

Diesel Particulate Matter Exposure (Underground Metal and Nonmetal Mines)

OMB Control Number: 1219-0135

OMB Expiration Date: 5/31/2025

**Supporting Statement for Health Standards for Diesel Particulate Matter Exposure
(Underground Metal and Nonmetal Mines)
Paperwork Reduction Act Submission**

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

OMB Control Number: 1219-0135

Information Collection Request Title: Health Standards for Diesel Particulate Matter Exposure (Underground Metal and Nonmetal Mines)

Type of OMB Review: Extension

Authority:

Part 57 - Safety and Health Standards - Underground Metal and Nonmetal Mines
Subpart D - Air Quality, Radiation, Physical Agents, and Diesel Particulate Matter
30 CFR 57.5060 - Limit on exposure to diesel particulate matter.
30 CFR 57.5065 - Fueling practices.
30 CFR 57.5066 - Maintenance standards.
30 CFR 57.5070 - Miner training.
30 CFR 57.5071 - Exposure monitoring.
30 CFR 57.5075 - Diesel particulate records.

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) as amended, 30 U.S.C. 813(h), authorizes the Mine Safety and Health Administration (MSHA) to collect information necessary to carry out its duty in protecting the safety and health of miners. Further, section 101(a) of the Mine Act, 30 U.S.C. 811(a), authorizes the Secretary of Labor (Secretary) to develop, promulgate, and revise as may be appropriate, improved mandatory health or safety standards for the protection of life and prevention of injuries in coal, metal, and nonmetal mines.

In order to fulfill the statutory mandates to promote miners' health and safety, MSHA requires the collection of information under the information collection request entitled Health Standards for Diesel Particulate Matter Exposure (Underground Metal and Nonmetal Mines). The information collection addressed by this notice is intended to ensure diesel particulate matter levels in metal and nonmetal (MNM) mines are kept at acceptable levels and do not expose miners to explosive or other hazardous conditions.

Diesel particulate matter (DPM) is a carcinogen that consists of tiny particles present in diesel engine exhaust that can penetrate into the lungs. Despite ventilation, the confined underground mine work environment may contribute to significant concentrations of particles produced by equipment used in the mine. Underground miners are exposed to higher concentrations of DPM than any other occupational group. As a result, they face a greater risk of developing diseases such as lung cancer, heart failure, serious allergic responses, and other cardiopulmonary problems.

The DPM regulations established a permissible exposure limit (PEL) of 160 micrograms of total carbon per cubic meter of air ($\mu\text{g}/\text{m}^3$), which is a surrogate for measuring a miner's exposure to DPM. Under 30 CFR 57.5060(b)(3), a miner's personal exposure to DPM in an underground mine must not exceed an average eight-hour equivalent full shift airborne concentration of $160_{\text{TC}} \mu\text{g}/\text{m}^3$. Other DPM regulations include a number of other requirements for the protection of miners' health. The DPM regulations contain information collection requirements for underground MNM mine operators under 30 CFR 57.5060, 57.5065, 57.5066, 57.5070, 57.5071, and 57.5075.

I. Provide Miner with Medical Determination for Respirator Use

I-1. Respirator Training and Fitting

Due to the potential safety and health risks associated with exposure to DPM, controls must be used effectively to reduce exposure below the PEL. However, if exposure levels of DPM cannot feasibly be decreased below the PEL, they must be lowered as much as possible, and respiratory protection must be provided as a supplement to protect miners.

Under 30 CFR 57.5060(d), mine operators must install, use, and maintain feasible engineering and administrative controls to reduce a miner's exposure to or below the applicable DPM PEL. When controls do not reduce a miner's DPM exposure to the PEL, controls are infeasible, or

controls do not produce significant reductions in DPM exposures, controls must be used to reduce the miner's exposure to as low a level as feasible and must be supplemented with respiratory protection in accordance with 30 CFR 57.5005(a), (b), and paragraphs (d)(1) through (d)(8) of this section.

When respiratory protection is required, mine operators must establish a respiratory protection program that complies with MSHA's respiratory protection standards for control of airborne contaminants at MNM mines in 30 CFR 57.5005(a) and (b). These require that whenever respiratory protective equipment is used, a mine operator must have a program for selection, maintenance, training, fitting, supervision, and cleaning of respiratory protective equipment. Respiratory protective equipment must meet the requirements in the DPM standard under paragraphs (d)(1) and (d)(2). The information collection is covered under a currently approved request, OMB Control Number 1219-0048, Respirator Program Records.

I-2. Medical Evaluation

Miners must seek medical approval of the ability to safely wear respiratory protection before they work in an area of the mine that requires respiratory protection. This ensures that miners are safely and effectively able to wear respiratory protection.

Under 30 CFR 57.5060(d)(3), mine operator must provide a confidential medical evaluation by a physician or other licensed health care professional (PLHCP), at no cost to the miner, to determine the miner's ability to use a respirator before the miner is required to be fit tested or to use a respirator at the mine.

Under 30 CFR 57.5060(d)(3), if the PLHCP determines that the miner cannot wear a negative pressure respirator, mine operators must make certain that the PLHCP evaluates the miner's ability to wear a powered air purifying respirator (PAPR).

Under 30 CFR 57.5060(d)(4), mine operators must provide the miner with an opportunity to discuss their evaluation results with the PLHCP before the PLHCP submits the written determination to the mine operator regarding the miner's ability to wear a respirator. If the miner disagrees with the evaluation results of the PLHCP, the miner may submit within 30 days additional evidence of his or her medical condition to the PLHCP.

II-3. Written Medical Determination Examine Tagged Diesel Equipment

Miners must undergo reevaluations if the work conditions change and there is reason to believe that a miner may no longer be able to safely wear a respirator. Under 30 CFR 57.5060(d)(5), mine operators must obtain a written determination from the PLHCP regarding the miner's ability to wear a respirator and the mine operators must ensure that the PLHCP provides a copy of the determination to the miner.

Under 30 CFR 57.5060(d)(6), a miner must be reevaluated when mine operators have reason to believe that conditions have changed which could adversely affect the miner's ability to wear the

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respirator. Such conditions may include a reassignment of the miner to a new task requiring a significant increase in physical exertion, or the miner is assigned to work at a lower level of a deep mine where conditions such as heat impose greater physiological stress.

Under 30 CFR 57.5060(d)(7), upon written notification that the PLHCP has determined that the miner is unable to wear a respirator, including a PAPR, the miner must be transferred to work in an existing position in an area of the same mine where respiratory protection is not required. The miner must be transferred within 30 days of the final determination by the PLHCP.

Under 30 CFR 57.5060(d)(8), mine operators must maintain a record of the identity of the PLHCP and the most recent written determination of each miner's ability to wear a respirator for the duration of the miner's employment plus six months.

II. MSHA DPM Sample of Working Area

Under 30 CFR 57.5061, MSHA will use a single sample collected and analyzed in accordance with the requirements of this section as an adequate basis for a determination of noncompliance with the DPM limit. The Secretary will collect samples of DPM by using a respirable dust sampler equipped with a submicrometer impactor and analyze the samples for the amount of elemental carbon using the method described in NIOSH Analytical Method 5040.

III. Retain Fuel Purchase Record

Under 30 CFR 57.5065(a), diesel fuel used to power equipment in underground areas must not have a sulfur content greater than 0.05 percent. The operator must retain purchase records that demonstrate compliance with this requirement for one year after the date of purchase.

IV. Miner Tag Diesel Equipment

Under 30 CFR 57.5066(b)(1), mine operators must authorize each miner operating diesel-powered equipment underground to affix a visible and dated tag to the equipment when the miner notes evidence that the equipment may require maintenance in order to comply with the maintenance standards specified in 30 CFR 57.5066(a). The term evidence means visible smoke or odor that is unusual for that piece of equipment under normal operating procedures, or obvious or visible defects in the exhaust emissions control system or in the engine affecting emissions.

V. Retain Log of Equipment Maintenance

Any diesel-powered equipment requiring maintenance must be promptly inspected by an authorized person and a log of inspections and any corrective action must be maintained. Under 30 CFR 57.5066(b)(2), mine operators must ensure that any tagged equipment is promptly examined by a person authorized to maintain diesel equipment, and that the affixed tag not be removed until the examination has been completed.

Under 30 CFR 57.5066(b)(3), mine operators must retain a log of any equipment tagged pursuant to this section. The log must include the date the equipment is tagged, the date the equipment is examined, the name of the person examining the equipment, and any action taken as a result of the examination. The operator must retain the information in the log for one year after the date the tagged equipment was examined.

VI. Retain Record for Competent Maintenance Personnel

Under 30 CFR 57.5066(c), persons authorized by a mine operator to maintain diesel equipment that operates at any time in underground areas as covered by paragraph (a) of this section must be qualified, by virtue of training or experience, to ensure that the maintenance standards of paragraph (a) of this section are observed. An operator must retain appropriate evidence of the competence of any person to perform specific maintenance tasks in compliance with those standards for one year after the date of any maintenance, and upon request must provide the documentation to the authorized representative of the Secretary.

VII. Retain Record of DPM Health Training

Training is an important component of safety and health for all miners. Therefore, all miners who are expected to be exposed to DPM must undergo annual training. Under 30 CFR 57.5070(a), mine operators must provide annual training to all miners at a mine covered by this part who can reasonably be expected to be exposed to diesel emissions on that property. The training must include:

- The health risks associated with exposure to diesel particulate matter.
- The methods used in the mine to control diesel particulate matter concentrations.
- Identification of the personnel responsible for maintaining those controls.
- Actions miners must take to ensure the controls operate as intended.

Under 30 CFR 57.5070(b), mine operators must retain a record at the mine site of the training required by this section for one year after completion of the training.

VIII. Post and Deliver Diesel Particle Sampling

Mine operators are responsible for monitoring DPM levels to ensure miners are not exposed to levels that exceed the PEL. Under 30 CFR 57.5071(a), mine operators must monitor as often as necessary to effectively determine, under conditions that can be reasonably anticipated in the mine, whether the average personal full-shift airborne exposure to DPM exceeds the DPM limit specified in 30 CFR 57.5060.

IX. Notify Sampling

Sampling must be conducted to ensure that miners are not exposed to dangerous levels of DPM. Prior to sampling, miners and their representatives must be notified of the date and time of DPM sampling. Following DPM sampling, results must be posted along with any necessary corrective action. Additionally, mine operators must provide any recordkeeping requirements to miners, former miners, or a miner's representative, upon request.

Under 30 CFR 57.5071(b), mine operators must provide affected miners and their representatives with an opportunity to observe exposure monitoring required by this section. Mine operators must give prior notice to affected miners and their representatives of the date and time of intended monitoring.

X. Post Sampling Result and Retain Record

Under 30 CFR 57.5071(d)(1), the results of monitoring for DPM, including any results received by a mine operator from sampling performed by MSHA, must be posted on the mine bulletin board within 15 days of receipt and must remain posted for 30 days. Mine operators must provide a copy of the results to the authorized representative of miners.

Under 30 CFR 57.5071(d)(2), mine operators must retain for five years (from the date of sampling), the results of any samples mine operators collected as a result of monitoring under this section, and information about the sampling method used for obtaining the samples.

XI. Post Notice of Corrective Action

Under 30 CFR 57.5071(c), if any monitoring performed under this section indicates that a miner's exposure to diesel particulate matter exceeds the DPM limit specified in 30 CFR 57.5060, the operator must promptly post notice of the corrective action being taken on the mine bulletin board, initiate corrective action by the next work shift, and promptly complete such corrective action.

XII. Respond to Request for Exposure Record by Miner

Under 30 CFR 57.5075(a), the recordkeeping requirements of the DPM standards contained in 30 CFR 57.5060 through 57.5071 are listed in a table entitled "Table 57.5075(A)--Diesel Particulate Matter Recordkeeping Requirements." The table lists the records that mine operators

must maintain pursuant to 30 CFR 57.5060, 57.5065, 57.5066, 57.5070, 57.5071, and the retention period for these records.

Under 30 CFR 57.5075(b)(3) mine operators must provide access to a miner, former miner, or, with the miner's or former miner's written consent, a personal representative of a miner, to any record required to be maintained pursuant to sections 57.5071 or 57.5060(d) to the extent the information pertains to the miner or former miner. Mine operators must provide the first copy of a requested record at no cost, and any additional copies at reasonable cost.

XIII. Respond to Request for Health Record

Under 30 CFR 57.5075(b)(2), upon request from an authorized representative of the Secretary of Labor, the Secretary of Health and Human Services, or from the authorized representative of miners, mine operators must promptly provide access to any record listed in the table of DPM recordkeeping requirements in this section.

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.

Underground MNM mines are confined spaces which, despite ventilation requirements, can accumulate significant concentrations of particles and gases – both those produced by the mine itself (e.g., methane gas and respirable dust) and those produced by equipment used in the mine (e.g., diesel particulate). It is widely recognized that respirable particles can create adverse health effects. This information collection is provided to MSHA inspectors and used by the Agency to monitor mine operators' compliance with the health standard. Miners and former miners use the information for similar purposes.

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.

No improved information technology has been identified that would reduce the existing burden. Under 30 CFR 57.5075(b)(1), any record required to be maintained at the mine site may be retained elsewhere, if mine operators can immediately access the record by electronic transmission.

Mine operators must have a written record of the most recent medical evaluation to confirm that the miner was evaluated. Additionally, mine operators must make certain that the PLHCP provides a copy of the determination to the miner. Though the section does not specify a timeframe in which mine operators must have the PLHCP provide a copy of the medical evaluation to the miner, MSHA intends for mine operators to exercise diligence in getting this important information to the miner by whatever method they choose. It has been MSHA's

longstanding practice to allow mine operators to keep records in either physical or electronic form, as long as the records are accessible.

4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Item A.2 above.

No similar or duplicate information is available or submitted to MSHA.

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

The information collection provisions apply to all mine operations, both large and small. Congress intended that the Secretary enforce the law at all mining operations within the Agency's jurisdiction regardless of size and that information collection and recordkeeping requirements be consistent with efficient and effective enforcement of the Mine Act. [S. Rep. No. 95-181 (1977)]. Section 103(e) of the Mine Act, 30 U.S.C. 813(e), directs the Secretary not to impose an unreasonable burden on small businesses when obtaining any information under the Mine Act. MSHA considered the burden on small mines when developing the collection. Hence, MSHA believes that these information collection requirements are imposed on all mining operations and do not have a significant impact on a substantial number of small business 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.

Without the required information, MSHA would not be able to verify whether mine operators were complying with the DPM requirements. Such action is likely to result in exposing underground MNM miners to high concentrations of DPM.

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. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

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

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

In accordance with 5 CFR 1320.8(d), MSHA will publish the proposed information collection requirements in the Federal Register, notifying the public that these information collection requirements are being reviewed in accordance with the Paperwork Reduction Act of 1995, and provided 60 days for the public to submit comments. MSHA published a 60-day Federal Register notice on October 23, 2024 (89 FR 84631). MSHA received no comments.

9. Explain any decision to provide any payments or gifts to respondents, other than remuneration of contractors or grantees.

MSHA does not provide payment 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.

Mine operators must ensure that the PLHCP administers the medical evaluation of a miner's ability to use a respirator in a manner that protects the miner's confidentiality. This record must be maintained by mine operators and may be reviewed by MSHA inspectors in the course of Agency business.

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 'Annual Cost to Federal Government'.**

Respondents

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 tracks the number of active and inactive mines and mine types throughout the United States.

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Based on MSHA Headquarters Enforcement Division data, there were 194 MNM underground mines in 2023 affected by this information collection request. There are 60 mines with 1-19 employees employing 501 miners, 127 mines with 20-500 employees employing 11,687 miners, and 7 mines with 501+ employees employing 4,507 miners. MSHA assumes that no mines file for an extension.

Wage Rates Determinations¹

MSHA used data from the May 2023 Occupational Employment and Wage Statistics (OEWS) published by the Bureau of Labor Statistics (BLS) for hourly wage rates² and adjusted the rates for benefits,³ wage inflation,⁴ and overhead costs.⁵ The occupations listed below in Table 12-1 are those that were determined to be relevant for the cost calculations.

Table 12-1. Hourly Wage Rates

Occupation	NAICS Code	Mean Wage Rate	Benefit Multiplier	Inflation Multiplier	Overhead Cost Multiplier	Loaded Hourly Wage Rate
		A	B	C	D	A x B x C x D
Mining Supervisor [a]	212200 212300	\$41.81	1.465	1.027	1.01	\$63.53
Clerk [b]	212200 212300	\$24.90	1.465	1.027	1.01	\$37.83
Miner[c]	212200 212300	\$27.16	1.465	1.027	1.01	\$41.27

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

² To obtain OEWS data, follow BLS's directions in its Frequently Asked Questions: "E. How to get OEWS data. 4. What are the different ways to obtain OEWS estimates from this website?" at https://www.bls.gov/oes/oes_ques.htm. The average wage rate is calculated as the employment-weighted average of hourly mean wages for the occupation.

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

⁴ Wage inflation is the change in Series ID: CIS2020000405000I; Seasonally adjusted; Series Title: Wages and salaries for Private industry workers in Construction, extraction, farming, fishing, and forestry occupations, Index. (<https://data.bls.gov/cgi-bin/srgate>; Inflation Multiplier = (Current Quarter Cost Index Value / OEWS Wage Base Quarter Index Value).

⁵ MSHA uses an overhead rate of 1 percent. The mining environment generally involves very little overhead, especially costs associated with workers engaged in administrative or clerical tasks.

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Engineer[d]	212200 212300	\$49.94	1.465	1.027	1.01	\$75.88
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Notes: MSHA uses the latest 4-quarter moving average 2023Q2-2024Q1 to determine that 31.8 percent of total loaded wages are benefits for private industry workers in construction, extraction, farming, fishing, and forestry occupations. The benefit multiplier is $1.465 = 1 + (0.318 / (1 - 0.318))$. The inflation multiplier is calculated by using the employment price index from the most current quarter, 2024Q1, divided by the base year and quarter of the OEWS employment and wage statistics, 2023Q2, for private industry workers in construction, extraction, farming, fishing, and forestry occupations, current dollar index. The inflation multiplier is $1.027 = 161.6 / 157.3$. MSHA uses the overhead multiplier of 1.01.

[a] The Standard Occupation Codes (SOC) uses for this occupation are (47-1011), (49-1011), (51-1011), and (53-1047).

[b] The SOCs uses for this occupation are (43-3021), (43-3031), (43-3051), (43-3061), (43-4171), (43-5061), (43-5071), and (43-9061).

[c] The SOCs uses for this occupation are (47-5000), (49-9043), (49-9071), (51-9021), and (53-7000).

[d] The SOCs uses for this occupation are (17-2071), (17-2081), (17-2112), (17-2131), (17-2141), and (17-2151).

Hour Burden

I. Provide Miners with Medical Determination for Respirator Uses

In instances where feasible engineering and administrative controls do not reduce the miner's exposure to the PEL under 30 CFR 57.5060(d), mine operators must supplement feasible controls with adequate respiratory protection for overexposed miners and enroll the miners in a respiratory protection program meeting the minimum requirements of 57.5005(a) and (b) addressing air quality standards for MNM mines, and paragraphs (d)(1) through (d)(8) of 57.5060 of the DPM standard.

The assumptions MSHA makes concerning the number of mines and miners using respirators, getting fit tests, and receiving or providing medical determinations are provided in Table 12-2. MSHA assumes that 25 percent of mines using diesel equipment use respirators, and 25 percent of miners in these mines will use respirators. MSHA assumes 1 new miner in each mine with 1-19 employees, 3 new miners in each mine with 20-500 employees, and 20 new miners in each mine with 501 or more employees. MSHA further assumes that 25 percent of mines and miners using respirators will provide medical determinations.

Table 12-2. Mines and Miners that use Diesel Equipment and Respirators

Size of Mine	Mines Using Diesel Equipment	Miners	Mines Using Respirators (25%)	Miners in Mines Using Respirators (25%)	Fit Tests per Mine	Total Fit Tests	Mines Providing Medical Determination (25% of Mines Using Respirators)	Miners Receiving Medical Determination (25% of Miners in Mines Using Respirators)
1- 19 Employees	60	501	15	125	1	15	4	31
20-500 Employees	127	11,687	32	2,922	3	96	8	731
501+ Employees	7	4,507	2	1,127	20	40	1	282
Total	194	16,695	49	4,174	24	151	13	1,044

I-1. Respirator Training and Fitting

Under 30 CFR 57.5060(d), mine operators are required to provide training on proper use of respirators. MSHA assumes that 25 percent of underground MNM mines, or 49 mines, use diesel-powered equipment and will be required to train their employees on the use of respirators. Mine operators will need to provide one training session to train all impacted miners on respirator use. The training session is estimated to take 45 minutes, for a mining supervisor, earning \$65.53 per hour, to note the training in the daily log or pass around a sign-up sheet to keep as proof of compliance.

Mine operators are required to provide miners with fit tests. As a result of miner turnover, every year a total of 151 fit tests will occur across all mine sizes. MSHA estimates that it will take 15 minutes for a mining supervisor, earning \$63.53 per hour, to conduct a fit test.

Table 12-3. Estimated Annual Respondent Hour and Cost Burden, Respirator Training and Fitting (30 CFR 57.5060(d))

Activity (Occupation)	Number of Respondents (Mines)	Number of Responses per Respondent	Total Responses	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
Respirator Training (Mining Supervisor)	49	1	49	0.75	36.75	\$63.53	\$2,334.73
<i>Fit tests (Mining Supervisor)</i>							
1-19 Employees	15	1	15	0.25	3.75	\$63.53	\$238.24
20-500 Employees	32	3	96	0.25	24.00	\$63.53	\$1,524.72
501+ Employees	2	20	40	0.25	10.00	\$63.53	\$635.30
Subtotal (Rounded)	49		200		75		\$4,733

Note: The total number of respondents do not correspond to the sum of respondents from each cost item because the same respondents carry out both activities.

I-2. Medical Evaluation

Under 30 CFR 57.5060(d)(3), mine operators must provide a roster of miners to the PLHCP that are to be evaluated for the respiratory protection program. In any given year, MSHA assumes that 25 percent of mines using respirators, or 13 mines, will provide this information. MSHA estimates that it takes a clerk, earning \$37.83 per hour, one hour to provide the information of all miners in the mine.

In any given year, MSHA estimates that 25 percent of miners in mines using respirators, or 1,044 miners, will be evaluated by the PLHCP. The miners must take the time to have the evaluation performed by the PLHCP concerning the respiratory protection program. MSHA estimates that it takes a miner, earning \$41.27 per hour, two hours and 40 minutes to complete the evaluation.

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Under 30 CFR 57.5060(d)(4) a miner that disagrees with the PLHCP determination, may provide additional evidence to the PLHCP. MSHA estimates that 4 miners evaluated will disagree with the PLHCP evaluation and need to spend some time providing a response to the PLHCP. MSHA estimates that it takes a miner, earning \$41.27 per hour, two hours and 40 minutes to complete their response in writing.

If the PLHCP determines that the miner cannot wear a negative pressure respirator, mine operators must make certain that the PLHCP evaluates the miner’s ability to wear a PAPR. MSHA assumes that 10 percent (or 104 miners) of miners evaluated by a PLHCP will need to be further evaluated for their ability to wear a PAPR. MSHA estimates that it takes a miner, earning \$41.27 per hour, two hours and 40 minutes to complete further evaluation.

Table 12-4. Estimated Annual Respondent Hour and Cost Burden, Medical Evaluation (30 CFR 57.5060(d)(3) and (4))

Activity (Occupation)	Number of Respondents (Mines)	Number of Responses per Respondent	Total Responses (Records)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
Provide Roster (Clerk)	13	1	13	1	13.00	\$37.83	\$491.79
Medical Evaluation (Miner)	13	80	1,044	2.67	2,784.00	\$41.27	\$114,895.68
Miner Response (Miner)	4	1	4	2.67	10.67	\$41.27	\$440.21
PAPR Medical Evaluation (Miner)	13	8.00	104	2.67	277.33	\$41.27	\$11,445.55
Subtotal (Rounded)	13		1,165		3,085		\$127,273

Note: The total number of respondents do not correspond to the sum of respondents from each cost item because the same respondents carry out both activities.

I-3. Written Medical Determination

Under 30 CFR 57.5060(d)(5), mine operators must maintain a record of the identity of the PLHCP and the most recent written determination of each miner’s ability to wear a respirator for the duration of the miner’s employment plus six months. In any given year, MSHA estimates that the 13 mines giving medical examinations must make records of the determination. MSHA estimates that it takes a clerk, earning \$37.83 per hour, three minutes to maintain a record for each affected miner.

Additional information would have to be maintained in the record for 104 miners that get evaluated to wear a PAPR. MSHA estimates that it takes a clerk, earning \$37.83 per hour, three minutes to record the additional information.

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Table 12-5. Estimated Annual Respondent Hour and Cost Burden, Maintain Medical Record (30 CFR 57.5060(d)(5))

Activity (Occupation)	Number of Respondents (Mines)	Number of Responses per Respondent	Total Responses (Medical Evaluations)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
Maintain Record (Clerk)	13	80	1,044	0.05	52.20	\$37.83	\$1,974.73
Maintain PAPR Record (Clerk)	13	8	104	0.05	5.20	\$37.83	\$196.72
Subtotal (Rounded)	13		1,148		57		\$2,171

Note: The total number of respondents do not correspond to the sum of respondents from each cost item because the same respondents carry out both activities.

Table 12-6. Estimated Annual Respondent Hour and Cost Burden, Provide Miners with Medical Determination for Respirator Uses Summary Table (30 CFR 57.5060)

Activity	Number of Respondents (Mines)	Number of Responses per Respondent	Total Responses (Records)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
II-1 Respirator Training and Fitting	49		200		74.50		\$4,732.99
II-2. Medical Evaluations	13		1,165		3085		\$127,273.23
II-3. Maintain Record	13		1,148		57.40		\$2,171.44
Subtotal (Rounded)	49		2,513		3,217		\$134,718

Note: The total number of respondents do not correspond to the sum of respondents from each cost item because the same respondents carry out both activities.

II. Retain Fuel Purchase Record

Under 30 CFR 57.5065(a), mine operators must keep purchase records for one year showing compliance with the requirement that the sulfur content of diesel fuel used to power equipment underground is not exceeding 0.05 percent. Since mine operators are merely retaining a receipt for a fuel purchase, this burden is considered to be zero.

III. Miner Tag Diesel Equipment

Under 30 CFR 57.5066(b)(1), each time there is an emission related problem on a diesel-powered machine, the equipment must be tagged, and a record made of the tag.

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In Table 12-7 are the estimated number of diesel-powered equipment that will be tagged by mine size. Due to the expertise of mine operators maintaining diesel engines and reliability of diesel emission pollution control, MSHA estimates that, on average in mines with 1-19 employees, 20 percent of diesel-powered equipment will be tagged. For larger mines, which generally have more extensive preventive maintenance programs, MSHA estimates that annually, on average, 20 percent of the diesel-powered equipment will be tagged.

Table 12-7. Estimated Annual Respondent Hour and Cost Burden, Estimations of Diesel-Powered Equipment Tags

Mine Size	Number of Diesel-Powered Equipment	Percent of Diesel-Powered Equipment to be Tagged	Number of Diesel-Powered Equipment to be Tagged
1-19 Employees	1,435	20%	287
20-500 Employees	3,050	20%	610
501+ Employees	785	20%	157
Total	5,270	20%	1,054

MSHA estimates it will take a miner, earning \$41.27 per hour, two minutes to tag the machine and another two minutes to record the tagging, for a total of four minutes.

Table 12-8. Estimated Annual Respondent Hour and Cost Burden, Miner Tag Diesel Equipment (30 CFR 57.5066(b)(1))

Activity (Occupation)	Number of Respondents (Mines)	Number of Responses per Respondent	Total Responses (Tags)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
<i>Miner Tag Diesel Equipment (Miner)</i>							
1-19 Employees	60	4.78	287	0.07	19.13	\$41.27	\$789.63
20-500 Employees	127	4.80	610	0.07	40.67	\$41.27	\$1,678.31
501+ Employees	7	22.43	157	0.07	10.47	\$41.27	\$431.96
Subtotal (Rounded)	194		1,054		70		\$2,900

IV. Examine Tagged Diesel Equipment and Retain Log of Equipment Maintenance

Under 30 CFR 57.5066(b)(2) and (3), for each diesel machine that has been tagged, 1,054 machines, an examination must be conducted concerning the tagged equipment and a record must be made of the examination. For each piece of equipment tagged, MSHA estimates that it will take an engineer, earning \$75.88 per hour, 10 minutes to examine the machine and another two minutes to record the examination, for a total of 12 minutes.

Table 12-9. Estimated Annual Respondent Hour and Cost Burden, Retain Log of Equipment Maintenance (30 CFR 57.5066(b)(2) and (3))

Activity	Number of	Number of	Total	Average	Total	Hourly	Total
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(Occupation)	Respondents (Mines)	Responses per Respondent	Responses (Examinations)	Burden (Hours)	Burden (Hours)	Wage Rate	Burden Cost
<i>Retain Log (Engineer)</i>							
1-19 Employees	60	4.78	287	0.20	57.40	\$75.88	\$4,355.51
20-500 Employees	127	4.80	610	0.20	122.00	\$75.88	\$9,257.36
501+ Employees	7	22.43	157	0.20	31.40	\$75.88	\$2,382.63
Subtotal (Rounded)	194		1,054		211		\$15,996

V. Retain Record for Competent Maintenance Personnel

Under 30 CFR 57.5066(c), appropriate repairs must be made to each diesel machine that has been tagged to bring the machine into compliance. The person performing these repairs must be qualified, by virtue of training or experience, to make them. Mine operators are required to maintain documentation verifying the competence of any person to perform specific maintenance tasks for one year after the date of any maintenance. In Table 12-10 are MSHA’s estimations of number of competent mechanics by mine size.

Table 12-10. Estimated Annual Respondent Hour and Cost Burden, Estimation of Competent Mechanics

Mine Size	Number of Mines	Competent Mechanics Per Mine	Total Number of Competent Mechanics
1-19 Employees	60	1	60
20-500 Employees	127	2	254
501+ Employees	7	5	35
Total	194		349

To create and maintain documentation verifying each maintenance personnel’s competence, MSHA estimates that it will take 30 minutes to review personnel records and 10 minutes (a total of 40 minutes) for a mining supervisor, earning \$63.53 per hour, to either record the examination or copy pertinent records.

Table 12-11. Estimated Annual Respondent Hour and Cost Burden, Retain Record for Competent Maintenance Personnel (30 CFR 57.5066(c))

Activity (Occupation)	Number of Respondents (Mines)	Number of Responses per Respondent	Total Responses (Records)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
<i>Retain Record of Competent Maintenance Personnel (Mining Supervisor)</i>							
1-19 Employees	60	1	60	0.67	40	\$63.53	\$2,541.20
20-500 Employees	127	2	254	0.67	169.33	\$63.53	\$10,757.75
501+	7	5	35	0.67	23.33	\$63.53	\$1,482.37

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Employees						
Subtotal (Rounded)	194		349		233	\$14,781

VI. Retain Record of DPM Health Training

All miners at a mine who can reasonably be expected to be exposed to diesel emissions on mine property must receive health training in accordance with 30 CFR 57.5070(a)(1) through (a)(4).

The average number of training sessions to be held by a mine is determined based on the assumption that no more than 34 miners can be trained in any one session. For mines with 20 or more employees, the average number of training sessions per mine is estimated as the average number of miners in each mine divided by 34. MSHA estimates that a total of 574 training sessions will be held annually. The number of training sessions is in table 12-12.

Table 12-12. Estimated Annual Respondent Hour and Cost Burden, Estimation of Number of Training Sessions

Mine Sizes	Number of Mines	Number of Miners	Average Number of Miners	Average Number of Training Sessions	Number of Training Sessions
1-19 employees	60	501	8	1	60
20-500 employees	127	11,687	92	3	381
500+ employees	7	4,507	644	19	133
Total	194	16,695			574

In each of the impacted 194 mines, it takes a clerk, earning \$37.83 per hour, 10 minutes to prepare the registration sheet for the health training attendees to sign at each training session.

For each training sessions each miner attending will be required to sign the registration sheet prepared by the clerk. Each signature will require 20 seconds of a miner’s time, earning \$41.27 per hour.

Table 12-13. Estimated Annual Respondent Hour and Cost Burden, Retain Record of DPM Health Training (30 CFR 57.5070)

Activity (Occupation)	Number of Respondents (Mines)	Number of Responses per Respondent	Total Responses (Records)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
<i>Retain Record of DPM Health Training (Clerk)</i>							
1-19 Employees	60	1	60	0.17	10.00	\$37.83	\$378.30
20-500 Employees	127	3	381	0.17	63.50	\$37.83	\$2,402.21
501+ Employees	7	19	133	0.17	22.17	\$37.83	\$838.57
Sign Attendance	194	86.06	16,695	0.01	92.75	\$41.27	\$3,827.79

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Sheet (miner)							
Subtotal (Rounded)	194		17,269		188.42		\$7,447

Note: The total number of respondents do not correspond to the sum of respondents from each cost item because the same respondents carry out both activities.

VII. Post and Deliver Diesel Particle Sampling

Under 30 CFR 57.5071(a), mine operators must conduct their own sampling as necessary to effectively determine if a miners' exposure exceeds the DPM PEL, based on conditions occurring at the mine. MSHA estimates that sampling will be necessary four times per year.

Once sampling results are received, MSHA estimates that it will take a clerk, earning \$37.83 per hour, 10 minutes to make two copies of a one-page notice and to post one and deliver the other to the miners' representative.

Table 12-14. Estimated Annual Respondent Hour and Cost Burden, Post and Deliver Diesel Particle Sampling (30 CFR 57.5071(a))

Activity (Occupation)	Number of Respondents (Mines)	Number of Responses per Respondent	Total Responses (Samples)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
Post and Deliver result (Clerk)	194	4	776	0.17	129.33	\$37.83	\$4,892.68
Subtotal (Rounded)	194		776		129		\$4,893

VIII. Notify Sampling

Under 30 CFR 57.5071(b), mine operators must provide prior notification to miners and their representatives of the dates and times the sampling will take place. MSHA estimates that sampling will occur four times a year. MSHA assumes that 45 percent of notifications will occur orally in 194 mines (or 87 mines), 35 percent (or 68 mines) notifications will be written, and 20 percent of mines (or 39 mines) will use a posted notice.

VIII-1. Oral Notification

MSHA assumes 87 mines will notify miners orally. MSHA estimates that the paperwork burden cost of this will be zero.

VIII-2. Written Notification

MSHA assumes that 68 mines will notify miners and their representatives in writing. The clerk will prepare, copy, and deliver the written notice to each miner in the 68 mines. MSHA estimates that there are 5,843 miners (35 percent of 16,695 miners) and each miner will be

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notified four times each year, a total of 23,373 notifications. This activity will take a clerk, earning \$37.83 per hour, two minutes per miner.

Table 12-15. Estimated Annual Respondent Hour and Cost Burden, Written Notification of Sampling (30 CFR 57.5071(b))

Activity (Occupation)	Number of Respondents (Mines)	Number of Responses per Respondent	Total Responses (Notifications)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
Written Notification (Clerk)	68	343.7	23,373	0.03	779.11	\$37.83	\$29,473.61
Subtotal (Rounded)	68		23,372		779		\$29,474

VIII-3. Post Notification

MSHA assumes that 39 mines will post a notice to inform miners of the dates and times that they intend to conduct sampling. It will take the clerk, earning \$37.83 per hour 15 minutes to prepare and post the notice.

Table 12-16. Estimated Annual Respondent Hour and Cost Burden, Post Notification of Sampling (30 CFR 57.5071(b))

Activity (Occupation)	Number of Respondents	Number of Responses per Respondent	Total Responses (Notifications)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
Post Notification (Clerk)	39	4	156	0.25	39.00	\$37.83	\$1,475.37
Subtotal (Rounded)	39		156		39		\$1,475

Table 12-17. Estimated Annual Respondent Hour and Cost Burden, Summary Table of Mine Operators Notification of Sampling (30 CFR 57.5071(b))

Activity	Number of Respondents	Number of Responses per Respondent	Total Responses (Notifications)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
IX-1. Oral Notification	87	4	0		0.00		\$0.00
IX-2. Written Notification	68	4	23,372		779.11		\$29,473.61
IX-3. Post Notification	39	4	156		39.00		\$1,475.37
Subtotal (Rounded)	194		23,529		830		\$30,949

IX. Post Sampling Result and Retain Record

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Under 30 CFR 57.5071(d)(1), the results of monitoring for DPM, including any results received by a mine operator from sampling performed by MSHA, must be posted. MSHA estimates that sampling will occur four times a year in 194 mines. MSHA estimates that it takes a clerk, earning \$37.83 per hour, 2 minutes to make a copy of the sampling results and post them.

Table 12-18. Estimated Annual Respondent Hour and Cost Burden, Post Sampling Result and Retain Record (30 CFR 57.5071(d)(1))

Activity (Occupation)	Number of Respondents (Mines)	Number of Responses per Respondent	Total Responses (Results)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
Post Sampling Results (Clerk)	194	4	776	0.03	25.87	\$37.83	\$978.54
Subtotal (Rounded)	194		776		26		\$979

X. Post Notice of Corrective Action

Under 30 CFR 57.5071(c), mine operators must prepare and post a notice of the corrective action taken to reduce the miner’s exposure to or below the PEL. MSHA assumes that 10 percent of mines with less than 501 employees and 20 percent of mines with 500 or more employees need corrective actions each year. MSHA estimates that it takes a mine supervisor, earning \$63.35 per hour, 15 minutes to post corrective actions.

Table 12-19. Estimated Annual Respondent Hour and Cost Burden, Post Notice of Corrective Action (30 CFR 57.5071(c))

Activity (Occupation)	Number of Respondents (Mines)	Number of Responses per Respondent	Total Responses (Notices)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
Post Notice of Corrective Action (Mining Supervisor)	20	1	20	0.25	5.00	\$63.53	\$317.65
Subtotal (Rounded)	20		20		5		\$318

XI. Respond to Request for Exposure Record by Miner

Under 30 CFR 57.5075, mine operators must promptly provide access to DPM records upon request. MSHA assumes that some miners leaving their jobs at the mine or former miners would request a copy of the records generated by the DPM requirements. These records would consist of copies of the exposure measurements that MNM mine operators are required to maintain. MSHA estimates that 10 percent of miners (or 1,670 miners) will request these records each year. It will take a clerk, earning \$37.83 per hour, five minutes to respond to each request.

Table 12-20. Estimated Annual Respondent Hour and Cost Burden, Respond to Request for Exposure Record by Miner (30 CFR 57.5075)

Activity (Occupation)	Number of Respondents (Mines)	Number of Responses per Respondent	Total Responses (Records)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
Request for Health Record (Clerk)	194	8.61	1,670	0.08	139.17	\$37.83	\$5,264.68
Subtotal (Rounded)	194		1,670		139		\$5,265

XII. Respond to Requests for Health Record

Under 30 CFR 57.5075(b)(2), upon request from an authorized representative of the U.S. Department of Health and Human Services (DHHS), underground MNM mine operators must provide access to health records. To date, MSHA has received no such requests from DHHS.

Hour Burden Summary

The annual respondent hour and cost burden is summarized in below.

Table 12-21. Estimated Annual Respondent Hour and Cost Burden, Summary Totals

Activity	Number of Respondents	Number of Responses per Respondent	Total Responses	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
I. Provide Miner with Medical Determination for Respirator Uses	49		2,513		3,217		\$134,177.66
III. Tag Diesel Equipment	194		1,054		70		\$2,899.91
IV. Retain Log of Equipment Maintenance	194		1,054		211		\$15,995.50
V. Retain Record of Competent	194		349		233		\$14,781.31

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Maintenance Personnel					
VI. Retain Record of DPM Health Training	194		17,269	188	\$7,446.86
VII. Post and Deliver Diesel Particle Sampling	194		776	129	\$4,892.68
VIII. Notify Sampling	194		23,529	830	\$30,948.98
IX. Post Sampling Result	194		776	26	\$978.54
X. Post Notice of Corrective Action	20		20	5	\$317.65
XI. Respond to Request for Exposure Record by Miner	194		1,670	139	\$5,264.68
Total (Rounded)	194		49,010	5,048	\$217,704

Note: The sum of the number of respondents might not add up to the total reported numbers in the table due to multiple people responding to the same activity.

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 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.**

I. Sampling for Mines That Contract Out Their Sampling Responsibilities

Under MSHA 30 CFR 57.5071(a), mine operators must monitor DPM exposure. MSHA initially estimated that mines would contract out their DPM sampling responsibilities. However, MSHA is not aware of any mine doing so. MSHA has not included any costs for this provision.

II. Miner’s Request of Exposure Record

Under 30 CFR 57.5075(b)(3), miners and former miners can request exposure records. The annual number of requests is estimated as 10 percent of miners, or 1,670 miners. Each request is estimated to be four pages in length, photocopy costs are \$0.15 per page, and postage is \$0.45, for a total of \$1.05 per request.

Table 13-1. Estimated Annual Respondent or Recordkeeper Cost Burden, Miner’s Request of Exposure Record (30 CFR 57.5075(b)(3))

Cost components	Number of Responses	Unit Cost	Cost to Recordkeepers
Miners Requests of Exposure Records	1,670	\$1.05	\$1,753.50
Total (Rounded)	1,670		\$1,754

III. Medical Evaluations

There are two medical evaluations covered in 30 CFR 57.5060(d)(3). First is the medical evaluation by the PLHCP is required of all miners who must wear respirators. MSHA estimates that 1,044 miners will be evaluated by the PLHCP. This evaluation costs \$50. The other medical evaluation is required only of those miners who cannot wear a respirator but whose work environment would require them to do so to be in compliance with the PEL. These medical evaluations determine whether the miner can wear a PAPR. MSHA estimates that they are required for 10 percent of the miners and costs \$250.

Table 13-2. Estimated Annual Respondent or Recordkeeper Cost Burden, Medical Evaluations

Cost components	Number of Responses	Unit Cost	Cost to Recordkeepers
Medical Evaluations	1,044	\$50.00	\$52,200.00
Medical Evaluations to determine ability to wear PAPR	104	\$250.00	\$26,000.00
Total (Rounded)	1,044		\$78,300

Recordkeeping Cost Burden Summary

The total annual cost burden to respondents or recordkeepers is summarized in the Summary Totals table below.

Table 13-3. Estimated Annual Respondent or Recordkeeper Cost Burden, Summary Table

Cost Component	Number of Responses	Unit Cost	Cost to Recordkeepers
II. Miners Requests of Health Records	1,670	\$1.05	\$1,753.50
III. Medical Evaluations	1,044		\$78,300.00
Total (Rounded)	2,818		\$80,054

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.

Table 14-1. Federal Hourly Wage Rates

Occupation	Occupation Code	Mean Wage Rate	Benefit & Overhead Multiplier [a]	Loaded Hourly Wage Rate
		A	B	A x B
GS-12 Inspector [b]	1822	\$47.55	1.586	\$75.41
GS-13 Chemist [c]	All	\$89.55	1.586	\$142.03

Note: Hourly wage rates developed from Office of Personnel Management (OPM) September 2023 FedScope Employment Cube, <http://www.fedscope.opm.gov/>.

[a] Benefit and overhead multiplier = 1 + (MSHA personnel benefits, travel and transportation, and rental expenses divided by MSHA personnel compensation) = (1 + ((76,679+20+5,309+5,932+17,577+71) / 180,071) (FY 2024 budget submission, use FY2023 Revised Enacted Budget: <https://www.dol.gov/sites/dolgov/files/general/budget/2024/CBJ-2024-V2-13.pdf>).

[b] Data search qualifiers are: Agency = DLMS, Occupation = 1822 (Mine Safety and Health Inspection), 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 and overhead, MSHA multiplied the average annual salary by a federal benefit and overhead multiplier for MSHA of 1.586. Rate equals \$75.41 = ((99,228 / 2,087) x 1.586).

[c] Data search qualifiers are: Agency = DLMS, Work Schedule = Full-Time, Salary Grade = GS-13, Measure = Average Salary. The hourly wage is the annual salary divided by 2,087. In order to include the cost of benefits and overhead, MSHA multiplied the average annual salary by a federal benefit and overhead multiplier for MSHA of 1.586. Rate equals \$142.03 = ((117,838 / 2,087) x 1.586).

I. MSHA DPM Sample of Working Area

Under 30 CFR 57.5061, at least once a year, MSHA inspectors will take miners' personal samples to measure their exposure to DPM in MNM underground mines that use diesel-powered equipment. One working area will be sampled in 60 mines that employ 1-19 workers and two working areas in 134 mines that employ 20 or more workers, for a total of 328 working areas (=1X60 mines employing 1-19 workers + 2X134 mines employing 20 or more workers). MSHA estimates that it takes a MSHA GS-12 mine inspector, earning \$75.41 per hour including

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benefits, 10 minutes to record sample and inspection information per miner for the full shift in one working area.

Table 14-2. Estimated Federal Hour and Cost Burden, DPM Sample of Working Area (Under 30 CFR 57.5061)

Activity (Occupation)	Number of Responses (Working Areas)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
Taking Samples (GS-12 MSHA Inspection)	328	0.17	54.67	\$75.41	\$4,122.41
Subtotal (Rounded)	328		55		\$4,122

II. Analyze and Upload DPM Sample Result

MSHA analyzes four out of the five collected samples, the fifth being a blank or control sample, therefore a total of 1,312 samples (=328 working areas X 4 samples) will be analyzed. MSHA estimates that it takes a MSHA GS-13 chemist, earning \$142.03 per hour including benefits, 10 minutes to analyze a sample and upload the results to MSHA’s database.

Table 14-3. Estimated Federal Hour and Cost Burden, Analyze and Upload DPM Sample Results (30 CFR 57.5061)

Activity (Occupation)	Number of Responses (Samples)	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
Analyze and Upload Results (GS-13 MSHA Chemist)	1,312	0.17	218.67	\$142.03	\$31,057.23
Subtotal (Rounded)	1,312		219		\$31,057

Federal Cost Summary

The annual Federal government hour and cost burden is summarized in below.

Table 14-4. Estimated Annual Federal Hour and Cost Burden, Summary Totals

Activity	Number of Responses	Average Burden (Hours)	Total Burden (Hours)	Hourly Wage Rate	Total Burden Cost
I. DPM Sample of Working Area	328	0.17	55	\$75.41	\$4,122.41
II. Analyze and Upload Result	1,312	0.17	218.67	\$142.03	\$31,057.23
Total (Rounded)	1,640		273		\$35,180

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

Number of Respondents: The estimated number of respondents remained unchanged at 194.

Number of Responses: The estimated number of responses decreased from 54,696 to 49,010 due to an updated methodology to eliminate non-paperwork activities including verbal briefings and sampling.

Annual Time Burden: The estimated annual time burden decreased from 11,218 to 5,048 due to an updated methodology to eliminate non-paperwork activities including verbal briefings and sampling.

Annual Burden Costs: The estimated annual burden costs decreased from \$480,349 to \$217,704 due to an updated methodology to eliminate non-paperwork activities including verbal briefings and sampling.

Annual Other Burden Costs: The estimated annual other burden cost decreased from \$421,942 to \$80,054 due to an updated methodology to eliminate costs of purchasing respirators and sampling.

Federal Hours: The estimated annual federal hours decreased from 2,405 to 273 hours due to an updated methodology to remove burden hours of sampling and analysis.

Federal Costs: The estimated annual federal costs decreased from \$228,860 to \$35,180 due to an updated methodology to remove costs of sampling and analysis.

Table 15-1. Summary of Changes

	Previous ICR	Current ICR	Difference
Number of Respondents	194	194	0
Number of Responses	54,696	49,010	-5,686
Annual Time Burden	11,218	5,048	-6,170
Annual Burden Costs	\$480,349	\$217,704	-\$262,646
Annual Other Burden Costs	\$421,942	\$80,054	-\$341,888
Federal Hours	2,405	273	-2,132
Federal Costs	\$228,860	\$35,180	-\$193,680

Diesel Particulate Matter Exposure (Underground Metal and Nonmetal Mines)

OMB Control Number: 1219-0135

OMB Expiration Date: 5/31/2025

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

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