. The information is not available from any other source. Only the mine operator is capable of continuously updating the mine map. Inaccurate or outdated information would endanger miner safety.

**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.**
- \*Requiring respondents to submit proprietary trade secret, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.**

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

**8. Federal Register Notice:**

- \*Provide a copy and identify the date and page number of publication in the**

**Federal Register of the agency's notice 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.**

**\*Describe consultations with representatives of those from whom information is to be obtained or those who must compile records. Consultation should occur at least once every three years, even if the collection of information activities 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 April 12, 2018 (83 FR 15875). 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 does not provide payments or gifts to respondents in exchange for a benefit sought.

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

Section 312(b) of the Mine Act and 30 CFR 75.1203 provide that “[t]he coal mine map and any revision and supplement thereof shall be available for inspection by the Secretary or his authorized representative, by coal mine inspectors of the State in which the mine is located, by miners in the mine and their representatives and by operators of adjacent coal mines and by persons owning, leasing, or residing on surface areas of such mines or areas adjacent to such mines. The operator shall furnish to the Secretary or his authorized representative and to the Secretary of Housing and Urban Development, upon request, one or more copies of such maps and any revision and supplement thereof. Such map or revision and supplement thereof shall be kept confidential and its contents shall not be divulged to any other person, except to the extent necessary to carry out the provisions of this Act and in connection with the functions and responsibilities of the Secretary of Housing and Urban Development.”

In addition, the Freedom of Information Act (FOIA) (5 U.S.C. Section 552(b)(4)) protects



“trade secrets and commercial or financial information obtained from a person that is privileged or confidential.”

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

There are no questions of a sensitive nature.

**12. Provide estimates of the hour burden of the collection of information. The statement should:**

**\* Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.**

**\* If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens.**

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

Number of respondents	
Underground Coal Mines	208
Surface Coal Mines	<u>406</u>
<b>Total</b>	<b>614</b>

MSHA used data from the Occupational Employment Statistics (OES) published by the Bureau of Labor Statistics (BLS) for hourly wage rates<sup>1</sup> for coal mining code from the North American Industry Classification System (NAICS 212100) and adjusted the rates for benefits<sup>2</sup> and wage inflation<sup>3</sup>.

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<sup>1</sup> 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](https://www.bls.gov/oes/oes_ques.htm).

Mining companies develop and maintain maps of their operations for numerous purposes. These maps serve as a graphic presentation of work completed and projected and as such are invaluable planning tools. The maps provide information for communicating operational specifics, personnel training, calculating and projecting equipment purchases, scheduling and planning mine development and construction, and calculating royalty payments. State agencies have traditionally required maps for licensing, permits, and employee safety purposes. MSHA standards require only the information necessary to evaluate compliance with specific safety standards. Accurate, up-to-date mine maps are essential in the event of a major mine accident. MSHA standards specify that these maps be created (a record of mining activities), be available for inspection and require copies provided to MSHA, and therefore, impose a recordkeeping burden.

### **Underground Coal**

#### **30 CFR 75.1200, 75.1200-1, 75.1201, 75.1202, 75.1202-1, and 75.1203**

Maps are prepared and revised twice annually based upon information gathered through mine surveying and kept up-to-date by notations between revisions. MSHA estimates that, of 208 underground coal mines with employment, 25 percent (52 mines) are large enough to have survey crews, drafting or computer drafting, and a professional engineer or surveyor on the payroll. MSHA also estimates that it takes 8 hours for a three-person survey crew to complete all activities related to surveying a typical underground coal mine. It also takes a registered engineer or surveyor 4 hours to review the survey crew's work and perform other related activities, and 4 hours for a draftsman or computer technician to update the map or input survey data. The remaining 75 percent of the underground mines (156 mines) utilize contract surveying and engineering companies and their burden is shown in the answer to question 13 of this package.

### **Responses**

52 mines x 2 responses per year = 104 responses

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2 The benefit-scaler comes from BLS Employer Costs for Employee Compensation access by menu <http://www.bls.gov/data/> or directly with <http://download.bls.gov/pub/time.series/cm/cm.data.0.Current>. The data series CMU2030000405000P, Private Industry Total benefits for Construction, extraction, farming, fishing, and forestry occupations, is divided by 100 to convert to a decimal value. MSHA used the latest 4-quarter moving average 2016Qtr4-2017Qtr3 to determine that 32.9 percent of total loaded wages are benefits. MSHA computes the scaling factor with a number of detailed calculations but it may be approximated with the formula and values  $1 + (\text{benefit percentage}/(1-\text{benefit percentage})) = 1 + (.329/(1-.329)) = 1.49$ .

3 Wage inflation is the change in Series ID: CIS2020000405000I; Seasonally adjusted; Series Title: Wages and salaries for Private industry workers in Construction, extraction, farming, fishing, and forestry occupations, Index. (<https://data.bls.gov/cgi-bin/srgate>; Qtr 3 2017/Qtr 2 2016).

### **Burden Hours**

Survey crew activities

52 mines x 3 person survey crew x 8 hours x 2 per year = 2,496 hours

Registered engineer or surveyor to supervise surveying and drafting, and certify map accuracy

52 mines x 1 registered engineer or surveyor  
x 4 hours x 2 per year = 416 hours

Draftsman or computer technician activities for data entry, system operation or drafting, preparation of prints and documents for state or federal agencies

52 mines x 1 draftsman or computer technician  
x 4 hours x 2 per year = 416 hours

### **Cost of Burden Hours**

MSHA estimates that the hourly wage rates are: \$34.91 for a survey crewmember<sup>4</sup>; \$61.56 for a registered engineer or surveyor<sup>5</sup>, and \$47.27 for a draftsman or computer technician<sup>6</sup>. Burden costs are shown below.

2,496 hours x \$34.91 per hour = \$87,135  
416 hours x \$61.56 per hour = \$25,609  
416 hours x \$47.27 per hour = \$19,664

### **30 CFR 75.1204 and 75.1204-1**

These provisions require that certified mine maps be revised and supplemented to the date of the closure and a copy be submitted to MSHA. Safety specialists estimate that it takes 2 additional hours to update the map. MSHA's records show that there is an average of 35 underground coal mine closures each year. Those closures may be temporary, permanent or permanent with all surface openings sealed. In all cases, if the closure is for a period greater than 90 days, the mine operator is required to submit

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4 For the Survey crewmember hourly wage rate, MSHA used the employment weighted mean hourly wage from the OES May 2016 survey, for 7 occupations that are from 3 Standard Occupational Classification (SOC) major group codes (codes 17, 47, and 51). The weighted mean was adjusted for benefits and inflation to obtain a fully loaded rate of \$34.91 (\$22.59 x 1.49 x 1.037).

5 For the Registered Engineer or Surveyor hourly wage rate, MSHA used the employment weighted mean hourly wage from OES May 2016 survey, for 3 occupations that are from Standard Occupational Classification (SOC) major group code 17. The weighted mean was adjusted for benefits and inflation to obtain a fully loaded rate of \$61.56 (\$39.84 x 1.49 x 1.037).

6 For the Draftsman or Computer Technician hourly wage rate, MSHA used the employment weighted mean hourly wage from OES May 2016 survey, for 1 occupation that is from Standard Occupational Classification (SOC) major group code 17. The weighted mean was adjusted for benefits and inflation to obtain a fully loaded rate of \$47.27 (\$30.59 x 1.49 x 1.037).

to the MSHA District Manager an updated mine map.

**Responses**

35 mine closure maps x 1 response per year = 35 responses

**Burden Hours**

35 mine closure maps x 1 registered engineer or surveyor x 2 hours = 70 hours  
35 mine closure maps x 1 draftsman or computer technician x 2 hours = 70 hours

**Cost of Burden Hours**

MSHA estimates that the update and submittal of the closure map will require the services of a registered engineer or surveyor at an hourly wage rate of \$61.56, and a draftsman or computer technician at an hourly wage rate of \$47.27.

70 hours x \$61.56 per hour = \$4,309  
70 hours x \$47.27 per hour = \$3,309

**30 CFR 75.373 and 75.1721**

For these sections, MSHA's estimates the burden hours and cost for underground coal mine operators to notify MSHA prior to opening a new mine or reopening a previously abandoned or inactive mine in the following manner. Section 75.1721 specifies the information and mandatory mine plans which must be submitted to the MSHA District Manager prior to opening the mine and prior to MSHA conducting an inspection (per section 75.373) before coal extraction begins. The required submission does not include the submittal of a certified mine map but does include submittal of documents and preliminary roof control and mine ventilation plans normally developed by a mine safety director, a production manager or an engineering technician. The information and plans required in the notification are neither complex nor extremely detailed due to the presumed need to revise the plans as soon as experience is gained in the actual mining conditions. The revised plan submittals are addressed under their respective sections in other recertification estimates. MSHA estimates that each submission will take a supervisor 6 hours to compile and submit.

**Responses**

27 new mines or reopening of mine notification  
x 1 response per year = 27 responses

**Burden Hours**

27 new mine or reopening of mine notifications x 6 hours = 162 hours

**Cost of Burden Hours**

MSHA estimates such notifications are done by either a safety director, production

manager, or engineering technician at an hourly wage rate<sup>7</sup> of \$102.13.

$$162 \text{ hours} \times \$102.13 \text{ per hour} = \$16,545$$

### **Surface Coal**

#### **30 CFR Part 77 Subpart M – Maps (Sections 77.1200, 77.1201, and 77.1202)**

For these sections, MSHA’s estimates burden hours and costs for surface mine operators to conduct the surveying, preparation, and maintenance of the required certified mine maps. In 2017, MSHA recorded a 12-month average of 406 surface coal mines with employment. MSHA estimates that 25 percent of these mines (101 mines) are sufficiently large to employ full time survey crews and registered engineers, while the remaining 75 percent (305 mines) will utilize contract surveying or engineering companies. Burden concerning the remaining 75 percent of surface coal mines is shown in the answer to question 13 of this package.

Generally, surveying of surface mines can be accomplished more efficiently than underground mines by using more sophisticated surveying equipment and fewer man hours. In addition, compared to underground mines, there exists substantially less risk of miners being entrapped or the mines requiring major mine rescue or recovery efforts. As a result, the surface mine map standards do not include the continuous updating with notations, availability at the mine site in a fire proof repository, or revisions every 6 months required for underground mines. However, the mine maps must be certified by a registered engineer or surveyor. MSHA estimates that a survey crew of three, including the registered engineer or surveyor, can maintain the required map accurately and sufficiently up-to-date, to satisfy the operating needs of the mine and have available to a representative of the Secretary the required information on the mine map. A typical surface survey is estimated to take 8 hours to complete by the survey crew with an additional 4 hours by the engineer or surveyor to review the work and conduct related activities. MSHA estimates a survey crewmember hourly wage rate to be \$34.91 per hour, and a registered engineer or surveyor hourly wage rate to be \$61.56 per hour.

#### **Responses**

$$101 \text{ mines} \times 1 \text{ response per year} = 101 \text{ responses}$$

#### **Burden Hours**

Survey crew activities

$$101 \text{ mines} \times 2 \text{ person survey crew} \times 8 \text{ hours} = 1,616 \text{ hours}$$

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<sup>7</sup> For the Safety Director, Production Manager, or Engineering Technician hourly wage rate, MSHA used the employment weighted mean hourly wage from OES May 2016 survey, for 4 occupations that are from Standard Occupational Classification (SOC) major group code 11. The weighted mean was adjusted for benefits and inflation to obtain a fully loaded rate of \$102.13 (\$66.10 x 1.49 x 1.037).

Registered engineer or surveyor to review work  
and conduct related activities

101 mines x 1 engineer or surveyor x 4 hours = 404 hours

**Cost of Burden Hours**

1,616 hours x \$34.91 per hour = \$56,415

404 hours x \$61.56 per hour = \$24,870

**Total Question 12 Responses = 267**  
**Total Question 12 Burden Hours = 5,650**  
**Total Question 12 Burden Cost = \$237,856**

Summary of Question 12 Burden Hours and Costs

Regulation/Task	Mines	Staff	Staff Hours	Annual Frequency	Burden Hours
Part 75 Subpart M - Maps 75.1200, 75.1200-1, 75.1201, 75.1202, 75.1202-1 and 75.1203 (excludes mine closure maps)					
Survey Crew Mapping	52	3	8	2	2,496
Engineer/Surveyor Mapping	52	1	4	2	416
Draftsman/Comp. Tech. Duties	52	1	4	2	416
Subtotal					3,328
Mine Closure Map Updates 75.1204 and 75.1204-1					
Engineer/Surveyor Mapping	35	1	2	1	70
Draftsman/Comp. Tech. Duties	35	1	2	1	70
Subtotal					140
MSHA Notification of Opening New Mines or Reopening Inactive or Abandoned Mines 75.373 and 75.1721					
Notify MSHA	27	1	6	1	162
Subtotal					162

Regulation/Task	Mines	Staff	Staff Hours	Annual Frequency	Burden Hours
Part 77 Subpart M - Maps 77.1200, 77.1201 and 77.1202					
Survey Crew Mapping	101	2	8	1	1,616
Engineer/Surveyor Mapping	101	1	4	1	404
Subtotal					2,020
<b>Total Hours</b>					<b>5,650</b>

**13. Provide an estimate of the total annual cost burden to respondents or record keepers resulting from the collection of information. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. (Do not include the cost of any hour burden already reflected on the burden worksheet.)**

MSHA has not included any capital equipment costs for the underground or surface coal mines large enough to maintain their own surveying and map making capabilities because that equipment is only incidentally used in complying with the standards. No equipment must be purchased specifically for the purposes of providing or gathering the information required by these standards. Mine maps are prepared on office equipment and or engineering equipment maintained at the mine or in the contractor's office for normal business-related engineering activities and not specifically for use in collecting data to satisfy MSHA's mine map requirements.

MSHA estimates that 75 percent of underground and surface coal mines (156 mines and 305 mines) are not sufficiently large to justify equipping and maintaining a surveying, drafting, and engineering capability dedicated to the mine. In general, these operations will utilize contract surveying and engineering services in preparing and maintaining mine maps. Even where a parent company or coal mineral rights owner provides these services to several small mine operations, the arrangement involves service contract charges to the individual mines.

### **Cost Estimates**

#### **Contract Surveying, Mapping Duties, Copying, and Mailing**

MSHA estimates each underground mine requires a three-person contract surveying crew (includes a registered engineer, surveyor, and a draftsman or computer technician) to survey each underground mine twice each month and each surface mine quarterly to maintain the information necessary for accurate and up-to-date mine maps.

Each on-site visit is estimated to take 6.5 hours at \$232 per hour.<sup>8</sup> Also, the contract surveying and engineering company would provide to the operator an updated certified mine map twice annually, with three copies for the operator to send to MSHA as required by 30 CFR 75.372 at a charge of \$48 per copy, includes mailing.

Underground Coal

156 mines x 6.5 hours per survey x \$232 per hour  
x 24 surveys per year = \$5,645,952

156 mines x 2 map updates per year x  
3 prints x \$48 per copy and mailing = \$44,928

Surface Coal

305 mines x 6.5 hours per survey x \$232 per hour  
x 4 surveys per year = \$1,839,760

305 mines x 2 map updates per year  
x 3 prints x \$48 per copy and mailing = \$87,840

Mine Closure Maps

MSHA estimates that preparation and submittal of mine closure maps are estimated to cost \$55 per map for copying, includes mailing.

Underground Coal

35 closure maps x \$55 per copy and mailing = \$1,925

Notification to MSHA for Opening of New Underground Mine or Reopening of Inactive or Abandoned Mine

Underground Coal

27 opening or reopening notifications  
x \$5.50 per copy and mailing = \$149

Total Question 13 Burden Costs = \$7,620,554

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<sup>8</sup> For the contractor survey team hourly wage rate, MSHA used the 75<sup>th</sup> percentile hourly wage from the OES May 2016 survey, for 3 SOC occupations involving surveying for NAICS 213100, Support Activities for Mining. MSHA used Standard Occupational Classification codes 17-2151, Mining and Geological Engineers Including Mining Safety Engineers; 17-1022, Surveyors; and 17-3031, Surveying and Mapping Technicians. The hourly labor cost for the contractor survey is \$232 which is determined by the rounding the sum of the 3 rates increased by the same benefit loading and ECI used in question 12 plus an additional 15% for contractor overhead. ( $\$232 = (\$58.33 + \$43.22 + \$29.10) \times 1.49 \times 1.037 \times 1.15$ )



**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 have been incurred without this collection of information. You may also aggregate cost estimates for Items 12, 13, and 14 in a single table.**

Cost to the Federal Government is minimal. Federal mine inspectors examine required maps for compliance in the course of routine mine inspections. Therefore, the requirements result in no significant additional costs to the Federal government. Underground Coal Mine maps are mailed to the MSHA District Office in the district where the mine is located. Cost to the Federal Government consists of the examination of the map by MSHA inspection personnel for the required information and clerical and mailing costs for mailing the maps to the OSM repository and maintaining the copy of the map in the MSHA repository.

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

There was a decrease in the total number of respondents, responses and burden hours as a direct result of a decrease in the number of mines.

Respondents: decreased from 1,631 to 614

Responses: decreased from 711 to 267

Burden Hours: decreased from 13,872 to 5,650

Burden Cost: decreased from \$17,573,769 to \$7,620,554

**16. For collections of information whose results will be published, outline plans for tabulation, and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.**

MSHA does not intend to publish the results of this information collection.

**17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.**

There are no forms associated with this information collection; therefore, MSHA is not seeking approval to not display the expiration date for OMB approval of this information collection.

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

There are no certification exceptions identified with this information collection.

## **B. Collection of Information Employing Statistical Methods**

This information collection does not employ statistical methods.

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

Section 103(h) of the Federal Mine Safety and Health Act of 1977 (Mine Act), 30 U.S.C. Section 813, authorizes MSHA to collect information necessary to carry out its duty in protecting the safety and health of miners as follows:

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.

#### **MAPS**

Sections 312 (a), (b), and (c) of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. Section 872, address MSHA's collection of information concerning mapping of mines and the opening, closure, and reopening of mines necessary to carry out its duty protecting the safety and health of miners as follows:

SECTION 312. (a) The operator of a coal mine shall have in a fireproof repository located in an area on the surface of the mine chosen by the mine operator to minimize the danger of destruction by fire or other hazard, an accurate and up-to-date map of

such mine drawn on scale. Such map shall show the active workings, all pillared, worked out, and abandoned areas, except as provided in this section, entries and aircourses with the direction of airflow indicated by arrows, contour lines of all elevations, elevations of all main and cross or side entries, dip of the coalbed, escapeways, adjacent mine workings within one thousand feet, mines above or below, water pools above, and either producing or abandoned oil and gas wells located within five hundred feet of such mine and any underground area of such mine, and such other information as the Secretary may require. Such map shall identify those areas of the mine which have been pillared, worked out, or abandoned which are inaccessible or cannot be entered safely and on which no information is available. Such map shall be made or certified by a registered engineer or a registered surveyor of the State in which the mine is located. Such map shall be kept up to date by temporary notations and such map shall be revised and supplemented at intervals prescribed by the Secretary on the basis of a survey made or certified by such engineer or surveyor.

(b) The coal mine map and any revision and supplement thereof shall be available for inspection by the Secretary or his authorized representative, by coal mine inspectors of the State in which the mine is located, by miners in the mine and their representatives and by operators of adjacent coal mines and by persons owning, leasing, or residing on surface areas of such mines or areas adjacent to such mines. The operator shall furnish to the Secretary or his authorized representative and to the Secretary of Housing and Urban Development, upon request, one or more copies of such map and any revision and supplement thereof. Such map or revision and supplement thereof shall be kept confidential and its contents shall not be divulged to any other person, except to the extent necessary to carry out the provisions of this Act and in connection with the functions and responsibilities of the Secretary of Housing and Urban Development.

(c) Whenever an operator permanently closes or abandons a coal mine, or temporarily closes a coal mine for a period of more than ninety days, he shall promptly notify the Secretary of such closure. Within sixty days of the permanent closure or abandonment of the mine, or, when the mine is temporarily closed, upon the expiration of a period of ninety days from the date of closure, the operator shall file with the Secretary a copy of the mine map revised and supplemented to the date of the closure. Such copy of the mine map shall be certified by a registered surveyor or registered engineer of the State in which the mine is located and shall be available for public inspection.

**30 CFR PART 75—MANDATORY SAFETY STANDARDS—UNDERGROUND COAL  
MINES**

Subpart D—Ventilation

Section 75.372 Mine ventilation map.

(a)(1) At intervals not exceeding 12 months, the operator shall submit to the district manager 3 copies of an up-to-date map of the mine drawn to a scale of not less than 100 nor more than 500 feet to the inch. A registered engineer or a registered surveyor shall certify that the map is accurate.

(2) In addition to the informational requirements of this section the map may also be used to depict and explain plan contents that are required in Section 75.371. Information shown on the map to satisfy the requirements of Section 75.371 shall be subject to approval by the district manager.

\* \* \* \* \*

(c) The mine map required by Sec. 75.1200 may be used to satisfy the requirements for the ventilation map, provided that all the information required by this section is contained on the map.

Section 75.373 Reopening mines.

After a mine is abandoned or declared inactive, and before it is reopened, mining operations shall not begin until MSHA has been notified and has completed an inspection.

Section 75.1200 Mine map.

The operator of a coal mine shall have in a fireproof repository located in an area on the surface of the mine chosen by the mine operator to minimize the danger of destruction by fire or other hazard, an accurate and up-to-date map of such mine drawn on scale. Such map shall show:

\* \* \* \* \*

Section 75.1200-1 Additional information on mine map.

Additional information required to be shown on mine maps under Section 75.1200 shall include the following:

\* \* \* \* \*

Section 75.1201 Certification.

Such map shall be made or certified by a registered engineer or a registered surveyor of the State in which the mine is located.

Section 75.1202 Temporary notations, revisions, and supplements.

Such map shall be kept up-to-date by temporary notations and such map shall be revised and supplemented at intervals prescribed by the Secretary on the basis of a survey made or certified by such engineer or surveyor.

Section 75.1202-1 Temporary notations, revisions, and supplements.

(a) Mine maps shall be revised and supplemented at intervals of not more than 6 months.

(b) Temporary notations shall include:

\* \* \* \* \*

Section 75.1203 Availability of mine map.

The coal mine map and any revision and supplement thereof shall be available for inspection by the Secretary or his authorized representative, by coal mine inspectors of the State in which the mine is located, by miners in the mine and their representatives and by operators of adjacent coal mines and by persons owning, leasing, or residing on surface areas of such mines or areas adjacent to such mines. The operator shall furnish to the Secretary or his authorized representative and to the Secretary of Housing and Urban Development, upon request, one or more copies of such maps and any revision and supplement thereof. Such map or revision and supplement thereof shall be kept confidential and its contents shall not be divulged to any other person, except to the extent necessary to carry out the provisions of this Act and in connection with the functions and responsibilities of the Secretary of Housing and Urban Development.

Section 75.1204 Mine closure; filing of map with Secretary.

Whenever an operator permanently closes or abandons a coal mine, or temporarily closes a coal mine for a period of more than 90 days, he shall promptly notify the Secretary of such closure. Within 60 days of the permanent closure or abandonment of the mine, or, when the mine is temporarily closed, upon the expiration of a period of 90 days from the date of closure, the operator shall file with the Secretary a copy of the mine map revised and supplemented to the date of the closure. Such copy of the mine map shall be certified by a registered surveyor or registered engineer of the State in which the mine is located and shall be available for public inspection.

Section 75.1204-1 Places to give notice and file maps.

Operators shall give notice of mine closures and file copies of maps with the Coal Mine Safety and Health District Office for the district in which the mine is located.

Section 75.1721 Opening of new underground coal mines, or reopening and reactivating of abandoned or deactivated coal mines, notification by the operator; requirements.

(a) Each operator of a new underground coal mine, and a mine which has been abandoned or deactivated and is to be reopened or reactivated, shall prior to opening, reopening or reactivating the mine notify the Coal Mine Health and Safety District Manager for the district in which the mine is located of the approximate date of the proposed or actual opening of such mine. Thereafter, and as soon as practicable, the operator of such mine shall submit all preliminary plans in accordance with paragraphs (b) and (c) of this section to the District Manager and the operator shall not develop any

part of the coalbed in such mine unless and until all preliminary plans have been approved.

(b) The preliminary plans required to be submitted by the operator to the District Manager shall be in writing and shall contain the following:

\* \* \* \* \*

(c) The preliminary plans required to be submitted by the operator to the District Manager shall be in writing and shall contain the following:

\* \* \* \* \*

**Part 77—MANDATORY SAFETY STANDARDS—SURFACE COAL MINES AND SURFACE WORK AREAS OF UNDERGROUND COAL MINES**

Section 77.1200                      Mine map.

The operator shall maintain an accurate and up-to-date map of the mine, on a scale of not less than 100 nor more than 500 feet to the inch, at or near the mine, in an area chosen by the mine operator, with a duplicate copy on file at a separate and distinct location, to minimize the danger of destruction by fire or other hazard. The map shall show:

\* \* \* \* \*

Section 77.1201                      Certification of mine maps.

Mine maps shall be made or certified by an engineer or surveyor registered by the State in which the mine is located.

Section 77.1202                      Availability of mine map.

The mine map maintained in accordance with the provisions of Section 77.1200 shall be available for inspection by the Secretary or his authorized representative.