

Diesel-Powered Equipment in Underground Coal Mines

OMB Control Number 1219-0119

OMB Expiration Date: 2/28/22

**SUPPORTING STATEMENT FOR DIESEL-POWERED EQUIPMENT IN UNDER-
GROUND COAL MINES**

OMB CONTROL NO. 1219-0119

Collection Instruments/Form Number(s): None

This information collection request seeks to extend, without change, an existing information collection.

Authority:

30 CFR Citations

Section 75.1901(a); Diesel fuel requirements

Section 75.1904(b)(4)(i); Underground diesel fuel tanks and safety cans

Section 75.1906(d); Transport of diesel fuel

Sections 75.1911(i) and (j); Fire suppression systems for diesel-powered equipment and fuel transportation units

Sections 75.1912(h) and (i); Fire suppression systems for permanent underground diesel fuel storage facilities

Sections 75.1914(f)(1), (f)(2), (g), (g)(5), (h)(1), and (h)(2); Maintenance of diesel-powered equipment

Sections 75.1915(a), (b)(5), (c)(1), and (c)(2); Training and qualification of persons working on diesel-powered equipment

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 (Secretary) to develop, promulgate, and revise as may be appropriate, improved mandatory health or safety standards for the protection of life and prevention of injuries in coal or other mines.

MSHA requires mine operators to provide important safety and health protections to underground coal miners who work on and around diesel-powered equipment. The engines powering diesel equipment are potential contributors to fires and explosion hazards in the confined environment of an underground coal mine where combustible coal dust and explosive methane gas are present. Diesel equipment operating in underground coal mines also can pose serious health risks to miners from exposure to diesel exhaust emissions, including diesel particulates, oxides of nitrogen, and carbon monoxide. Diesel exhaust is a lung carcinogen in animals.

This information collection includes records for maintenance and use of diesel equipment, tests and maintenance of fire suppression systems on both the equipment and at fueling stations, and exhaust gas sampling.

Records are required to document that essential testing and maintenance of diesel-powered equipment are conducted regularly by qualified persons; that corrective actions are taken; and that the persons performing the maintenance, repairs, examinations, and tests are trained and qualified to perform such tasks.

Safety requirements for diesel-powered equipment include many of the proven features required in existing standards for electric-powered mobile equipment, such as cabs or canopies, methane monitors, brakes, and lights. Sampling of diesel exhaust emissions is required to protect miners from overexposure to carbon monoxide and nitrogen dioxide contained in diesel exhaust.

Information collection requirements are found in: section 75.1901(a), Diesel fuel requirements; section 75.1904(b)(4)(i), Underground diesel fuel tanks and safety cans; section 75.1906(d), Transport of diesel fuel; section 75.1911(j), Fire suppression systems for diesel-powered equipment and fuel transportation units; section 75.1912(i), Fire suppression systems for permanent underground diesel fuel storage facilities; sections 75.1914(f)(2), (g), (h)(1), and (h)(2), Maintenance of diesel-powered equipment; and sections 75.1915(b)(5), (c)(1), and (c)(2), Training and qualification of persons working on diesel-powered 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 respondents are underground coal mine operators. The recordkeeping requirements are necessary to assist MSHA in determining compliance and to provide information to mine operators and miners' representatives about the performance of diesel engines and any deterioration or defective condition of these engines needing corrective action. For example, this information collection provides important information about the exhaust output of a diesel engine and its ventilation needs. This information is valuable for selecting engines and monitoring their performance in service. This information collection also helps to identify deteriorating engine performance that indicates the need for equipment repair or maintenance, thus preventing overexposure of miners to the health hazards resulting from diesel exhaust. In addition, miners' representatives may use this information to verify that necessary repairs are made to diesel-powered equipment.

The examinations associated with these standards must be performed on a regular basis. Less frequent examinations would not ensure that conditions requiring immediate attention are promptly detected, such as inadequate air quantities ventilating diesel-powered equipment or equipment defects that create a hazard. Records of equipment examinations are required only when defects are found.

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 information gathered is required to be recorded, maintained for the period specified, and made accessible, upon request, to authorized representatives of the Secretary and miners' representatives. This may be done in a traditional manner by recording this information in a book, or electronically by computer.

Electronic storage and retrieval of information through computers is a common business practice. MSHA encourages the use of electronically stored records, provided they are secure and not susceptible to alteration, are able to capture the information and signatures required, and are accessible to the authorized representative of the Secretary and miners' representatives. "Secure" means unalterable or cannot be modified. MSHA considers electronic records meeting these criteria to be practical and as reliable as traditional records.

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.

MSHA knows of no other Federal- or State-reporting requirement that would duplicate the reporting requirements contained in these standards.

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.

Reduction of these recordkeeping requirements would increase the likelihood that unsafe and unhealthy conditions would go undetected and uncorrected in underground coal mines. Less frequent data gathering would not provide the monitoring necessary to ensure that dangerous conditions requiring immediate attention are identified and corrected. The recordkeeping requirements provided by these standards are the minimum necessary to ensure the safe and healthful operation of diesel-powered equipment in underground coal mines. The information requirements in these standards not only verify compliance, but also provide important information to mine operators and miners' representatives about safety and health conditions in miners' workplaces.

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 June 16, 2021 (86 FR 32067). MSHA received no public comments.

9. Explain any decision to provide any payments or giftsto 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.

MSHA makes no assurance that the information will remain confidential. Records required by the diesel-powered equipment in underground coal mines safety standards are for training, testing, and maintenance activities and contain no proprietary or confidential information. In addition, the records are maintained at the mine and are not submitted to MSHA.

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 under Item 13.**

All information related to quantities and inspection rates are estimated by MSHA's Headquarters 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 Headquarters Enforcement Division the number of mines and employment, and from this information MSHA Headquarters Enforcement Division tracks the number of active and inactive mines and mine types throughout the United States. According to MSHA, in 2020 there were 126 mines (respondents), consisting of 93 large and 33 small mines. Annual burden hours and related costs calculations are shown below.

Annual burden hours and related costs calculations are shown below. MSHA used data from the May 2019 Occupational Employment Statistics (OES) published by the Bureau of Labor Statistics (BLS) for hourly wage rates and adjusted the rates for benefits and wage inflation¹.

Section 75.1901(a) - Proof of Diesel Fuel Purchase

¹ Options for obtaining OES data are available at item "E3. How to get OES data. What are the different ways to obtain OES estimates from this website?" at https://www.bls.gov/oes/oes_ques.htm. 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 2019Qtr4-2020Qtr3 to determine that 33.1 percent of total loaded wages are benefits. MSHA computes the scaling factor with a number of detailed calculations but it may be approximated with the formula and values $1 + (\text{benefit percentage}/(1-\text{benefit percentage})) = 1 + (.331/(1-.331)) = 1.49$. Wage inflation is the change in Series ID: CIS2020000405000I; Seasonally adjusted; Series Title: Wages and salaries for Private industry workers in Construction, extraction, farming, fishing, and forestry occupations, Index. (<https://data.bls.gov/cgi-bin/srgate>); Qtr 4 2020/Qtr 2 2019; $141.1/135.9=1.038$)

Section 75.1901(a) requires that upon request, the mine operator must provide to an authorized representative of the Secretary evidence that the diesel fuel purchased for use in diesel-powered equipment underground meets the requirements in section 75.1901(a). The information requested is available on the purchase order when the mine operator purchases diesel fuel. However, MSHA estimates that half of the mines (63 mines) do not keep gas purchase orders on file. MSHA estimates that, on average, operators purchase fuel 24 times per year, and that a clerical person, earning \$28.75 per hour², takes 3 minutes to make a record of the purchase.

Section 75.1904(b)(4)(i) - Marking Diesel Fuel Connections

Section 75.1904(b)(4)(i) requires that underground diesel fuel tank connections be identified by conspicuous markings that specify the function. MSHA estimates that 438 tanks require markings (93 mines x 4 tanks per large mine) + (33 mines x 2 tanks per small mine). MSHA estimates that a miner, earning \$39.73 per hour³, takes 2 minutes to mark the connections per tank. The markings will last for 2 years, thus the average annual time spent on marking is 1 minute.

Section 75.1906(d) - Marking Diesel Fuel Tanks and Safety Cans

Section 75.1906(d) requires that diesel fuel transportation unit tanks and safety cans be conspicuously marked as containing diesel fuel. MSHA estimates that there are 438 tanks in mines of which: 372 tanks are in large mines (93 mines x 4 tanks per mine); and 66 tanks are in small mines (33 mines x 2 tanks per mine). In addition, MSHA estimates the number of diesel equipment is 4,571 pieces in large mines and 191 pieces in small mines. MSHA estimates that each piece of diesel equipment carries one safety can. Thus, 5,200 tanks and safety cans require markings, of which 4,943 are in large mines and 257 are in small mines. It will take a miner, earning \$39.73 per hour, 2 minutes to mark each tank and safety can. The markings will last for 2 years, thus the average annual time spent on this is 1 minute.

Sections 75.1911(i) and (j) - Weekly and Manufacturer Recommended Inspection and Recording of Diesel Equipment Fire Suppression System Defects

Section 75.1911(j) requires a record when defects are found on certain diesel equipment during: weekly fire suppression system inspections; and manufacturer recommended fire suppression system inspections. Diesel ambulance equipment, firefighting equipment, and attended equipment, is not affected by this provision. Section 75.1911(i) requires the inspections.

MSHA estimates that the diesel equipment affected by this provision are: 4,114 pieces in large mines (4,571 pieces x 90 percent); and 162 pieces in small mines (191 pieces x 85 percent). The number of inspections per year are 50 in large mines and 40 in small mines. About

² For the clerk hourly wage rate, MSHA used the employment weighted mean hourly wage from the OES May 2019 survey, for 3 clerical occupations that are from the Administrative Support Standard Occupational Classification (SOC) major group code 43. The weighted mean was adjusted for benefits and inflation to obtain a fully loaded rate of \$28.75 ($\$18.59 \times 1.49 \times 1.038$).

³ For the miner hourly wage rate, MSHA used the employment weighted mean hourly wage from the OES May 2019 survey, for 7 related occupations that are from two Standard Occupational Classification (SOC) major group codes (codes, 47 and 49). The weighted mean was adjusted for benefits and inflation to obtain a fully loaded rate of \$39.73 ($\$25.69 \times 1.49 \times 1.038$).

10 percent of the inspections will disclose a defect and require a record to be made. MSHA estimates that each record take 5 minutes by a miner trained in fire suppression system inspections who is earning \$41.17⁴ per hour.

Sections 75.1912(h) and (i) - Weekly and Manufacturer Recommended Inspection and Recording of Diesel Fuel Storage Facilities Fire Suppressions System Defects

Sections 75.1912(i) requires a record for each fire suppression system in which a defect is found when inspecting a permanent diesel fuel storage facility in an underground coal mine. A record is also required when a defect is found during a manufacturer recommended inspection of such facilities. Section 75.1912(h) requires the inspections.

MSHA estimates that 37 percent of large mines (34 mines = 93 mines x 0.37) and 28 percent of small mines (9 mines = 33 mines x 0.28), maintain permanent underground diesel fuel storage facilities. The number of inspection per year are 50 in large mines and 40 in small mines. About 10 percent of inspections will disclose a defect and require a record to be made. MSHA estimates that each record takes 5 minutes by a miner trained in fire suppression system inspections, who is earning \$41.17 per hour.

Sections 75.1914(f)(1), (f)(2), and (h) - Weekly Inspection and Recording of Diesel Equipment

Section 75.1914(f)(1) requires that weekly examinations be performed on diesel-powered equipment. Sections 75.1914(f)(2) and (h) provide for relevant recordkeeping. Only the results of those examinations disclosing a defect must be recorded. The record must include the machine examined, defect found, and corrective action taken. MSHA estimates that there are 4,571 pieces of diesel equipment in large mines and 191 pieces of such equipment in small mines. MSHA estimates that annual inspections are 50 in large mines and 40 in small mines. About 25 percent of these inspections will show a defect. MSHA estimates that it takes 5 minutes for each record by a miner earning \$39.73 per hour.

Sections 75.1914(g) and (h) – Develop and Maintain Testing Procedures

Section 75.1914(g) requires mine operators to develop, in writing, standard operating procedures for testing undiluted diesel exhaust emissions. To account for new mines, which will require the development of these standard operating procedures, MSHA estimates that each year 1.5 percent of all large mines are new and 5 percent of all small mines are new. MSHA estimates that 50 percent of new large mines and 10 percent of new small mines will use diesel equipment. Applying these percentages to the 93 large mines and 33 small mines in this package would result in less than one large mine being impacted and one small mine being impacted. Therefore, MSHA estimates that one new large mine, and one new small mine will be affected by these provisions annually.

⁴ For the miner trained in fire suppression inspections MSHA used the employment weighted mean hourly wage from the OES May 2019 survey, for 11 related occupations that are from 5 Standard Occupational Classification (SOC) major group codes (codes 17, 19, 47, 49, and 51). The weighted mean was adjusted for benefits and inflation to obtain a fully loaded rate of \$41.17 ($\$26.62 \times 1.49 \times 1.038$).

MSHA estimates that a supervisor, earning \$62.13⁵ per hour, takes 2 hours to develop and maintain the testing procedures as required by paragraphs (g) and (h). Written procedures are similar for diesel-powered equipment that is of the same model, but will vary when the diesel machines are different models. On average, MSHA estimates that there are 8 different diesel equipment models in a large mine and 2 different diesel equipment models in a small mine.

Sections 75.1914(g)(5) and (h) – Testing and Recording of Undiluted Exhaust Emissions of Diesel Equipment

Sections 75.1914(g)(5) and (h) require that records be kept of weekly exams and tests of the undiluted exhaust emissions on certain pieces of diesel-powered equipment. Exempt from this provision are diesel engines in diesel-powered equipment approved under 30 CFR part 36 and heavy-duty nonpermissible diesel-powered equipment as defined in section 75.1908(a). MSHA estimates that the number of machines affected by these provisions is 1,600 pieces of diesel equipment in large mines (4,571 pieces x 35 percent) and 67 pieces of diesel equipment in small mines (191 pieces x 35 percent). Annually, MSHA estimates that there are 50 exam weeks in a large mine and 40 exam weeks in a small mine. For each piece of diesel equipment a miner, earning \$39.73 per hour, will take 5 minutes to follow the requirements of paragraphs (g)(5) and (h).

Sections 75.1915(b)(5) and (c) – Develop and Make Record Concerning Training Program for Persons to Maintain Diesel Equipment

Sections 75.1915(b)(5) and (c) require that the mine operator develop an initial and retraining program to qualify persons to perform maintenance, repairs, examinations, and tests on diesel-powered equipment, as required by section 75.1915(a). Paragraph (c) sets forth requirements concerning the records to be made and maintained. MSHA estimates that one new large mine and one new small mine using diesel equipment will begin operation per year and require the development of a training program. MSHA estimates that a supervisor, earning \$62.13 per hour, takes 16 hours in a large mine and 10 hours in a small mine to develop and maintain the training program as required by paragraphs (b)(5) and (c).

For the summary table which follows, all time is calculated at the full precision (e.g. minutes/60) and then rounded to two decimal places after hours are calculated. The hourly employee cost is shown rounded to two decimal places. The total burden costs for question 12 are the product of hours times rate and then rounded to two decimal places. All grand totals are rounded to whole numbers.

⁵ For the Supervisor hourly wage rate, MSHA used the employment weighted mean hourly wage from the OES May 2019 survey, for 3 supervisory occupations that are from 3 Standard Occupational Classification (SOC) major group codes (codes 47, 49, and 51). The weighted mean was adjusted for benefits and inflation to obtain a fully loaded rate of \$62.13 (\$40.17 x 1.49 x 1.038).

Diesel-Powered Equipment in Underground Coal Mines

OMB Control Number 1219-0119

OMB Expiration Date: 2/28/22

Summary of Question 12 Burden

Section	No. of Respondents	No. Responses per Respondent	Total Responses	Average Burden Per Response (units shown)	Burden Hours	Hourly Wage Rate	Total Burden Costs
75.1901(a)	63	24	1,512	3 m/60	75.60	\$28.75	\$2,173.50
75.1904(b)(4)(i) (Large Mines)	93	4	372	1 m/60	6.20	\$39.73	\$246.33
75.1904(b)(4)(i) (Small Mines)	33	2	66	1 m/60	1.10	\$39.73	\$43.70
75.1906(d) (Large Mines Tanks)	93	4	372	1 m/60	6.20	\$39.73	\$246.33
75.1906(d) (Small Mines Tanks)	33	2	66	1 m/60	1.32	\$39.73	\$43.70
75.1906(d) (Large Mines Cans)	4,571	1	4,571	1 m/60	76.18	\$39.73	\$3,026.63
75.1906(d) (Small Mines Cans)	191	1	191	1 m/60	3.18	\$39.73	\$126.34
75.1911(i) & (j) (Large Mines)	4,114	5	20,570	5 minutes / 60	1,714.17	\$41.17	\$70,572.38
75.1911(i) & (j) (Small Mines)	162	4	648	5 minutes / 60	54.00	\$41.17	\$2,223.18
75.1912(h) & (i) (Large Mines)	34	5	170	5 minutes / 60	14.17	\$41.17	\$583.38
75.1912(h) & (i) (Small Mines)	9	4	36	5 minutes / 60	3.00	\$41.17	\$123.51
75.1914(f)(1), (f)(2) & (h) (Large Mines)	4,571	13	59,423	5 minutes / 60	4,951.92	\$39.73	\$196,739.78
75.1914(f)(1), (f)(2) & (h) (Small Mines)	191	10	1,910	5 minutes / 60	159.17	\$39.73	\$6,323.82
75.1914(g) & (h) (Large Mines)	1	8	8	2.00 hours	16.00	\$62.13	\$994.08
75.1914(g) & (h) (Small Mines)	1	2	2	2.00 hours	4.00	\$62.13	\$248.52
75.1914(g)(5) & (h) (Large Mines)	1,600	50	80,000	5 minutes / 60	6,666.67	\$39.73	\$264,866.80
75.1914(g)(5) & (h) (Small Mines)	67	40	2,680	5 minutes / 60	223.33	\$39.73	\$8,872.90
75.1915(b)(5) &	1	1	1	16.00	16.00	\$62.13	\$994.08

Diesel-Powered Equipment in Underground Coal Mines

OMB Control Number 1219-0119

OMB Expiration Date: 2/28/22

(c) (Large Mines)				hours			
75.1915(b)(5) & (c) (Small Mines)	1	1	1	10.00 hours	10.00	\$62.13	\$621.30
Total	126*		172,599 **		14,002*** (rounded)		\$556,847 (rounded)

* = Total in the Respondents column is not sum of rows.

** = This differs from the number of responses, 170,641, in the 60-Day Federal Register Notice published on June 16, 2021 (86 FR 32067).

*** = This differs from the number of annual burden hours, 13,844, in the 60 Day Federal Register Notice published on June 16, 2021 (86 FR 32067).

13. Provide an estimate for 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 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.**

Purchase costs, Maintenance and Calibration Costs Related to Instantaneous Gas Analyzer

Mine operators will need to purchase an instantaneous gas analyzer that costs approximately \$3,000 per instrument to make records from weekly exams and tests of the undiluted exhaust

Diesel-Powered Equipment in Underground Coal Mines

OMB Control Number 1219-0119

OMB Expiration Date: 2/28/22

emissions required by sections 75.1914(g)(5) and (h). Since the gas analyzer has a 10-year useful life the purchase cost is annualized by a factor of 0.142 (7 percent discount rate) to be \$426 (\$3,000 x 0.142). Annual maintenance and calibration costs for a gas analyzer are approximately \$1,000. MSHA estimates that 219 gas analyzers will be purchased by operators, 186 in large mines (93 mines x 2 gas analyzers) and 33 in small mines (33 mines x 1 gas analyzer).

Annualized Purchased Costs	
219 gas analyzers x \$426	= \$93,294.00
Annual Maintenance and Calibration Costs	
219 gas analyzers x \$1,000	= <u>\$219,000.00</u>
Total Question 13 Burden Costs Rounded	= \$312,294

14. Provide estimates of annualized costs 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 may also aggregate cost estimates from Items 12, 13, and 14 in a single table.

There is no cost to the Federal government directly associated with these record keeping requirements. None of the records in this information collection are submitted to MSHA for review or approval. The records are examined during normal mandatory inspections and do not significantly add to the time required to conduct those mandatory inspections.

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

The number of respondents increased due to an increase of the number of active mines using diesel-powered equipment (from 112 mines to 126). The total pieces of utilized diesel-powered equipment, responses, and hours have increased due to an increase in respondents.

Respondents:	Increase (from 112 to 126)
Responses:	Increase (from 161,209 to 172,599)
Burden Hours:	Increase (from 13,080 to 14,002)
Cost:	Increase (from \$299,460 to \$312,294)

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.

There are no outline plans for tabulation and publication of data for this information collection.

Diesel-Powered Equipment in Underground Coal Mines

OMB Control Number 1219-0119

OMB Expiration Date: 2/28/22

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 associates no forms with this collection.

18. Explain each exception to the certification statement.

There are no certification exceptions identified with this information collection.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

This information collection does not employ statistical methods.