# November, 2013 **SUPPORTING STATEMENT**

Information Collection Title: Safety Defects; Examination, Correction, and Records

<u>Authorities</u>: 30 CFR §§ 56/57.14100, 56/57.13015, 56/57.13030, and 56/57.18002 (pertains to metal and nonmetal (M/NM) surface and underground mines)

Collection Instrument(s): None

#### A. Justification

1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

Section 103(h) of the Federal Mine Safety and Health Act of 1977 (Mine Act), 30 U.S.C. 813(h), authorizes MSHA to collect information necessary to carry out its duty in protecting the safety and health of miners.

Title 30 CFR §§ 56.13015 and 57.13015 require compressed-air receivers and other unfired pressure vessels to be inspected by inspectors holding a valid National Board Commission and in accordance with the applicable chapters of the National Board Inspection Code, a Manual for Boiler and Pressure Vessels Inspectors, 1979. Safety defects found on compressed-air receivers and other unfired pressure vessels have caused injuries and fatalities in the mining industry.

Records of inspections must be kept in accordance with the requirements of the National Board Inspection Code and the records must be made available to the Secretary or an authorized representative.

Title 30 CFR §§ 56.13030 and 57.13030 require that fired pressure vessels (boilers) must be equipped with water level gauges, pressure gauges, automatic pressure-relief valves, blowdown piping and other safety devices approved by the American Society of Mechanical Engineers (ASME) to protect against hazards from overpressure, flameouts, fuel interruptions and low water level.

These sections also require that records of inspection and repairs be retained by the mine operator in accordance with the requirements of the ASME Boiler and Pressure Vessel Code, 1977, and the National Board Inspection Code (progressive records - no

limit on retention time) and shall be made available to the Secretary or an authorized representative.

Title 30 CFR §§ 56.14100 and 57.14100 require operators to inspect equipment, machinery, and tools that are to be used during a shift for safety defects before the equipment is placed in operation. Defects affecting safety are required to be corrected in a timely manner. In instances where the defect makes continued operation of the equipment hazardous to persons, the equipment must be removed from service, tagged to identify that it is out of use, and repaired before use is resumed.

Safety defects on self-propelled mobile equipment account for many injuries and fatalities in the mining industry. Inspection of this equipment prior to use is required to ensure safe operation. The equipment operator is required to make a visual and operational check of the various primary operating systems that affect safety, such as brakes, lights, horn, seatbelts, tires, steering, back-up alarm, windshield, cab safety glass, rear and side view mirrors, and other safety and health related items. Any defects found are required to be either corrected immediately, or reported to and recorded by the mine operator prior to the timely correction.

A record is not required if the defect is corrected immediately, i.e. a defect that the operator can fix without a mechanic such as a light bulb that needs to be turned tighter. The precise format in which the record is kept is left to the discretion of the mine operator.

Reports of uncorrected defects are required to be recorded by the mine operator and kept at the mine office from the date the defects are recorded, until the defects are corrected.

Title 30 CFR §§ 56.18002 and 57.18002 require that a competent person designated by the operator examine each working place at least once each shift for conditions which may adversely affect safety or health. A record of such examinations must be kept by the operator for a period of one year and must be made available for review by the Secretary or an authorized representative.

2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.

The records are used by industry management and maintenance personnel to ensure that defects are not overlooked, that repairs are made, and to monitor when and how often maintenance is performed on certain equipment, machinery, and tools. Additionally, the inspection records denote any hazards that were discovered and how

the hazards or unsafe conditions were abated. Federal mine inspectors use the records to ensure that unsafe conditions are identified and corrected.

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 burden; however, to comply with the Government Paperwork Elimination Act, MSHA allows mine operators to retain the records in whatever method they choose, which may include using computer technology.

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.

There are no similar records that could be used or modified for use in lieu of the required records. The Agency requires a record to be kept to comply with requirements of 30 CFR §§ 56.14100 and 57.14100 only when safety defects are not corrected immediately. Title 30 CFR §§ 56.13015, 57.13015, 56.13030, 57.13030, 56.18002 and 57.18002 require that records be kept of inspections. Such records are used to ensure that a regular inspection schedule is maintained and/or that any unsafe conditions are discovered and corrected.

5. If the collection of information impacts small businesses or other small entities (Item 5 of OMB Form 83-I), describe any methods used to minimize burden.

MSHA has undertaken measures to minimize any burden on small businesses or entities subject to these requirements. MSHA's Technical Support Directorate (Tech Support) frequently answers phone calls and emails from small businesses and other small entities about conducting these inspections. This assistance from Tech Support helps the businesses comply with these standards and helps reduce their associated burden.

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.

Further reductions of these requirements could allow unsafe equipment to remain in operation; thereby, jeopardizing the safety of miners. Section 101(a)(9) of the Mine Act prohibits any regulatory action which would reduce the protection given miners by an existing standard.

- 7. Explain any special circumstances that would cause an information collection to be conducted in a manner:
- · requiring respondents to report information to the agency more often than quarterly;
  - requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;
  - · requiring respondents to submit more than an original and two copies of any document;
  - · requiring respondents to retain records, other than health, medical, government contract, grant-in- aid, or tax records for more than three years;
  - in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;
  - requiring the use of a statistical data classification that has not been reviewed and approved by OMB;
  - that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or
  - · requiring respondents to submit proprietary trade secret, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

This collection of information is consistent with the guidelines in 5 CFR § 1320.5.

8. If applicable, provide a copy and identify the data and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB.

MSHA published a 60-day Federal Register notice on September 3, 2013 (78 FR 54278). MSHA received no comments.

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

MSHA does not provide payments or gifts to respondents.

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

There is no assurance of confidentiality provided to respondents. Records are maintained by the operator.

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 in Item 13 of OMB Form 83-I.
  - 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 14.

Burden cost figures used in this section are based on salaries obtained from the U.S. Metal & Industrial Mineral Mine Salaries, Wages, & Benefits - 2011 Survey Results. The salary of a M/NM mine supervisor is \$65.09 per hour; a M/NM miner \$28.57 per hour; and clerical staff \$26.56 per hour. Approximately 12,375 mines are subject to the standards, 12,191 of which are small entities with 500 or less employees.

#### 30 CFR §§ 56.13015 and 57.13015

The standards require that compressed-air receivers and other unfired pressure vessels be inspected by inspectors holding a valid National Board Commission and in accordance with the applicable chapters of the National Board Inspection Code, a Manual for Boiler and Pressure Vessels Inspectors, 1979. The standards also require that records of inspections be kept and made available in accordance with the requirements of the National Board Inspection Code. There are approximately 3,400 compressed-air receivers and other unfired pressure vessels that must be inspected annually. MSHA estimates that the time required for recording would be approximately 10 minutes (.166 hour) per vessel and that the time required for the supervisor to participate in the inspection would be 15 minutes per vessel.

3,400 vessels x 1 inspection/vessel x 0.166 hour = 564 hours 3,400 vessels x 1 inspection/vessel x 0.25 hour = 850 hours Total Hours 1,414 hours

1,414 hours x \$65.09/hour wages = \$92,063

§§ 56/57.13015 TOTAL BURDEN 1,414 HOURS §§ 56/57.13015 TOTAL COST \$92,063

#### 30 CFR §§ 56.13030 and 57.13030

The standards require that records of inspection and repairs be retained by the mine operator in accordance with the requirements of the ASME Boiler and Pressure Vessel Code and the National Board Inspection Code and made available to MSHA. There are approximately 500 fired pressure vessels (boilers) that must be inspected annually. MSHA estimates that the time required for recording would be approximately 10 minutes (.166 hour) and that the time required for the supervisor to participate in the inspection would be 15 minutes per vessel.

500 vessels x 1 exam/vessel x .166 hour = 83 hours 500 vessels x 1 exam/vessel x .25 hour = 125 hours Total Hours 208 hours

208 hours x \$65.09/hour wages = \$13,539

TOTAL BURDEN: 208 HOURS TOTAL COST: \$13,359

#### 30 CFR §§ 56.14100 and 57.14100

These standards require that an inspection be made for every shift for equipment that is to be used. Further, a record is required to be made of any defects affecting safety that are not corrected.

Of the 12,375 mines subject to these standards, 9,096 mines have been designated as intermittent mines. To determine the number of workplace shifts occurring at intermittent mines, the number of hours reported (31,633,000) was divided by the average number of employees (26,629) providing the average number of hours per employee per year (1,188). The resultant figure was divided by eight hours, resulting in the estimated number of eight hour work shifts per year (148). The estimated number of shifts was multiplied by the number of intermittent mines to obtain the total number of workplace shifts for intermittent mines per year; 1,346,208.

To determine the number of work place shifts occurring at the 3,279 other M/NM mines, the average number of shifts for each day was calculated (1.25). This was multiplied by 240 workdays per year, and the number of non-intermittent mines for a total of 983,700 workplace shifts.

The numbers of work place shifts for intermittent and all other mines were added to provide the total number of workplace shifts conducted in M/NM mines for the year; 2,252,385.

- 1,346,208 workplace shifts for intermittent mines per year
- + 983,700 workplace shifts for all other mines per year
  - 2,329,908 work place shifts total

A small mine is defined by MSHA as a mine or mill employing fewer than 20 miners and a large mine is defined as a mine or mill employing 20 miners or more. Small mining operations usually have only a few pieces of equipment; larger mines may have 100 or more pieces of equipment. MSHA estimates that 2,252,385 workplace shifts occur each year at all mines covered by these standards. Small mines comprise 88% of M/NM mines; large mines comprise 12% of M/NM mines. Small mines are estimated to conduct two inspections every shift. Large mines are estimated to conduct 15 inspections each shift. MSHA estimates that it will take an average of 5 minutes (.08 hour) to record the required information.

## **Small Mine Burden and Cost:**

2,329,908 workplace shifts/year  $\times$  0.88 = 2,050,319 shifts/year 2,050,319 shifts/year  $\times$  2 inspections/shift = 4,100,638 inspections/year 4,100,638 responses/inspections/year  $\times$  .08 hour = 328,051 hours/year 328,051 hours/year  $\times$  \$26.56/hour wage = \$8,713,036 a year

#### Large Mine Burden and Cost:

2,329,908 workplace shifts/year x 0.12 = 279,589 shifts/year

279,589 shifts/year x 15 inspections/shift = 4,193,834 inspections/year 4,193,834 responses/inspections/year x .08 hour = 349,486 hours/year x \$26.56/hour wage = \$9,282,353 a year

677,537 hours	Total mine burden
349,486 hours	Large mine burden
328,051 hours	Small mine burden

\$8,713,036 Small mine cost \$9,282,353 Large mine cost \$17,995,389 Total mine cost

§§ 56/57.14100 TOTAL HOUR BURDEN 677,537 HOURS §§ 56/57.14100 TOTAL COST \$17,995,389

### 30 CFR §§ 56.18002 and 57.18002

These standards require that a competent person designated by the mine operator examine each working place at least once each shift for conditions which may adversely affect safety or health. A record that such examinations were conducted shall be kept by the operator for a period of one year and shall be made available for review by the Secretary or her authorized representative. MSHA estimates that the time required for the recordkeeping activities would be approximately 12 minutes (.20 hour) per mine.

2,329,908 work shifts x .20 hour =	465,982 hours
465,982 hours x \$65.09 (Supervisor wage/hour) =	\$30,330,742

§§ 56/57.18002 TOTAL HOUR BURDEN	465,982 HOURS
§§ 56/57.18002 TOTAL COST	\$30,330,742

GRAND TOTAL HOUR BURDEN	1,145,141 HOURS
GRAND TOTAL COST	\$48,431,734
RESPONDENTS	12,375
RESPONSES	10,368,771

- 13. Provide an estimate of the total annual cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden shown in Items 12 and 14).
  - The cost estimate should be split into two components: (a) a total capital
    and start-up cost component (annualized over its expected useful life); and
    (b) a total operation and maintenance and purchase of services component.

The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over 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 is no additional cost burden to respondents or recordkeepers.

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.

Records are examined by Federal mine inspectors in the course of routine mine inspections. Therefore, these requirements do not result in additional cost to the Federal government.

15. Explain the reasons for any program changes or adjustments reporting in Items 13 or 14 of the OMB Form 83-I.

There are no program changes for the 2013 paperwork package clearance. Adjustments are as follows.

The decrease of 77,963 burden hours (1,223,104 to 1,145,141) is due to a decrease in the estimated number of respondents from 12,557 to 12,375 as well as a decrease in the number of responses from 11,502,241 to 10,368,771. The supervisors' time to participate in the inspection is added in this submission, because burden time is required of the inspector as well. There is no change in cost burden to respondents or recordkeepers.

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.

## B. Collection of Information Employment Statistical Methods

This information collection does not employ statistical methods.