Supporting Statement for Mine Mapping and Records of Opening, Closing, And Reopening of Mines Paperwork Reduction Act Submission

This information collection request (ICR) seeks to extend, without change currently approved information collection.

OMB Control Number: 1219-0073

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

Type of OMB Review: Extension

Authority:

30 U.S.C. 872 – Maps.

- (a) Fireproof repository; contents; certification
- (b) Availability for inspection; confidential copies
- (c) Notification of mine closures; filing of revised and supplemental map; certification

30 CFR Part 75 Mandatory Safety Standards - Underground Coal Mines.

Subpart D – Ventilation

- 75.372 Mine ventilation map.
- 75.373 Reopening mines.

Subpart M – Maps

- 75.1200 Mine map.
- 75.1200-1 Additional information on mine map.
- 75.1200-2 Accuracy and scale of mine maps.
- 75.1201 Certification.
- 75.1202 Temporary notations, revisions, and supplements.
- 75.1202-1 Temporary notations, revisions, and supplements.
- 75.1203 Availability of mine map.
- 75.1204 Mine closure; filing of map with Secretary.
- 75.1204-1 Places to give notice and file maps.

Subpart R – Miscellaneous

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

30 CFR Part 77 Mandatory Safety Standards - Surface Coal Mines and Surface Work Areas of

Underground Coal Mines.

Subpart M – Maps

- 77.1200 Mine map.
- 77.1201 Certification of mine maps.
- 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.

Section 103(h) of the Federal Mine Safety and Health Act of 1977, as amended (Mine Act), 30 U.S.C. 813(h), authorizes the Mine Safety and Health Administration (MSHA) to collect information necessary to carry out its duty in protecting the safety and health of miners. Further, section 101(a) of the Mine Act, 30 U.S.C. 811(a), 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, metal, and nonmetal mines.

Mine maps are schematic depictions of critical mine infrastructure, such as water, power, transportation, ventilation, and communication systems. Mine maps describe the current status of an operating mine or provide crucial information about a closed mine that is being reopened. The maps provide essential information for MSHA to plan and conduct mandatory inspections and to review and approve mandatory mine plans and permits. Additionally, 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. Using accurate, up-to-date maps during a disaster, mine emergency personnel can

locate refuges for miners and identify sites of explosion potential. Emergency personnel use the maps to know where stationary equipment was placed, where the ground was secured, and where they can begin a rescue operation.

Section 312 of the Mine Act, 30 U.S.C. 872, and 30 CFR parts 75 and 77 address the information collection requirements for mapping of mines and opening, closing, and reopening of mines. MSHA requires mine operators to develop, update, and provide certified coal mine maps and any revisions and supplements. Operators are also required to provide MSHA access to inspect mine maps and to file mine closure maps. This information collection is intended to ensure that operators maintain up-to-date, accurate mine maps that are available for review.

Underground Coal Mines

I. Notifications of Opening or Reopening of Underground Coal Mines

Under 30 CFR 75.373, MSHA must be notified and complete an inspection before an abandoned or inactive mine can be reopened.

Under 30 CFR 75.1721(a), prior to opening, reopening or reactivating a mine, each operator of a new underground coal mine or a mine which has been abandoned or deactivated and is to be reopened or reactivated, must 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 date of opening, reopening, or reactivating of the mine. The preliminary plans must be submitted to the District Manager in writing and include the required plan contents, listed in 30 CFR 75.1721(b) and (c).

Mine Ventilation Map

Under 30 CFR 75.372(a), the operator must submit to the District Manager 3 copies of an up-to-date mine ventilation map at intervals not exceeding 12 months. The map must be certified for its accuracy by a registered engineer or surveyor. Information shown on the mine ventilation map is subject to approval by the District Manager.

Under 30 CFR 75.372(c), MSHA allows the mine map required by 30 CFR 75.1200 to be used to satisfy the requirements for the ventilation map, provided that all the information required by the ventilation map is contained on the mine map. The information collection burden associated with mine ventilation plans in underground coal mines is covered under OMB Control Number 1219-0088.

II. Revisions of Mine Maps in Underground Coal Mines

Map Contents, Scale, and Certification

Section 312(a) of the Mine Act, 30 U.S.C. 872(a), and 30 CFR 75.1200 require the operator of an underground coal mine to have a fireproof repository of an accurate and up-to-date mine map. The required elements of the mine map are listed in 30 CFR 75.1200 and 75.1200-1.

Under 30 CFR 75.1200-2, the scale of mine maps must not be less than 100 or more than 500 feet to the inch. Mine traverses must be advanced by closed loop methods of traversing or other equally accurate methods of traversing.

Section 312(a) of the Mine Act, 30 U.S.C. 872(a), and 30 CFR 75.1201 require mine maps to be made or certified by a registered engineer or surveyor of the State in which the mine is located.

Temporary Notations, Revisions, and Supplements

Section 312(a) of the Mine Act, 30 U.S.C. 872(a), and 30 CFR 75.1202 require that mine maps be kept up-to-date by temporary notations (specified in 75.1202-1(b)) and be revised and supplemented at intervals prescribed by the Secretary (no more than 6 months as specified in 30 CFR 75.1202-1(a)) on the basis of a survey made or certified by a registered engineer or surveyor.

III. Availability of Mine Map

Section 312(b) of the Mine Act, 30 U.S.C. 872(b), and 30 CFR 75.1203 require the mine operator to make the coal mine map and any revision and supplement available for inspection by MSHA inspectors, 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 the mines or areas adjacent to the mines. Upon request, the operator must furnish one or more copies of the map and any revision and supplement. The coal mine operator must keep the map or revision and supplement confidential and must not divulged its contents to any other person, except to the extent necessary to carry out the provisions of the Mine Act and in connection with the functions and responsibilities of MSHA.

IV. Filing of Mine Closure Maps in Underground Coal Mines

Section 312(c) of the Mine Act, 30 U.S.C. 872(c), and 30 CFR 75.1204 require the coal mine operator to promptly notify MSHA whenever the operator permanently closes or abandons a coal mine, or temporarily closes a coal mine for a period of more than 90 days. 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 must file with MSHA a copy of the mine map revised and supplemented to the date of the closure. The mine map must be certified by a registered surveyor or engineer of the State in which the mine is located and be

available for public inspection.

Under 30 CFR 75.1204-1, coal mine operators must 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.

Surface Coal Mines and Surface Work Areas of Underground Coal Mines

V. Revisions of Mine Maps in Surface Mines

Under 30 CFR 77.1200, the operator must maintain an accurate and up-to-date mine map, at or near the mine, in an area chosen by the mine operator. The map must be on a scale of not less than 100 nor more than 500 feet to the inch. The operator is required to have a duplicate copy on file at a separate and distinct location to minimize the danger of destruction by fire or other hazard. The information required on the mine map is also listed in this section.

Under 30 CFR 77.1201, mine maps must be made or certified by an engineer or surveyor registered by the State in which the mine is located.

Under 30 CFR 77.1202, the mine map must be available for inspection by MSHA.

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.

Coal mine operators routinely use mine map information to develop safe and effective plans and determine hazards before beginning their mining work. Hazards can be found in abandoned underground mines or the worked-out and inaccessible areas of active underground or surface mines and may include water inundation potentials and explosive levels of methane or lethal gases. If an operator, unaware of the hazards, were to mine into these areas, miners could be killed or seriously injured.

Using accurate, up-to-date maps during a mine disaster, 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 the mine to begin a search for survivors.

MSHA requires mine operators to provide certified underground mine maps annually. Operators must also provide MSHA access to inspect surface mine maps and are required to file mine closure maps.

The maps provide 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, as well as closing of mines, provide information for mine operators, emergency personnel, and MSHA.

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 has not been identified to 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 very large 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 by mine operators to District Managers under 30 CFR 75.1204-1, to the U.S. Department of Interior, Office of Surface Mining, Reclamation and Enforcement (OSMRE). OSMRE 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 A.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 OSMRE containing copies of the maps submitted to MSHA District Managers is the best organized,

indexed, and complete source of information available.

Maps are unique to each mine. No similar information is available or submitted to MSHA.

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

The information collection provisions apply to all mine operations, both large and small. Congress intended that the Secretary enforce the law at all mining operations within the Agency's jurisdiction regardless of size and that information collection and recordkeeping requirements be consistent with efficient and effective enforcement of the Mine Act. [S. Rep. No. 95-181, 28 (1977)]. Section 103(e) of the Mine Act directs the Secretary not to impose an unreasonable burden on small businesses when obtaining any information under the Mine Act. MSHA considered the burden on small mines when developing the collection. Hence, MSHA believes that these information collection.

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.

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 six 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 MSHA 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 ensuring compliance with the safety standards required 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.

Not collecting this information could lead to inaccurate or outdated mine maps that could 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. 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 provided 60 days for the public to submit comments. MSHA published a 60-day Federal Register notice on July 12, 2024 (89 FR 57168). MSHA received one comment. No action taken as the comment was a compliment on the purpose of the information collection.

9. Explain any decision to provide any payments or gifts 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, 30 U.S.C. 872(b), 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 the mines or areas adjacent to the 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 the maps and any revision and supplement thereof. The map or revision and supplement must 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.**

Respondents

All information related to quantities and inspection rates are estimated by MSHA's Enforcement Division based on field experience with different types of mining operations, sizes of mines, and the frequency of inspections dictated by statute. Mine operators provide MSHA's Enforcement Division with information to derive the number of mines and employment, and from this information MSHA tracks the number of active and inactive mines and mine types throughout the United States.

Information related to the number of surface and underground coal mines, filings for new coal mines, and reported abandoned coal mines were obtained from the MSHA Standardized Information System (MSIS) database for calendar year (CY) 2020, CY 2021, and CY 2022. The resulting annual data was summarized, and yearly averages were determined for the purpose of preparing this supporting statement.

Mine Type	CY 2020	CY 2021	CY 2022	Yearly Average
All Coal Mines				
Underground	235	215	220	223
Surface	781	757	771	770
New Coal Mines				
Underground	0	5	14	6
Surface	16	27	63	39
Abandoned Mines				
Underground	33	25	16	25

Surface	95	84	70	83

*Note: Some filings for new mines were recorded but no coal production was provided for the reporting period. Therefore, the new mines listed above represent only the new mines which also reported tonnage for the reporting period.

According to MSHA's Enforcement Division, there was a yearly average of 223 underground mines and 770 surface mines, totaling 993 coal mines. Of the 993 coal mines, 6 were new underground mines, 39 were new surface mines, 25 were abandoned underground mines, and 83 were abandoned surface mines.

Wage Rates Determinations[1]

MSHA used data from the May 2022 Occupational Employment and Wage Statistics (OEWS) published by the Bureau of Labor Statistics (BLS) for hourly wage rates[2] and adjusted the rates for benefits,[3] wage inflation,[4] and overhead costs.[5] The occupations listed below in Table 12-1 are those that were determined to be relevant for the cost calculations.

Table 12-1. Hourly Wage Rates

Occupation	NAICS Code	Mean Wage Rate	Benefit Multiplier	Inflation Multiplier	Overhead Cost Multiplier	Loaded Hourly Wage Rate
		A	B	C	D	A x B x C x D
Surveyor*	212100	$32.66	1.482	1.045	1.17	$59.18
Engineer**	212100	$49.10	1.482	1.045	1.17	$88.97
Surveyor or Engineer***	212100	$44.86	1.482	1.045	1.17	$81.28
Drafter or Computer technician****	212100	$32.41	1.482	1.045	1.17	$58.73
Safety director, Production manager, or Engineering	212100	$77.73	1.482	1.045	1.17	$140.84

1 For all wage rates, MSHA uses the relevant precision throughout the calculation to avoid compound rounding errors and rounds at the final rate value. Displayed intermediate calculation values are presented to explain the calculation and are representative but the final rate value reflects the correct rounding and final estimate.

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

3 The benefit multiplier comes from BLS Employer Costs for Employee Compensation accessed by menu at http://data.bls.gov/cgi-bin/srgate or directly with http://download.bls.gov/pub/time.series/cm/cm.data.0.Current. Insert series ID CMU2030000405000D and CMU2030000405000P, Private Industry Total benefits for Construction, extraction, farming, fishing, and forestry occupations, which is divided by 100 to convert to a decimal value. MSHA used the latest 4-quarter moving average to determine what percent of total loaded wages are benefits. MSHA computes the benefit multiplier with a number of detailed calculations, but it may be approximated with the formula 1 + (benefit percentage/(1-benefit percentage)).

4 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 at https://data.bls.gov/cgi-bin/srgate. Inflation multiplier = (current quarter cost index value / OEWS wage base quarter index value).

5 MSHA used an overhead rate of 17 percent. This overhead rate is based on a 2002 EPA report by Cody Rice, "Wage Rates for Economic Analysis of the Toxics Release Inventory Program", available at https://www.regulations.gov/document/EPA-HQ-OPPT-2016-0387-0064.

technician*****						

Note: MSHA used the latest 4-quarter moving average 2022Q2-2023Q1 to determine that 32.5 percent of total loaded wages are benefits for private industry workers in construction, extraction, farming, fishing, and forestry occupations. The benefit multiplier is 1.482= 1+ (0.325/(1-0.325)). The inflation multiplier was determined by using the employment price index from the most current quarter data is available, 2023Q2, divided by the base year and quarter of the OEWS employment and wage statistics, 2022Q2, for private industry workers in construction, extraction, farming, fishing, and forestry occupations, current dollar index. The inflation multiplier is 1.045 = 157.3/150.5. MSHA used the overhead multiplier of 1.17.
*The Standard Occupation Codes (SOC) used for this occupation are (17-1022) and (17-3031).
**The SOC used for this occupation is (17-2151).
***The mean wage rate of this occupation is a weighted average of the Surveyor and Engineer occupations.
****The SOC used for this occupation is (17-3000).
*****The SOCs used for this occupation are (11-1021), (11-3051), and (11-9041).

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 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 must be created and revised (a record of mining activities) and be available for inspection. Mine operators are also required to provide copies to MSHA which imposes a recordkeeping burden.

Time Burden

<u>Underground Coal Mines</u>

I. Notifications of Opening or Reopening of Underground Mines (30 CFR 75.373 and 75.1721)

30 CFR 75.1721 specifies the information and mandatory mine plans that must be submitted to the MSHA District Manager prior to opening the mine and prior to MSHA conducting an inspection before coal extraction begins. The submission required in 30 CFR 75.373 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 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. MSHA estimates that six new mines/inactive underground coal mines will be either opened or reopened each year.

MSHA estimates that each submission will take a supervisor six hours to compile and submit. MSHA estimates such notifications are done by either a safety director, production manager, or engineering technician at an hourly wage rate of $140.84.

Table 12-2. Estimated Annual Respondent Hour and Cost Burden, Notifications of Opening or Reopening in Underground Mines (30 CFR 75.373 and 75.1721)

Activity (Occupation)	No. of Respondents (Underground Mines)	No. of Responses per Respondent	Total Responses (Notifications)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
Notifications of opening or reopening of mines (Safety director, Production manager, or Engineering technician)	6	1	6	6	36	$140.84	$5,070.22
Subtotal (Rounded)	***6***		***6***		***36***		***$5,070***

II. Revisions of Mine Maps in Underground Mines (30 CFR 75.1200 through 75.1203)

In accordance with 30 CFR 75.1202-1, mine maps are required to be prepared and revised at least every 6 months based upon information gathered through mine surveying and kept up-to-date by notations between revisions. MSHA estimates that, of 223 underground coal mines with employment, 82 percent (183 mines) are large enough to have at least one mine employed surveyor on the payroll, a drafting or computer drafting technician, and a professional engineer on the payroll. MSHA estimates that it takes eight hours for a surveyor to complete all activities related to surveying a typical underground coal mine. MSHA also estimates that it takes a registered engineer four hours to review the surveyor's survey and perform other related activities, and four hours for a drafter or computer technician to update the map or input survey data. The remaining 18 percent of the underground mines (40 mines) utilize contract surveying and engineering companies and their burden is shown in the answer to Item 13 of this package.

MSHA estimates that the hourly wage rates are $59.18 for a surveyor, $88.97 for a registered engineer, and $58.73 for a drafter or computer technician.

Table 12-3. Estimated Annual Respondent Hour and Cost Burden, Revising Mine Maps in Underground Mines (30 CFR 75.1200, 75.1200-1, 75.1201, 75.1202, 75.1202-1, and 75.1203)

Activity (Occupation)	No. of Respondents (Underground Mines)	No. of Responses per Respondent	Total Responses (Revisions)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
Revising mine maps (Surveyor)	183	2	366	8	2,928.00	$59.18	$173,275.68

Revising mine maps (Engineer)	183	2	366	4	1,464.00	$88.97	$130,248.56
Revising mine maps (Drafter or Computer Technician)	183	2	366	4	1,464.00	$58.73	$85,974.66
Subtotal (Rounded)	***183***		**1,098**		**5,856**		**$389,499**

IV. Filing Mine Closure Maps in Underground Mines (30 CFR 75.1204 and 75.1204-1)

Provisions in 30 CFR 75.1204 require that certified mine maps be revised and supplemented to the date of the closure and a copy be submitted to MSHA.

MSHA's records show that there is an average of 25 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 to the MSHA District Manager an updated mine map.

MSHA safety specialists estimate that it takes two hours for a registered engineer or surveyor and two hours for a drafter or computer technician to update and submit the map. MSHA estimates that a registered engineer or surveyor would have an hourly wage rate of $81.28, and a drafter or computer technician would have an hourly wage rate of $58.73.

Table 12-4. Estimated Annual Respondent Hour and Cost Burden, Filing Mine Closure Maps in Underground Mines (30 CFR 75.1204 and 75.1204-1)

Activity (Occupation)	No. of Respondents (Underground Mines)	No. of Responses per Respondent	Total Responses (Closure Maps)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
Filing of Mine closure maps (Surveyor or Engineer)	25	1	25	2	50	$81.28	$4,064.01
Filing of Mine closure maps (Drafter or Computer Technician)	25	1	25	2	50	$58.73	$2,936.29
Subtotal (Rounded)	***25***		***50***		***100***		***$7,000***

Surface Coal Mines and Surface Work Areas of Underground Coal Mines

V. Revising Mine Maps in Surface Mines (30 CFR 77.1200, 77.1201, and 77.1202)

Based on data provided for CY 2020, CY 2021, and CY 2022, MSHA determined an annual

average of 770 surface coal mines with employment. MSHA estimates that 25 percent of these mines (193 mines) are sufficiently large to employ at least one full time surveyor and a registered engineer, while the remaining 75 percent 578 mines will utilize contract surveying or

engineering companies. Burden concerning the remaining 75 percent of surface coal mines is shown in the answer to Item 13 of this package.

Generally, surveying of surface mines can be accomplished more efficiently than underground mines by using more sophisticated surveying equipment. 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 fireproof repository, or revisions every six months. However, the mine maps must be certified by a registered engineer or surveyor.

MSHA believes that a surveyor and the registered engineer can maintain the required map accurately and sufficiently to satisfy the operating needs of the mine and make the required information on the mine map available to a MSHA inspector. A typical surface survey is estimated to take eight hours to complete by a surveyor with an additional four hours by the engineer to review the work and conduct related activities.

MSHA estimates a surveyor's hourly wage rate to be $59.18 per hour, and a registered engineer's hourly wage rate to be $88.97 per hour.

MSHA's estimates burden hours and costs for surface mine operators to conduct the surveying, preparation, and maintenance of the required certified mine maps below.

Table 12-5. Estimated Annual Respondent Hour and Cost Burden, Revising Mine Maps in Surface Mines (30 CFR 77.1200, 77.1201, and 77.1202)

Activity (Occupation)	No. of Respondents (Surface Mines)	No. of Responses per Respondent	Total Responses (Revisions)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
Revising mine maps (Surveyor)	193	1	193	8	1,544	$59.18	$91,372.15
Revising mine maps (Engineer)	193	1	193	4	772	$88.97	$68,682.98
Subtotal (Rounded)	***193***		***386***		***2,316***		***$160,055***

Time Burden Summary

The annual respondent hour and cost burden in summarized in Table 12-6.

SUMMARY OF BURDEN HOURS

Table 12-6. Estimated Annual Respondent Hour and Cost Burden, Summary Totals

Activity	No. of Respondents	No. of Responses per Respondent	Total Responses	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
I. Notifications of opening or reopening of underground mines (Safety director, Production manager, or Engineering technician)	6	1	6	6	36	$140.84	$5,070.22
II. Revising underground mine maps (Surveyor)	183	2	366	8	2,928	$59.18	$173,275.68
II. Revising underground mine maps (Engineer)	183	2	366	4	1,464	$88.97	$130,248.56
II. Revising underground mine maps (Drafter or Computer Technician)	183	2	366	4	1,464	$58.73	$85,974.66
IV. Filing underground mine closure maps (Surveyor or Engineer)	25	1	25	2	50	$81.28	$4,064.01
IV. Filing underground mine closure maps (Drafter or Computer Technician)	25	1	25	2	50	$58.73	$2,936.29
V. Revising surface mine maps (Surveyor)	193	1	193	8	1,544	$59.18	$91,372.15
V. Revising surface mine maps (Engineer)	193	1	193	4	772	$88.97	$68,682.98
Total (Rounded)	***376***		***1,540***		***8,308***		***$561,625***

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

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

preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.

- **If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.**

- **Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.**

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 18 percent of underground and 75 percent of surface coal mines (40 underground mines and 578 surface mines) are not sufficiently large enough to justify equipping and maintaining surveying, drafting, and engineering capabilities solely 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.

Similar to mine employees involved in revising mine maps in underground coal mines, a contractor surveying team also includes one surveyor, a drafting or computer drafting technician, and a professional engineer. Their combined hourly wage rate is $233 per hour to perform the task of map revision.

Table 13-1. Contractor Hourly Wage Rates

Occupation	NAICS Code	75th Percentile Wage Rate	Benefit Multiplier	Inflation Multiplier	Overhead Cost Multiplier	Loaded Hourly Wage Rate
		A	B	C	D	A x B x C x D
Surveyor*	213100	$33.42	1.482	1.045	1.17	$60.55
Engineer**	213100	$58.89	1.482	1.045	1.17	$106.71
Drafter or Computer technician***	213100	$36.29	1.482	1.045	1.17	$65.76
Total (Rounded)						***$233***

Notes: *The Standard Occupation Codes (SOC) used for this occupation are (17-1022) and (17-3031).
**The SOC used for this occupation is (17-2151).
***The SOC used for this occupation is (17-3000).

Underground Coal

I. Notifications of Opening or Reopening of Underground Mines (30 CFR 75.373 and 75.1721)

MSHA estimates that 6 new mines/inactive mines will be either opened or reopened each year. MSHA further estimates that sending a notification to MSHA prior to opening a new mine or reopening a previously abandoned or inactive mine will cost $5.50 per notification for printing and mailing.

Table 13-2. Estimated Annual Respondent Recordkeeping Cost Burden, Notifications of Opening or Reopening in Underground Mines (30 CFR 75.373 and 75.1721)

Activity	No. of Respondents (Underground Mines)	No. of Responses per Respondent	Total Responses (Notifications)	Units	Unit Cost	Total Cost
Printing and Mailing Copies	6	1	6	1.0	$5.50	$33.00
Subtotal (Rounded)	***6***		***6***			***$33***

II. Revisions of Mine Maps in Underground Mines (30 CFR 75.1200 through 75.1203)

MSHA estimates that, out of 223 underground coal mines with employment, 18 percent (40 mines) are not large enough to have at least one mine employed surveyor, drafting or computer drafting technician, or professional engineer on the payroll.

MSHA estimates each underground mine requires a three-person contract surveying crew (a registered engineer, surveyor, and a draftsman or computer technician) to survey each underground mine twice each month (24 times a year) 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 a

combined wage rate of $233 per hour for the three-person contract surveying crew.[6] 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, including mailing.

Table 13-3. Estimated Annual Respondent Recordkeeping Cost Burden, Revising Mine Maps in Underground Mines (30 CFR 75.1200, 75.1200-1, 75.1201, 75.1202, 75.1202-1, and 75.1203)

Activity	No. of Respondents (Underground Mines)	No. of Responses per Respondent	Total Responses (Revisions)	Units	Unit Cost	Total Cost
Surveying	40	24	960	6.5	$233.00	$1,453,920.00
Printing and Mailing Copies	40	2	80	3.0	$48.00	$11,520.00
Subtotal (Rounded)	***40***		***1,040***			***$1,465,440***

IV. Filing Mine Closure Maps in Underground Mines (30 CFR 75.1204 and 75.1204-1)

MSHA's records show that there is an average of 25 underground coal mine closures each year. MSHA estimates that preparation and submittal of mine closure maps will cost $55.00 per map copy, including mailing.

Table 13-4. Estimated Annual Respondent Recordkeeping Cost Burden, Filing Mine Closure Maps in Underground Mines (30 CFR 75.1204 and 75.1204-1)

Activity	No. of Respondents (Underground Mines)	No. of Responses per Respondent	Total Responses (Closure Maps)	Units	Unit Cost	Total Cost
Printing and Mailing Copies	25	1	25	1.0	$55.00	$1,375.00
Subtotal (Rounded)	***25***		***25***			***$1,375***

Surface Coal Mines and Surface Work Areas of Underground Coal Mines

V. Mine Maps (30 CFR 77.1200, 77.1201, and 77.1202)

MSHA estimates that, of the 770 surface coal mines with employment, 75 percent (578 mines) are not large enough to have at least one mine employed surveyor, drafting or computer drafting technician, or professional engineer on the payroll.

MSHA estimates each surface mine requires a three-person contract surveying crew (a registered

6 For the contractor survey team hourly wage rate, MSHA used the 75th percentile hourly wage from the OEWS May 2022 survey, for 3 SOC occupations involving surveying for NAICS 213100, Support Activities for Mining. The hourly labor cost for the contractor survey is $233, determined by the rounding the sum of the 3 rates increased by the same benefit, inflation, and overhead loading and used in Item 12.

engineer, surveyor, and a draftsman or computer technician) to survey 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 $233 per hour.

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, including mailing.

Table 13-5. Estimated Annual Respondent Recordkeeping Cost Burden, Revising Mine Maps in Surface Mines (30 CFR 77.1200, 77.1201, and 77.1202)

Activity	No. of Respondents (Surface Mines)	No. of Responses per Respondent	Total Responses (Revisions)	Units	Unit Cost	Total Cost
Surveying	578	4	2,312	6.5	$233.00	$3,501,524.00
Printing and Mailing Copies	578	2	1,156	3.0	$48.00	$166,464.00
Subtotal (Rounded)	***578***		***3,468***			***$3,667,988***

The annual cost burden to respondents or recordkeepers in summarized in Table 13-5.

SUMMARY OF RECORDKEEPING COSTS

Table 13-5. Estimated Annual Respondent Recordkeeping Cost Burden, Summary Totals

Activity	No. of Respondents	No. of Responses per Respondent	Total Responses	Units	Unit Cost	Total Cost
I. Notifications relating to opening or reopening of mines (Printing and Mailing Copies)	6	1	6	1.0	$5.50	$33.00
II. Revising underground mine maps (Surveying)	40	24	960	6.5	$233.00	$1,453,920.00
II. Revising underground mine maps (Printing and Mailing Copies)	40	2	80	3.0	$48.00	$11,520.00
IV. Mine closure maps (Printing and Mailing Copies)	25	1	25	1.0	$55.00	$1,375.00
V. Revising surface mine maps (Surveying)	578	4	2,312	6.5	$233.00	$3,501,524.00
V. Revising surface mine maps (Printing and Mailing Copies)	578	2	1,156	3.0	$48.00	$166,464.00
Total (Rounded)	***649***		***4,539***			***$5,134,836***

14. Provide estimates of the 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), 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 into a single table.

The 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.

15. Explain the reasons for any program changes or adjustments.

Number of Respondents: The estimated annual number of respondents decreased from 580 to 376 mining operations due to a change in how respondents were calculated. The number of mining operations increased from 580 to 993, but only mining operations that are large enough to create their own mine maps are deemed respondents.

Number Responses: The estimated annual number of responses increased from 1,191 to 1,540 due to an increase in the number of mining operations submitting revisions.

Annual Time Burden: The estimated annual time burden increased from 6,274 hours to 8,308 hours due to an increase in the number of mining operations submitting revisions.

Annual Burden Costs: The estimated annual burden costs increased from $286,962 to $561,625 due to the increase in the time burden.

Annual Other Burden Costs: The estimated annual other burden costs increased from $3,204,898 to $5,134,836 due to an increase in the number of mining operations submitting revisions.

Table 15-1. Summary of Changes

	Currently Approved ICR	Revised ICR	Difference
Number of Respondents	580	376	-204
Number of Responses	1,191	1,540	349
Annual Time Burden	6,274	8,308	2,034
Annual Burden Costs	$286,962	$561,625	$274,662
Annual Other Burden Costs	$3,204,898	$5,134,836	$1,929,939
Federal Costs	$0	$0	$0
Federal Hours	0	0	0

16. For collections of information whose results will be published, outline plans for tabulations, 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.

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.