

## **SUPPORTING STATEMENT**

**Information Collection Request Title:** Slope and Shaft Sinking Plans, 30 CFR 77.1900 (Pertains to the surface work areas of underground coal 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. Further, section 101(a) of the Mine Act, 30 U.S.C. 811, authorizes the Secretary of Labor to develop, promulgate, and revise as may be

appropriate, improved mandatory health or safety standards for the protection of life and prevention of injuries in coal and metal and nonmetal mines.

Title 30 CFR 77.1900 requires underground coal mine operators to submit for approval a plan that will provide for the safety of miners in each slope or shaft that is commenced or extended from the surface to the underground coal mine. Each slope or shaft sinking operation is unique in that each operator uses different methods and equipment and encounters different geological strata, which make it impossible for a single set of regulations to ensure the safety of the miners under all circumstances. This makes an individual slope or shaft sinking plan necessary. The plan must be consistent with prudent engineering design. Plans include the name and location of the mine; name and address of the mine operator; a description of the construction work and methods to be used in construction of the slope or shaft, and whether all or part of the work will be performed by a contractor; the elevation, depth and dimensions of the slope or shaft; the location and elevation of the coalbed; the general characteristics of the strata through which the slope or shaft will be developed; the type of equipment which the operator proposes to use; the system of ventilation to be used; and safeguards for the prevention of caving during excavation.

**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.**

Plans are submitted for approval to the MSHA District Manager in the district where the mine is located. Once approved, plans are used by MSHA to determine whether the equipment and methods used by the mine operator provide a safe working environment.

**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.**

The shaft or slope plans submitted under section 77.1900 include narrative descriptions, lists, tables and drawings. These documents can be prepared using automated drafting programs and word processing programs and submitted via email, where the mine operator has the capability of affixing transmittable authorization signatures or where the email or facsimile is followed

by a signed hard copy. No new information technology has been identified that would reduce the burden. Plans are submitted electronically through email approximately 88 percent of the time.

**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.**

Plans are developed for individual slope and shaft sinking operations. No similar or duplicate information exists.

**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.**

Plans are prepared once for each slope and shaft sinking operation. The plan must be consistent with prudent engineering design. Each slope or shaft sinking operation is unique in that each operator/contractor uses different methods and equipment and encounters different geological strata, which make it impossible for a single set of regulations to ensure the safety of miners under all circumstances. If the collection is not conducted or is conducted less frequently, the safety and health of miners and contractor personnel would be jeopardized during the high-risk activities of shaft and slope construction.

**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 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.**

MSHA published a 60-day Federal Register notice on January 2, 2020 (85 FR 141). 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.

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

Slope and shaft sinking plans are applicable to specific work conditions. There is no personal or proprietary information involved. MSHA regards the approved plans as public records. There is no assurance of confidentiality.

**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**

**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 'Annual Cost to Federal Government.'**

Shaft and slope plans are required for underground mines. In FY 2018, 283 underground coal mines were reported in operation. The Coal Mine Safety and Health Districts found that 35 base plans and 56 revised shaft or slope plans were submitted and approved in FY 2018.

The calculations below show the burden hours and related costs that are borne by underground coal mine operators. Hourly wages in this answer are from Bureau of Labor Statistics (BLS), Occupational Employment Statistics (OES) May 2018 survey.<sup>1</sup> MSHA increased the OES hourly wage rates for benefits by a 1.49 benefit scaling factor to obtain fully loaded wages.<sup>2</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?"  
[https://www.bls.gov/oes/oes\\_ques.htm](https://www.bls.gov/oes/oes_ques.htm) .

MSHA estimates that it takes a mining engineer earning approximately \$65.31 per hour, approximately 20 hours to prepare an average plan.<sup>3,4</sup>

Respondents: 35 coal mines

Responses: 91 plans

Hours: 91 plans x 20 hours per plan = 1,820 burden hours

Cost: 1,820 burden hours x \$65.31 per hour = \$118,864

**13. Provide an estimate of 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**

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<sup>2</sup> The benefit scaler comes from BLS Employer Costs for Employee Compensation access by menu <https://data.bls.gov/cgi-bin/srgate>. 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 2018Qtr3-2019Qtr2 to determine that 32.9 percent of total loaded wages are benefits. The scaling factor is a detailed calculation, but may be approximated with the formula and values  $1 + (\text{benefit percentage}/(1-\text{benefit percentage})) = 1 + (.329/(1-.329)) = 1.49$ .

<sup>3</sup> 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.

<sup>4</sup>The reported mean value is increased for the annual change in employment costs (3.7%) as reported by BLS using BLS, Employment Cost Index: Wages and salaries for Private industry workers in Construction, extraction, farming, fishing, and forestry occupations (CIS2020000405000I) qtr. 2 2018 to qtr. 3, 2019 at <https://data.bls.gov/cgi-bin/srgate>. Hourly wages from OES May 2018 survey, Standard Occupational Classification (SOC) code 17-2151, Mining and Geological Engineers, Including Mining Safety Engineers, (NAICS code 212100, Coal Mining). MSHA multiplied the mean wage rate of \$42.27 times the 1.49 benefit scaling factor and 1.037 the inflation factor to obtain a fully loaded hourly wage of \$65.31.

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.**

No equipment must be purchased specifically for providing/gathering the information required by this standard.

The shaft and slope plans are prepared on office equipment and or engineering equipment maintained at the mine or in the contractor's office for normal business activities. Twelve percent of plans are sent to MSHA by mail or hand-delivered and 88 percent are sent electronically.<sup>5</sup> MSHA estimates that each plan will cost approximately \$5.00 to print and mail resulting in additional transmittal costs of \$55.00.

$$\$5.00 \text{ per package} \times 91 \text{ plans} \times 12 \text{ percent} = \$55.00$$

**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**

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<sup>5</sup> Rounding to the nearest whole plan, approximately 11 are mailed and 80 are submitted electronically.

**also may aggregate cost estimates from Items 12, 13, and 14 in a single table.**

MSHA estimates that it would take approximately 15 hours to review and approve an average plan. Either a mine safety and health specialist (OPM job series 1822) or a mining engineer (OPM job series 0880) at the GS-12 level would review the plans. The weighted average salary cost for MSHA employees at the GS-12 level in these job series codes is \$57.08 per hour.<sup>6</sup> MSHA's current records show there are approximately 91 shaft and slope plans per year.

91 plans x 15 hours x \$57.08 per hour = \$77,914

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

There was an increase in respondents from 27 to 35. The burden hour increase of 220 hours (from 1,600 hours to 1,820 hours) and the associated costs is due to the slight increase in the number of revised plans submitted for the number of shaft and slope projects. This is true even when MSHA records show that there were fewer shafts and slopes under construction during the year FY2018 than 2015. The increase in base and revised plans increased responses from 80 to 91. In addition, most of these plans and revisions are submitted by email, cutting down on mailing costs. There was also a cost burden decrease (from \$60 to \$55) resulting from the combination of increased responses, increased use of electronic submissions, and updated printing and mailing costs.

**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.

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<sup>6</sup> Hourly wage rate developed from Office of personnel Management (OPM) December 2018 FedScope employment cube, <http://www.fedscope.opm.gov/>. Average annual salary of \$85,148 obtained as a weighted average from two occupations for DOL-MSHA employees. Data search qualifiers are: Agency = DLMS, Occupation = 1822 or 0880, Work Schedule = Full-Time, Salary Grade = GS-12, Measures = Average Salary or Employment. In order to include the cost of benefits, the average annual salary was multiplied by a federal benefit scaler of 1.399 (FY 2020). [\$57.08 = (\$85,148.05 x 1.399) ÷ 2,087 annual hrs.]



**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.

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

There are no exceptions to the certification statement.

**B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS**

This information collection does not employ statistical methods.