6-2014

**Supporting Statement for**

**Paperwork Reduction Act Submissions**

**OMB Control Number:** 1219-0148

**Information Collection Request Title:**

Proximity Detection Systems for Continuous Mining Machines in Underground Coal Mines

**Authority:**

The Federal Mine Safety and Health Act of 1977 as amended, 30 U.S.C. § 801 et seq. and 30 CFR 75.1732

**General Instructions**

**A Supporting Statement, including the text of the notice to the public required by 5 CFR 1320.5(a)(1)(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 Item 17 or the OMB Form 83-I 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. Provide a detailed description of the nature and source of the information to be collected.**

*The following provisions are new information collections, OMB 1219-0148 – Proximity Detection Systems for Continuous Mining Machines in Underground Coal Mines.*

Section 103(h) of the Federal Mine Safety and Health Act of 1977 (Mine Act), 30 U.S.C. § 813(h), authorizes MSHA to collect information necessary to carry out its duty in protecting the safety and health of miners. Further, Section 101(a) of the Mine Act, 30 U.S.C. 811 authorizes the Secretary to develop, promulgate, and revise as may be appropriate, improved mandatory health or safety standards for the protection of life and prevention of injuries in coal or other mines.

Section 75.1732(d)(1) requires that at the completion of the check of the machine-mounted components of the proximity detection system under § 75.1732(c)(1), a certified person under § 75.100 must certify by initials, date, and time that the check was conducted. Defects found as a result of the check required under § 75.1732(c)(1), including corrective actions and dates of corrective actions, must be recorded.

Section 75.1732(d)(2) requires the operator to make a record of the defects found as a result of the checks of miner-wearable components required under § 75.1732(c)(2), including corrective actions and dates of corrective actions.

Section 75.1732(d)(3) requires the operator to make a record of the persons trained in the installation and maintenance of proximity detection systems under § 75.1732(b)(6).

**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. Provide a detailed description of: how the information will be shared, if applicable, and for what programmatic purpose.**

Records of defects and corrective actions required under § 75.1732(d)(1) provide a history of the defects of machine-mounted components documented at the mine. MSHA and mine management could use the records to evaluate whether the same conditions or problems, if any, are recurring, and whether corrective measures are effective. The certification required under § 75.1732(d)(1) helps assure compliance; and for miners on the section, to confirm that the required check was made.

Records of defects and corrective actions required under § 75.1732(d)(2) provide a history of the defects of miner-wearable components documented at the mine. MSHA and mine management will use the records to evaluate whether the same conditions or problems, if any, are recurring, and whether corrective measures are effective.

Making records of personnel trained in the installation and maintenance of proximity detection systems required under § 75.1732(d)(3) helps assure that persons assigned to install and perform maintenance on proximity detection systems were trained.

**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 final rule or information collection does not specify how records are to be kept. They could be kept in the traditional manner or stored electronically, provided they are secure and not susceptible to loss or alteration. MSHA encourages mine operators who store records electronically to provide a mechanism to allow the continued storage and retrieval of records for a number of years. MSHA estimates that 1 percent of operators will keep records electronically.

**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.**

The information collection requirements would not be duplicative of any other MSHA requirements. The requirements to collect and maintain information are specific to each mine operator and no other source or agency duplicates these requirements or can make the required information available to MSHA. West Virginia has adopted State requirements that mirror the standards in the Proximity Detections System final rule that has caused this information collection request. Compliance with the parallel West Virginia requirements would also constitute compliance with those established by the MSHA. For purposes of this ICR MSHA has assumed the parallel burden.

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

This information collection does not have an impact on small businesses or other small entities.

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

Reduction of the collection requirements could allow unsafe equipment to be placed or remain in operation and thereby jeopardize the safety of miners.

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

 **(a) Requiring respondents to report information to the agency more often than quarterly.**

 **(b) Requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it.**

 **(c) Requiring respondents to submit more than an original and two** **copies of any document.**

 **(d) Requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years**.

 **(e) 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**.

 **(f) Requiring the use of a statistical data classification that has not been reviewed and approved by OMB.**

 **(g) 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.**

 **(h) 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. Federal Register Notice:**

 **a. Provide a copy and identify the date and page number of publication in the Federal Register of the agency’s notice 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.**

 **b. 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.**

 **c. Describe consultations with representatives of those from whom information is to be obtained or those who must compile records. Consultation should occur at least once every three years, even if the collection of information activities 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 notified the public in the Federal Register on August 31, 2011, (76 FR 54163) that information collection requirements were being reviewed in accordance with the Paperwork Reduction Act of 1995. This notice was part of MSHA’s rulemaking on Proximity Detection Systems for Continuous Mining Machines in Underground Coal Mines (RIN: 1219-AB65) and provided the general public and government agencies with an opportunity to comment on the proposed information collection requirements.

Several comments were received regarding the proposed information collection requirements.

Final § 75.1732(d)(1), like the proposal, requires that at the completion of the check required under paragraph (c)(1) of this section, a certified person under existing § 75.100 certify by initials, date, and time that the check was conducted. Defects found as a result of the check under paragraph (c)(1) of this section, including corrective actions and dates of corrective actions, must be recorded.

A commenter supported the proposed requirement that the mine operator record any defect and corrective action. Another commenter recommended that the record of any defect or corrective action be made at the end of the shift and kept in a book on the surface. Another commenter, however, supported the requirement to certify the check required in proposed § 75.1732(c)(1) but stated there was no safety benefit to requiring a record of defects or corrective actions. Other commenters indicated that there is no need to require records specifically for proximity detection systems and that these records would be a burden.

The certification in final paragraph (d)(1) helps assure compliance and provides miners on the section a means to confirm that the required check was made. MSHA anticipates that, in most cases, the person making the certification of the on shift examination under existing § 75.362(g)(2) will also make the certification of this check at the same time.

Final § 75.1732(d)(2), like the proposal, requires the operator to record defects found as a result of the check of miner-wearable components in final § 75.1732(c)(2), including corrective actions and dates of corrective actions.

A commenter supported the proposed requirement that the mine operator record any defect and corrective action, but also stated that the check of the miner-wearable component must be recorded as well. Another commenter stated that the record of any defect or corrective action be made at the end of the shift and kept in a book on the surface. A commenter also stated there was no safety benefit to requiring a record of defects or corrective actions. Other commenters indicated that there is no need to require records specifically for proximity detection systems and that these records would be a burden.

The requirement in final § 75.1732(d)(2) provides for a record of defects and corrective actions. This record can be used to show a history of miner-wearable component defects that can be used to alert miners, representatives of miners, mine management, manufacturers, and MSHA of recurring problems. For miner-wearable components, no record is needed unless a defect is found. A certification of the check for proper operation of miner-wearable components that is required under final § 75.1732(c)(2) is not necessary because miners can readily check to confirm that the component is working.

The final rule does not include the provisions in proposed § 75.1732(d)(3). The proposal would have required that: (1) the operator make and retain records at the completion of the weekly examination under proposed § 75.1732(c)(3); (2) the qualified person conducting the examination record and certify by signature and date that the examination was conducted; and (3) defects, including corrective actions and dates of corrective actions, be recorded.

A commenter supported the proposed requirement but also stated that a maintenance supervisor be required to countersign the record. Another commenter indicated that the electrical examination of proximity detection systems should be recorded consistent with the recording requirement under existing § 75.512 and that it would be unnecessary and burdensome for this record to include a record of defects found and corrective actions. Another commenter stated that maintaining separate records for weekly inspections is redundant to records already being maintained. Another commenter stated this requirement would increase the paperwork burden on a mine operator.

After considering the comments, MSHA determined that a separate examination under proposed § 75.1732(c)(3) and existing requirements under § 75.512 are redundant. Accordingly, the corresponding record requirement under proposed paragraph (d)(3) is not required by the final rule. As required under existing § 75.512, electric equipment must be frequently examined, tested, and properly maintained by a qualified person to assure safe operating conditions; and a record of this examination must be kept and made available to an authorized representative of the Secretary and to the miners. Consistent with MSHA policy, if dangerous conditions and corrective actions are not recorded, the records of weekly examinations of electric equipment are incomplete.

Final § 75.1732(d)(3), like proposed § 75.1732(d)(4), requires that the operator make and retain records of the persons trained, under this final rule, in the installation and maintenance of proximity detection systems.

One commenter stated that a record is necessary to assure the person assigned to install and perform maintenance on proximity detection systems has been trained. Other commenters stated this requirement and existing requirements would be redundant. One of these commenters stated that existing § 75.159, which requires a list of all qualified persons designated to perform duties under 30 CFR part 75, and the proposed record would be redundant. This commenter stated that MSHA Form 5000-23 (Certificate of Training) includes this information and that due to this redundancy the requirement in proposed § 75.1732(d)(4) should not be included in the final rule. Other commenters indicated that this requirement would be impractical when the installation or maintenance is performed by a third party. Another commenter indicated this requirement would increase the paperwork burden for a mine operator.

Final § 75.1732(d)(3) requires the mine operator to make a record of persons trained to install and perform maintenance on proximity detection systems. MSHA anticipates that many mine operators will train qualified persons, as defined by existing § 75.153, to install and perform maintenance on proximity detections systems; but, the mine operator may train another miner who is not included on the list required under existing § 75.159. A mine operator may make the record of the persons trained under final paragraph (d)(3) of this section using existing MSHA Form 5000 23. Consistent with existing practice, mine operators do not need to make and retain records of training for proximity detection system manufacturers’ employees who install or perform maintenance on their systems.

Final § 75.1732(d)(4), like proposed § 75.1732(d)(5), requires the operator to maintain records in a secure book or electronically in a secure computer system not susceptible to alteration.

One commenter supported the proposal. Another commenter stated that this requirement should be removed because the underlying recordkeeping requirements in proposed § 75.1732(d) are redundant. Another commenter stated this requirement would create another record book for mine operators to maintain and that this would increase their paperwork burden.

The records required under final §§ 75.1732(d)(1), (d)(2), and (d)(3), if recorded in a book, must be in a book designed to prevent the insertion of additional pages or the alteration of previously entered information in the record. Based on MSHA’s experience with other safety and health records, the Agency believes that records should be maintained so that they cannot be altered. In addition, electronic storage of information and access through computers is increasingly a common business practice in the mining industry. This provision permits the use of electronically stored records provided they are secure, not susceptible to alteration, and able to capture the information and signatures required. Care must be taken in the use of electronic records to assure that the secure computer system will not allow information to be overwritten after being entered. MSHA believes that electronic records meeting these criteria are practical and as reliable as paper records. MSHA also believes that once records are properly completed and reviewed, mine management can use them to evaluate whether the same conditions or problems, if any, are recurring, and whether corrective measures are effective.

The final rule provides mine operators flexibility to maintain the records in a secure book or electronically in a secure computer system that they already use to satisfy existing recordkeeping requirements.

Final § 75.1732(d)(5), like proposed § 75.1732(d)(6), requires that the operator retain records for at least one year and make them available for inspection by authorized representatives of the Secretary and representatives of miners.

A commenter supported the proposal but stated that hard copies of this information be made available if the lack of computer skills would prohibit a miner from viewing this information. Another commenter stated that this requirement should be removed because the underlying recordkeeping requirements in proposed § 75.1732(d) are redundant. This commenter stated this requirement would increase a mine operator’s paperwork burden.

This provision applies to the records required under final §§ 75.1732(d)(1), (d)(2) and (d)(3). These records must be made available for inspection to representative of miners and MSHA. The operator may provide access electronically or by providing paper copies of records. MSHA believes that keeping records for one year provides a history of the conditions documented at the mine to alert miners, representatives of miners, mine management, and MSHA of recurring problems.

**9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.**

MSHA does not provide payments or gifts to respondents in exchange for a benefit sought.

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

There is no assurance of confidentially provided to respondents beyond that required by the Freedom of Information Act (5 U.S.C. 522).

**11. Provide additional justification for any question 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 in Item 13.**

MSHA estimates that approximately 109 unique respondents (109 underground coal mine operators) will respond to this collection of information. The underground coal mine hourly wage rates used in this answer are $99.60 for a mine supervisor; $50.12 composite wage rate (of miners and supervisors); and $28.63 for a clerical worker. The composite wage rate of $50.12 per hour is based on 15 percent of the miners being supervisors and the rest, 85 percent, being miners [(0.15 x $99.60/hour) + (0.85 x $41.39/hour)]. These hourly wage rates are based on data obtained from the U.S. Coal Mine Salaries, Wages, & Benefits – 2012 Survey Results adjusted by the Bureau of Labor Statistics’ Employment Cost Index (ECI) for 2013.

**Section 75.1732(d)(1) Records, Machine-mounted component**

Section 75.1732(d)(1) requires that at the completion of the check required under § 75.1732(c)(1), and if any defects found as a result of this check, including corrective actions and dates of corrective actions, be recorded.

Based on a three year average, MSHA estimates that the number of machines checked per year are: 49 machines at mines with 1-19 employees (16 in year one, 49 in year two, and 82 in year three); 419 machines at mines with 20-500 employees (140 in year one, 419 in year two, 698 in year three); and 50 machines at mines with 500+ employees (17 in year one, 50 in year two, 83 in year three).

MSHA estimates that the number of checks per machine per year are: 200 at mines with 1-19 employees (200 workdays x 1 shift per workday); 600 at mines with 20-500 employees (300 workdays x 2 shifts per workday); and 1,050 at mines with 501+ employees (350 workdays x 3 shifts per workday).

MSHA estimates that it takes 10 seconds (0.003 hours) to certify by initials, date, and time. In addition, MSHA estimates that a corrective action will be needed once a year and to record a corrective action takes 2 minutes (0.033 hrs).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Responses |  |  |  |  |  |
| 49 | Machines at mines with 1-19 employees | x | 200 | checks/machine | = | 9,800 |
| 419 | Machines at mines with 20-500 employees | x | 600 | checks/machine | = | 251,400 |
| 50 | Machines at mines with 501+ employees | x | 1,050 | checks/machine | = | 52,500 |
| 518 | Corrective actions | x | 1 | response/machine | = | 518 |
| Total Responses | = | 314,218 |
|  |  |  |  |  |  |  |
| Hour Burden |  |  |  |  |  |
| 313,700 | Checks | x | 0.003 | hrs./check | = | 941 hrs. |
| 518 | Corrective actions | x | 0.033 | hrs./corrective action | = | 17 hrs. |
| Total Hour Burden | = | 958 hrs. |
|  |  |  |  |  |  |  |
| Hour Burden Cost |  |  |  |  |  |
| 958 | hrs. | x | $99.60  | /hr. for a supervisor | = | $95,417  |

**Section 75.1732(d)(2) Record, Miner-Wearable components**

Section 75.1732(d)(2) requires the recording of defects found as a result of the check in § 75.1732(c)(3) of the miner-wearable component. The corrective action and date of the corrective action, also needs to be recorded. MSHA estimates that 10 percent of the 9,884 miner wearable components that are checked annually (or 988) will require a corrective action to be made after the check, and thus also a record to be made of that corrective action. MSHA estimates that it will take 2 minutes (0.033 hrs.) to make this record.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Responses |  |  |  |  |  |
| 988 | Miner-wearable components records | x | 1 | response/record | = | 988 |
| Total Responses | = | 988 |
|  |  |  |  |  |  |  |
| Hour Burden |  |  |  |  |  |
| 988 | responses | x | 0.033 | hr./response | = | 33 hr. |
| Total Hour Burden | = | 33 hr. |
|  |  |  |  |  |  |  |
| Hour Burden Cost |  |  |  |  |  |
| 33 | hr. | x | $50.12  | /hr. | = | $1,654  |

**Section 75.1732(d)(3) Record, Installation and Maintenance Training**

Section 75.1732(d)(3) requires that a record be kept of personnel trained in the installation and maintenance of proximity detection systems. MSHA projects that an average of 109 mines records (326 mines/3 years). MSHA estimates that it takes 1 minute (0.0167 hrs.) to make a record of all trained personnel at each mine.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Responses |  |  |  |  |  |
| 109 | Installation and Maintenance Training Records | x | 1 | response/record | = | 109 |
| Total Responses | = | 109 |
|  |  |  |  |  |  |  |
| Hour Burden |  |  |  |  |  |
| 109 | Responses | x | 0.0167 | hr./response | = | 2 hrs. |
| Total Hour Burden | = | 2 hrs. |
|  |  |  |  |  |  |  |
| Hour Burden Cost |  |  |  |  |  |
| 2 | hrs. | x | $28.63  | /hr. | = | $57  |
|  |  |  |  |  |  |  |

**GRAND TOTAL RESPONDENTS = 109**

**GRAND TOTAL RESPONSES = 315,315**

**GRAND TOTAL BURDEN HOURS = 993**

**GRAND TOTAL BURDEN HOUR COST = $97,128**

**13. Provide an estimate of the total annual cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden 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.**

There are no costs to respondents or recordkeepers resulting from this collection of information.

**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.**

There are no additional costs to the Federal Government.

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

This is a new collection of information package, therefore all are program changes.

|  |
| --- |
| **Itemized Changes in Annual Burden Hours** |
| **Standard/Data Collection Activity/Form** | **Program Change (hours currently on OMB Inventory)** | **Program Change (New)** | **Difference** |
| Records, Machine-mounted component/ [75.1732(d)(1)] | 0 | 941 | +941 |
| Records, Machine-mounted component corrective actions/ [75.1732(d)(1)] | 0 | 17 | +17 |
| Record, Miner-Wearable Components/ [75.1732(d)(2)]  | 0 | 33 | +33 |
| Record, Installation and Maintenance Training / [75.1732(d)(3)] | 0 | 2 | +2 |
| **Total** | **0** | **993** | **+993** |

There are no costs to respondents or recordkeepers resulting from this collection of information.

**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.

**17. If seeking approval not to display the expiration date for OMB approval of the information collection, explain reasons that display would be inappropriate.**

This collection does not seek approval to not display the expiration date for OMB approval.

**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**

There is no statistical methodology involved in this collection.