

SUPPORTING STATEMENT

Information Collection Title: Health Standards for Diesel Particulate Matter Exposure (Underground Coal Mines)

Authorities: 30 CFR Sections 72.510(a) and (b), 72.520(a) and (b)

Collection Instruments(s): None

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 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.

MSHA established standards and regulations for diesel-powered equipment in underground coal mines that provide additional important protection for coal miners who work on and around diesel-powered equipment. The standards were designed to reduce the risks to underground coal miners of serious health hazards that are associated with exposure to high concentrations of diesel particulate matter. The standards contain information collection requirements for underground coal mine operators in sections 72.510(a) & (b), and 72.520(a) & (b).

Section 72.510(a) requires underground coal mine operators to provide annual training to all miners who may be exposed to diesel emissions. The training must include health risks associated with exposure to diesel particulate matter; methods used in the mine to control diesel particulate concentrations; identification of the personnel responsible for maintaining those controls; and actions miners must take to ensure controls operate as intended.

Section 72.510(b) requires underground coal mine operators to keep a record of the training for one year.

Section 72.520(a) and (b) requires underground coal mine operators to maintain an inventory of diesel powered equipment units together with a list of information about any unit's emission control or filtration system. The list must be updated within 7 calendar days of any change.

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 collection is provided to the MSHA inspector and used by the agency to monitor the mine operator's compliance with the health standard and to provide useful information to mine operators and miners' representatives about the affected standards.

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.

Mine operators have the option of providing the inventory via MSHA's web page or they may submit the information in writing to MSHA. MSHA has information available on-line to aid mine operators in maintaining and updating the inventory found at <https://lakegovprod3.msha.gov/DieselInventory/ViewDieselInventoryExternal.aspx> by clicking on view national inventory. In addition, the MSHA standards afford the mine operator the flexibility to retain the information in whatever format/method they choose that reasonably conveys the inventory.

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.

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 collection does not have a significant impact on a substantial number of small entities. However, MSHA has made available various links on our web-site specific to diesel matters. On our homepage at www.msha.gov, there are sites making available compliance materials and other information on diesel particulate.

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

The information collection requirements are essential for helping to protect miners' health and safety while working in areas of the underground mine where diesel-powered equipment is being operated. The information also serves as a means of verifying compliance with the standards and also informs mine operators and miners' representatives of safety and health conditions in a miner's workplace. Reduction of these information collection requirements would increase the likelihood that unsafe and unhealthy conditions could go undetected and uncorrected in underground coal mines that use diesel-powered equipment.

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 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.

MSHA published a 60-day *Federal Register* notice on November 4, 2016 (81 FR 76968). MSHA received no 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.

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 hrs. 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 under Item 13.**

Shown below are the burden hours and related costs that are borne by underground coal mine operators that use diesel-powered equipment. Hourly wages in this answer are from Bureau of Labor Statistic (BLS), Occupational Employment Statistics (OES) May 2015 survey.¹ MSHA increased the OES hourly wage rates for benefits by a 1.49 benefit scaling factor to obtain fully loaded wages.²

Section 72.510, Miner Health Training

This section requires that all miners who can reasonably be expected to be exposed to diesel emissions on mine property be trained annually in accordance with section 72.510(a). Training will occur at 220 mines and 36,000 miners will be trained.

At each mine a supervisor, earning \$56.56 per hour, will take 5 minutes to instruct a clerical worker concerning the training.³ A clerical worker, earning \$23.26 per hour, will

1 For those not familiar with the OES survey, see item “E3. How to get OES data. What are the different ways to obtain OES estimates from this website?” at http://www.bls.gov/oes_ques.htm.

2 The benefit scaler comes from BLS Employer Costs for Employee Compensation access by menu <http://www.bls.gov/data/> or directly with <http://download.bls.gov/pub/time.series/cm/cm.data.0.Current>. The data series CMU2030000405000P, Private Industry Total benefits for Construction, extraction, farming, fishing, and forestry occupations, is divided by 100 to convert to a decimal value. MSHA used the latest 4-quarter moving average 2015Qtr3-2016Qtr2 to determine that 32.65 percent of total loaded wages are benefits. The scaling factor is a detailed calculation, but may be approximated with the formula and values $1 + (\text{benefits}/(1-\text{benefit percentages})) = 1 + (.3265/(1-.3265)) = 1.48$.

3 Hourly wages from OES May 2015 survey, Standard Occupational Classification (SOC) code 47-1011,

take 15 minutes at each mine, (includes listening to supervisor's instructions) to make arrangements concerning the required training.⁴ In addition, the clerical worker will take 1 minute to record each trainee in a computer file. Each trainee, earning \$37.00 per hour, will take 20 seconds to sign a registration sheet, which also serves as a record.⁵

Recordkeeping Burden Hours

Supervisor

1 Supervisor x 220 mines x 5 minutes instruction per mine = 18 hrs.

Clerical

1 Clerical worker x 220 mines x 15 minutes to
Make training arrangements = 55 hrs.

1 Clerical worker x 36,000 miners x 1 minute to
Record training in computer = 600 hrs.

Total Clerical hours = 655 hrs.

Miner

36,000 miners x 20 seconds to sign registration sheet = 200 hrs.

Recordkeeping Burden Costs

18 Supervisor hrs. x \$56.56 per hr. = \$1,018

655 Clerical hrs. x \$23.26 per hr. = \$15,235

200 Miners hrs. x \$37.00 per hr. = \$7,400

Section 72.520, Diesel Equipment Inventory

Section 72.520 requires underground coal mine operators to maintain a list of diesel powered equipment units, together with information about any unit's emission control or filtration system. This list must be updated within 7 days of any change.

Mine operators can obtain general information on approved engines from manufacturers or MSHA (via MSHA's website). Annually, it will take a mine supervisor, earning \$56.56 per hour, an average of 2 minutes to perform this task for each change.

First-line Supervisors of Construction Trades and Extraction Workers, Coal Mining, (NAICS code 212100). MSHA multiplied the mean wage rate of \$37.96 times the 1.49 benefit scaling factor to obtain a fully loaded hourly wage of \$56.56.

4 Hourly wages from OES May 2015 survey, Standard Occupational Classification (SOC) code 43-9061, Office Clerks General, Coal Mining, (NAICS code 212100). MSHA multiplied the mean wage rate of \$15.61 times the 1.49 benefit scaling factor to obtain a fully loaded hourly wage of \$23.26.

5 Hourly wages from OES May 2015 survey, Standard Occupational Classification (SOC) code 47-5000, Extraction Workers, Coal Mining, (NAICS code 212100). MSHA multiplied the mean wage rate of \$24.83 times the 1.49 benefit scaling factor to obtain a fully loaded hourly wage of \$37.00.

Each year, MSHA estimates that changes will be required for one sixth of the inventory, 915 diesel machines.

Recordkeeping Burden Hours

915 changes x 2 minutes to record required changes = 31 hrs.

Recordkeeping Burden Costs

31 hrs. x \$56.56 per hr. = \$1,753

In addition, mine operators can obtain machine-specific information (e.g. serial numbers) from maintenance files or similar records. Collecting and recording this information will take a miner, earning \$37.00 per hour, an average of 2 minutes per machine. Annually, 915 diesel machines will have these changes.

Recordkeeping Burden Hours

915 changes x 2 minutes to record machine-specific changes = 31 hrs.

Recordkeeping Burden Costs

31 hrs. x \$37.00 per hr. = \$1,147

The mine operator must transmit electronically or send a copy of the diesel inventory list to the appropriate MSHA District Manager and provide a copy to the miner representative. Nearly all mine operators transmit their diesel inventory lists electronically; therefore, the burden is de minimis. For those inventories submitted by mail, a clerical worker must copy and mail the list to the District Manager; and provide a copy to the miner's representative. On average, MSHA estimates that it will take a clerical worker, earning \$23.26 per hour, 5 minutes per machine to perform these functions. MSHA estimates only a few mine operators will submit their inventories by mail.

Reporting Burden Hours

12 inventory changes x 5 minutes to perform clerical duties = 1 hr.

Reporting Burden Costs

1 hr. x \$23.26 per hr. = \$23

Estimated Annualized Respondent Hour and Cost Burdens

Type of Respondent	Form/Regulation	No. of Respondents	No. of Responses per Respondent	Total No. of Responses	Avg. Burden per Response (in hours)	Total Burden Hours	Total Burden Costs
Recordkeeping Burden							
Business or other for-profit	72.510 (Supervisor Instruction)	220	1	220	5/60	18	\$1,018
Business or other for-profit	72.510 (Clerical Prep)	220	1	220	15/60	55	\$1,279
Business or other for-profit	72.510 (Clerical Make Record of Training)	36,000	1	36,000	1/60	600	\$13,956
Business or other for-profit	72.510 (Miners Sign Registration Sheet)	36,000	1	36,000	.3333/60	200	\$7,400
Business or other for-profit	72.520 (Diesel Engine, Emission, or Filtration Changes)	915	1	915	2/60	31	\$1,753
Business or other for-profit	72.520 (Diesel Machine-Specific Information and Maintenance Changes)	915	1	915	2/60	31	\$1,147
Totals for Recordkeeping				74,270		935	\$26,553
Reporting Burden							

Business or other for-profit	72.520 (Clerical Copy and Send of Inventory Changes)	12	1	12	5/60	1	\$23
Total				74,282		936	\$26,576

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 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 that 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.

Section 72.520

Underground coal mine operators that use diesel powered equipment will need to update their list of diesel equipment and send a copy to the appropriate MSHA District Manager. Also, a copy of the updated list will need to be provided to the representative of the miners. On average, MSHA estimates that the updated list consist of 2 pages. Nearly all mine operators transmit their diesel inventory lists electronically; therefore, the cost is de minimis. On average, MSHA estimates that, annually, 12 inventory changes will be submitted by mail. MSHA's estimate of the cost related to submission and providing a copy to the representative of the miners is \$1.07 [(\$0.15 copy cost per pg. x 2 pgs. x 2 copies) + \$0.47 for postage] to make copies and mail the list to the appropriate MSHA District Manager.

12 inventory changes x \$1.07 per change = \$13

QUESTION 13 ANNUAL BURDEN COSTS

Type of Respondent	Form/Regulation	Total Cost
Business or other for-profit	72.510 (Supervisor Instruction)	\$0
Business or other for-profit	72.510 (Clerical Prep)	\$0
Business or other for-profit	72.510 (Clerical Record Miner Training)	\$0
Business or other for-profit	72.510 (Miners Sign Registration Sheet)	\$0
Business or other for-profit	72.520 (Engine, Emission or Filtration Changes)	\$0
Business or other for-profit	72.520 (Diesel Machine-Specific Information and Maintenance Changes)	\$0
Business or other for-profit	72.520 (Clerical Copy, Submit & Provide Copy to Miner Rep.)	\$13
TOTAL		\$13

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 hrs., 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.

There is no cost to the Federal government for this information collection.

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

The number of respondents, responses, burden hours, and annual cost burden has increased. Due to the increase in respondents, the number of changes required to be reported concerning the diesel powered equipment inventory increased; which therefore increased cost.

Current:
TOTAL BURDEN HOURS = 936
TOTAL RESPONDENTS = 220
TOTAL RESPONSES = 74,282
TOTAL RESPONDENT COST = \$13

Previous:
TOTAL BURDEN HOURS = 703
TOTAL RESPONDENTS = 206
TOTAL RESPONSES = 53,631
TOTAL RESPONDENT COST = \$9

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 the 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 not to display the expiration date for OMB approval of this information collection.

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

There are no certification exceptions identified with this information collection.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

The collection of this information does not employ statistical methods.