### SUPPORTING STATEMENT

#### Information Collection Request Title: Escape and Evacuation Plans

Provision(s): 30 CFR 57.11053 (underground metal and nonmetal mines)

Collection Instrument(s): None

#### **General Instructions**

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

**Specific Instructions** 

#### A. Justification

1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

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

Title 30 of the Code of Federal Regulations (CFR) 57.11053 requires the development of specific escape and evacuation plans that address the unique conditions of each underground metal and nonmetal mine. Section 57.11053 also requires that mine operators make revisions to the escape and evacuation plan for an underground metal and nonmetal mine as mining progresses. The plan must be available to representatives of MSHA and conspicuously posted at the mine at locations convenient to all persons on the surface and underground. The mine operator and MSHA are required to jointly review the plan at least once every six months.

The following information is required with each escape and evacuation plan submission:

(1) Mine maps or diagrams showing directions of principal air flow, location of escape routes, and locations of existing telephones, primary fans, primary fan controls, fire doors, ventilation doors, and refuge chambers.

(2) Procedures to show how the miners will be notified of an emergency.

(3) An escape plan for each working area in the mine, including instructions showing how each working area should be evacuated.

(4) A firefighting plan.

(5) Procedures for surface personnel to follow in an emergency, including the notification of proper authorities and the preparation of rescue equipment and other equipment which may be used in rescue and recovery operations.

(6) A statement of the availability of emergency communication and transportation facilities, emergency power, and ventilation, and the location of rescue personnel and equipment.

### 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.

The information is prepared by the mine operator for use by miners, MSHA, and persons involved in rescue operations. A miner must be aware, at all times, of the emergency escape route for his/her particular working place. Rescue personnel must be aware of the miners' escape routes.

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.

A mine operator may use computer technology, e.g., AutoCAD®, to aid in the design of the mine's escape and evacuation plan. Computer-aided drafting programs provide more accurate designs and data because they provide access to numerous databases, including geographic information systems and other geospatial information. These databases permit engineers to reduce the duplication of effort and maintain the integrity of the data in designing mines' escape and evacuation plans.

## 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.

Escape and evacuation plans are unique to each mine. There is no similar or duplicate information that MSHA could use.

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

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

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

An accurate and up-to-date escape and evacuation plan indicating current escape routes is vital to the safety of the miners and rescue personnel in the event of an emergency. Underground disasters including fires, explosions, and inundations often account for multiple fatalities in underground mines. The escape and evacuation plan and its revisions assure maximum safety for miners. The mine operator and MSHA must review plans at least once every six months to assure that miners have sufficient means to evacuate the mine in the event of an emergency. The required regularity of revision and review is necessitated by the ever-changing configuration of a producing mine.

7. Explain any special circumstances that would cause an information collection to be conducted in a manner:

\* requiring respondents to report information to the agency more often than quarterly;

\* requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;

\* requiring respondents to submit more than an original and two copies of any document;

\* requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years;

\* in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;

\* requiring the use of a statistical data classification that has not been reviewed and approved by OMB;

\* that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or \* requiring respondents to submit proprietary trade secrets, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

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

8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR

1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

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

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

MSHA published a 60-day Federal Register notice on March 22, 2017 (82 FR 14752). MSHA received two comments on the continued collection of this information; one comment was supportive.

One commenter stated that information requested by officials other than inspection personnel familiar with the particular mine and its escape and evacuation plan is not captured in the estimate and is not appropriate because agency personnel familiar with the particular mine should review the escape and evacuation plans. Agency personnel who are familiar with particular mines do the reviews. In some cases, additional review expertise may be required. MSHA's estimate provided the appropriate federal cost impact.

This commenter stated that when submittal of additional information is required, sufficient and reasonable time consistent with the effort required should be afforded the mine operator. MSHA does allow for additional time when required. This commenter seemed to suggest that 5 CFR 1320.5 indicates that 30 days is the minimum time that should be afforded respondents required to submit written responses to an ICR. MSHA would like to note that 5 CFR 1320 does not set response time requirements for MSHA collections of information and the renewal of this collection does not alter the timing for joint review by the operator and the Secretary's representative set at least semi-annually. Rather, 30 CFR 57.11053, published in 1985 and revised in 1995, requires plans to be updated as necessary so that current escape and evacuation procedures are available to all affected personnel. The regulation requires the joint review to occur at least once every six months. The supporting statement question the commenter is referring to asks the agency to explain any special circumstances that would cause an information collection to be conducted in a manner requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it. This collection does not require a response time of less than 30 days, and therefore MSHA does not provide a justification of a short response time.

This commenter noted opposition to MSHA making use of AutoCAD® mandatory in this information collection and a concern that such computer technologies typically contain information "above and beyond" that required for the ICR. The supporting statement specifically states that a mine operator may use computer technology, e.g., AutoCAD®, to aid in the design of the mine's escape and evacuation plan. It does not state use of AutoCAD® is mandatory. This commenter expressed a preference for submitting responses to the ICR in Portable Document Format (PDF) instead of in AutoCAD® software files. MSHA does not object to the use of PDF's. In addition, MSHA does not share this information with anyone other than those individuals involved in evaluating the escape and evacuation plan and emergency response personnel.

This commenter seemed to suggest that use of such computer technologies make information not directly material and relevant to the ICR available to others, including MSHA. However, MSHA's interest is information relevant to escape and evacuation plans.

Another commenter requested that MSHA complete the record with information on the number of citations issued for 30 CFR 57.11053, both nationally and in each MSHA district, for each of the last five years, as well as the number of such citations vacated each year (whether by MSHA or by courts) and that MSHA provide all notes, presentations, correspondence, memoranda, and emails related to this standard, that were created, sent, or received by each MSHA district manager, assistant district manager, program and division director, and/or technical support personnel. This request is outside the scope of the ICR; MSHA is addressing the commenter's request for information directly with the commenter.

This commenter states opposition to OMB approval for the use of these paperwork requirements to make substantive changes to mine operations without rulemaking. This ICR simply documents the burden that exists due to current MSHA regulations. Therefore, this notice of renewal of existing requirements is not a rulemaking.

This commenter also suggest that MSHA's calculated burden of paperwork requirements is massively understated for any mine that is subjected to new proposed plan requirements that require expert engineering reviews and/or significant efforts at the mines to analyze and/or implement them. MSHA, in reply, would like to note that the requested burden is an expected average of completion time estimates of varying ranges. The average takes into account both shorter and longer completion times, expected over the next three years.

### 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.

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

There is no assurance of confidentiality provided to respondents.

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

There are no questions of a sensitive nature.

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

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

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

All hourly wages for estimating hour burden costs are from Bureau of Labor Statistics (BLS), Occupational Employment Statistics (OES) May 2015 survey.<sup>1</sup> MSHA increased the OES hourly wage rates for benefits by a 1.48 benefit-scaling factor to obtain fully loaded wages.<sup>2</sup>

<sup>&</sup>lt;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 <u>http://www.bls.gov/oes\_ques.htm</u>.

<sup>&</sup>lt;sup>2</sup> The benefit-scaler comes from BLS Employer Costs for Employee Compensation access by menu <u>http://www.bls.gov/data/</u> or directly with <u>http://download.bls.gov/pub/time.series/cm/cm.data.0.Current</u>. 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 4quarter moving average 2015Qtr4-2016Qtr3 to determine that 32.5 percent of total loaded wages are benefits. The scaling factor may be approximated with the formula and values 1 + (benefit percentage/(1benefit percentage)) = 1+(.325/(1-.325)) = 1.48.

Company supervisors update escape and evacuation plans at irregular intervals as the configuration of the mine changes. MSHA estimates that there are approximately 231 active underground metal and nonmetal mines. Based on on-site experience, MSHA estimates that an average mine would develop two plan revisions each year, and that each revision would require approximately eight hours to develop. Accordingly, the hour burden is as follows:

231 (mines) x 2 (annual revisions) = 462 revisions462 revisions x 8 (hours per revision) = 3,696 annual hours for plan revisions.

Company supervisors, earning \$58.00<sup>3</sup> per hour, usually make the plan revisions. The burden cost is estimated as follows:

3,696 (burden hours for plan revisions)  $\times$  \$58.00 (supervisor wage per hour) = \$214,368 annual cost to respondents for plan revisions.

After revisions are completed, a clerical person must copy, post, and file the revisions. MSHA estimates that it takes a clerical person, earning \$22.42 per hour, about 0.5 hour to copy, distribute, and file the plan. Accordingly, the hour burden and burden cost is as follows:

462 revisions x 0.5 (hour per revision) = 231 hours

231 (hours to copy, post, and file)  $\times$  \$22.42<sup>4</sup> (mine clerical staff wage per hour) = \$5,179 annual cost to copy, post, and file plan revisions.

### **Total Burden to Operator**

<u>Responses</u> 462 plan revisions = 462 responses

<u>Reporting Burden Hours</u> 3,696 (plan revisions)

Recordkeeping Burden Hours 231 (to copy, post, and file)

<sup>&</sup>lt;sup>3</sup> Hourly wages from OES May 2015 survey, Standard Occupational Classification (SOC) code 47-1011, First-Line Supervisors of Construction Trades and Extraction Workers (NAICS codes 212200, Metal Ore Mining, and 212300, Nonmetallic Mineral Mining and Quarrying, weighted by employment). MSHA multiplied the employment weighted average at the 75th percentile wage rate of \$39.19 times the 1.48 benefit-scaler factor to obtain a fully loaded hourly wage of \$58.00.

<sup>&</sup>lt;sup>4</sup> Hourly wages from OES May 2015 survey, Standard Occupational Classification (SOC) code 43-9061, Office Clerks, General (NAICS codes 212200, Metal Ore Mining, and 212300, Nonmetallic Mineral Mining and Quarrying, weighted by employment). MSHA multiplied the mean wage rate of \$15.15 times the 1.48 benefit-scaler factor to obtain a fully loaded hourly wage of \$22.42.

#### Total Burden Hours 3,927 total hours

Burden Cost

\$214,368 (plan revisions) + \$5,179 (to copy, post, and file) = \$219,547 total cost

**13.** Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).

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

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

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

MSHA estimates that the costs to respondents for office supplies, copies, and postage resulting from this collection of information averages about \$10 per mine annually. The annual cost burden to respondents is as follows:

231 (mines) x \$10 (supplies, copies, and postage) = \$2,310 annual recordkeeping cost for supplies and postage.

14. Provide estimates of annualized cost to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead,

## printing, and support staff), and any other expense that would not have been incurred without this collection of information. Agencies also may aggregate cost estimates from Items 12, 13, and 14 in a single table.

MSHA estimates that inspection personnel spend approximately one hour reviewing each plan revision. Journeymen mine inspectors with an average base wage of \$53.91 (GS-12) would conduct these reviews.

231 (mines) x 2 (revisions/yr) x 1 (hour/revision) x  $53.91^5$  (MSHA wage per hour) = 24,906 annual plan review cost.

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

The burden decrease was due to fewer respondents (251 previous to 231 current). The number of responses also decreased (from 502 to 462) and the burden hours reflect the decrease (4,267 to 3,927). Burden costs also decreased from \$2,510 to \$2,310 also due to a decrease in active underground metal and nonmetal mines.

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.

MSHA is not seeking approval to not display the expiration date for OMB approval of this information collection and there is no form associated with this 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.** Collections of Information Employing Statistical Methods

<sup>&</sup>lt;sup>5</sup>Annual salary developed from Office of personnel Management (OPM) March 2016 *FedScope* employment cube, http://www.fedscope.opm.gov/ . Average annual salary of \$81,356 was obtained for DOL-MSHA GS-12 inspectors. Data search qualifiers were: Agency = DLMS, Occupation = 1822, Work Schedule = Full-Time, Salary Grade = GS-12, Measure = Average Salary. The hourly wage is the annual salary divided by 2,087. In order to include the cost of benefits, MSHA multiplied the average annual salary by a federal benefit scaler for MSHA of 1.383 (FY 2016).

As statistical analysis is not required by the regulation, questions 1 through 5 do not apply.