Supporting Statement

30 CFR subpart A, Section 48.8 - Annual refresher training of miners; minimum courses of instruction, hours of instruction (revised)

30 CFR subpart P, section 75.1501 - Emergency Evacuations (new)

30 CFR subpart P, section 75.1502 - Mine Emergency Evacuation and Firefighting Program of Instruction (new)

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.

The Mine Safety and Health Administration (MSHA) is issuing an emergency temporary standard (ETS) under section 101(b) of the Federal Mine Safety and Health Act of 1977 (Mine Act) in response to the grave danger which miners are exposed to during mine fire, explosion, and gas or water inundation emergencies. The recent deaths of fourteen miners at two underground coal mines confirm that miners working underground are exposed to grave danger during mine emergencies and demonstrates the need for MSHA to address proper training and mine emergency evacuation procedures in an emergency temporary standard. Collection of such records is authorized under Section 103(h) of the Federal Mine Safety and Health Act of 1977 (Mine Act).

In response to the recent accidents of September 2001 at the Jim Walter Resources No. 5 Mine and of July 2000 at the Willow Creek Mine, MSHA has determined that new safety standards are necessary to further protect miners when a mine emergency presenting an imminent danger to miners due to fire, explosion, or gas or water inundation occurs which requires an evacuation of miners. Miners and mine operators must be able to rapidly and safely respond to emergency situations created by fire, explosion, or gas or water inundation hazards, and initiate an immediate mine evacuation when necessary to protect miners from the grave dangers of remaining underground or re-entering affected areas when hazards and conditions arise that endanger safety. A rapid and planned evacuation of all miners, who are knowledgeable about the mine's plan for mine emergencies, is essential to survival, and is one of the last safeguards that would allow miners to exit from the mine under extremely adverse conditions. The current lack of such knowledge, and demonstrated inability to quickly initiate and properly conduct a mine evacuation, presents a grave danger

to miners who work in underground coal mines when a mine fire, explosion, or gas or water inundation emergency occurs.

Underground coal mines are dynamic work environments where the working conditions can change rapidly. Diligent compliance with safety and health standards and safety conscious work habits provide a substantial measure of protection against the occurrence of fire and explosions and resultant mine emergencies underground. In the high-hazard work environment of underground coal mines, however, the danger of a fire, explosion, or gas or water inundation hazard which can develop into a mine emergency is always present.

Issuance of an ETS is an extraordinary measure provided for by the Mine Act to enable MSHA to react quickly to grave dangers which threaten miners before those dangers manifest themselves in serious or fatal injuries or illnesses.

Section 101(b) of the Mine Act provides that:

- (1) The Secretary shall provide, without regard to the requirements of Chapter 5, Title 5, United States, Code, for an emergency temporary mandatory health or safety standard to take immediate effect upon publication in the Federal Register if [s]he determines (A) that miners are exposed to grave danger from exposure to substances or agents determined to be toxic or physically harmful, or to other hazards, and (B) that such emergency standard is necessary to protect miners from such danger.
- (2) A temporary mandatory health or safety standard shall be effective until superseded by a mandatory standard promulgated in accordance with the procedures prescribed in paragraph (3) of this subsection.
- (3) Upon publication of such standard in the Federal Register, the Secretary shall commence a proceeding in accordance with section 101(a), and the standards as published shall also serve as the proposed rule for the proceeding. The Secretary shall promulgate a mandatory health or safety standard under this paragraph no later than nine months after publication of the emergency temporary standard as provided in paragraph (2).

This ETS establishes two new standards in subpart P, section 75.1501 Emergency Evacuations, and section 75.1502 Mine Emergency Evacuation and Fire-fighting Program of Instruction. Also, Subpart P is renamed "Subpart P – Mine Emergencies." In addition, the existing part 48, subpart A, section 48.8 is revised. Discussed below are those sections with respect to paperwork.

Section 75.1501 Emergency Evacuations

Section 75.1501(c) requires the mine operator to train all miners about the requirements of this section and the identity of the responsible person(s) designated by the operator for the work-shift within 7 days of publication of this ETS in the Federal Register. The operator also is required to instruct miners of any change in the identity of the responsible person before the start of their work-shift.

<u>Section 75.1502 Mine Emergency Evacuation and Firefighting Program of Instruction</u>

New § 75.1502 broadens existing section 75.1101-23 by including all mine emergencies created as a result of a fire, an explosion, or a gas or water inundation. It requires revisions to existing fire-fighting and evacuations plans to address these emergencies, require training of miners regarding the mine emergency evacuation fire-fighting plan, and require that mine operators train miners in any revisions to the plan after its submission to MSHA for approval.

Section 75.1502(a) requires the operator to adopt a mine emergency evacuation and fire-fighting program. The operator is required to train all miners in the proper evacuation procedures to be followed in the event of a mine emergency, the location and use of fire-fighting equipment, location of escapeways, exists, and routes of travel to the surface. The training is required to begin as soon as possible, but not later than 30 days from the date of publication of this ETS. In addition, the program must be submitted to the District Manager for approval within 30 days of publication of the ETS. All miners would be trained on any revisions made to the program of instruction after it has been approved by MSHA to ensure that miners are kept aware of any changes made to the mine emergency evacuation and fire-fighting plan after they have received initial training.

<u>Section 48.8 Annual refresher training of miners; minimum courses of instruction, hours of instruction</u>

The existing training requirements in 30 CFR Part 48 are to be revised to specifically include annual refresher training of miners regarding mine emergency evacuation and fire-fighting plans. Subpart A of 30 CFR Part 48 prescribes requirements for submitting and obtaining MSHA approval of operator-administered programs for training and retraining underground miners. Each mine must have an approved training program for training new miners and newly-employed experienced miners, as well as training miners for

new tasks, and providing annual refresher training. Annual refresher training under existing § 48.8, however, does not cover emergency evacuation or firefighting training.

Section 48.8 is revised by this ETS to include a requirement that the annual refresher training include the mine emergency evacuation and fire-fighting plan. This training will acquaint all underground coal miners with the mine emergency evacuation procedures for mine emergencies involving fire, explosion, or gas or water inundations. Note: Information collection under Part 48 is currently approved by OMB (§ 48.3 under 1219-0070; with an expiration date of 11/30/04). Upon final approval of this rule, ICWs will be submitted to reflect this burden being transferred from this approved collection to 1219-0070.

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 allow mine operators to determine that miners have received the required training. MSHA inspectors use the records to determine that training required by the regulations is being provided.

Under section 75.1502(c)(1), which essentially retains the same requirements as existing section 75.1101-23(c), the operator is required to certify by signature and date that the mine emergency evacuation drills were held in accordance with the requirements of that section. Certifications would be kept at the mine and made available on request to an authorized representative of the Secretary. Note: MSHA is not taking burden for this section in this ICR. This burden is already covered under 1219-0054; expiration 9/30/03.

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.

This emergency temporary standard (ETS) addresses revisions to mine emergency evacuation plans and associated training. This ETS neither requires underground coal mines to procure any additional equipment nor use any new technology. This is not a technology-forcing standard; however, the plans can be prepared using personal computers and word processing programs. No improved information technology has been identified that would reduce the burden associated with revisions to mine emergency evacuation plans and

associated training.

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.

Annual refresher training of miners regarding mine emergency evacuation and fire-fighting plans now are covered under the revised part 48 training regulations. Accordingly, inclusion of those training provisions within new section 75.1502 would be duplicative. Therefore, under this ETS, the level of safety afforded miners will be maintained or increased from the level of safety afforded under existing section 75.1101-23 because this ETS provides for the training of all miners for mine emergencies including explosions and gas or water inundations, not just mine fires, and provides annual refresher training of miners while eliminating duplicate provisions and consolidating the training requirements under part 48. This modification of the training requirements under existing section 75.1101-23 does not represent a reduction in safety to miners because the training requirements of existing section 75.1101-23 are incorporated in new section 75.1502 and the revised and existing sections of part 48.

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.

The provisions of the Federal Mine Safety Mine Act of 1977 (Mine Act) and MSHA regulations and standards apply to all mining operations because accidents, injuries, and illnesses can occur at any mine, regardless of size. Congress intended that the Mine Act be enforced at all mining operations within its jurisdiction regardless of size, and that information collection and record keeping requirements be consistent with efficient and effective enforcement of the Act. (See S. Rep. 181, 95th Cong., 1st Sess. 28 (1977)).

However, Congress did recognize that small operations may face problems in complying with some of the provisions of the Mine Act. Therefore, Section 103(e) of the Mine Act, 30 U.S.C. § 813(e), directs the Secretary of Labor not to impose an unreasonable burden on any operator, and in particular, small businesses, in obtaining any information under the Act. Accordingly, MSHA takes this into consideration when developing regulatory requirements.

To provide distinct information collection and recordkeeping requirements for small mines in the regulation at hand, however, would not

fulfill the objectives of the Mine Act. Statistics show that there is a higher incidence of accidents and deaths in small mines than there is in larger mines. This information collection of information complies with 4 CFR 1320.5

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.

MSHA believes that the information collection requirements are the minimum necessary to ensure that miners receive the required training in mine emergency evacuation procedures and fire-fighting plans. Reduction in these requirements may result in miners being subjected to unsafe conditions in the mine, thus jeopardizing their lives during a mine emergency.

- 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;

NA

• requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;

NA

 requiring respondents to submit more than an original and two copies of any document;

NA

 requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years;

Although there is no explicit requirement that a mine operator retain records for more than three years, the operator must maintain a current, approved training plan during the entire time the mine is in operation. This collection of information is otherwise consistent with the guidelines in 5 CFR 1320.5.

• 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;

NA

• requiring the use of a statistical data classification that has not been reviewed and approved by OMB;

NA

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

NA

 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.

NA

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

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

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

MSHA will publish the emergency temporary standard (ETS) for underground coal mines, which contains the information collection requirements in the Federal Register. This ETS also serves as an Notice of Proposed Rule Making (NPRM) in which case giving interested persons 60 days to submit

comments thereby notifying the public that these information collection requirements are being reviewed by OMB in accordance with the Paperwork Reduction Act. MSHA will also mail copies of the Federal Register notice of proposed rulemaking (ETS) to all affected mines. Comments received will be addressed in the Preamble of the Final Rule and if necessary a revised ICR will be submitted.

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

MSHA has decided not to provide payments or gifts to respondents identified by this collection.

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 confidentially provided to respondents. Records are maintained by the mine operator and reviewed by MSHA inspectors during routine inspections.

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 form 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.

NOTE: Burden hour costs are figured using the following hourly wage:

Coal Supervisor: \$54.53 # of underground coal mines is 664

Coal Clerical: \$20.18 (total Respondents)

In the First Year of the Rule

In the first year the rule is in effect, there would be an increase of 5,010 burden hours and related burden costs of \$250,041.

Table 1 shows that with respect to first year-only burden hours and costs, there would be an increase of 4,304 burden hours and related costs of \$211,565.

Table 2 shows that with respect to annual costs, there would be an increase of 706 burden hours and related costs of \$38,476.

In the Second Year of the Rule and for Every Year Thereafter

After the first year of the rule, those burden hours and related costs occurring in the first year would no longer occur, and what remains are only the annual burden hours and related costs. Therefore, in the second year of the rule and for every year thereafter, there would be an increase of 706 burden hours and related costs of \$38,476.

Table1: Summary of First Year Only Burden Hours and Costs

| | | <20 Emp. | | 20 | to 500 Em | ıp. | | >500 Emp. | • | | Total | |
|--------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | | | First Year |
| | | | Burden | | | Burden | | | Burden | | | Burden |
| | First Year | First Year | Costs |
| Table | Burden | Burden | Annual- |
| Number | Hours | Costs | ized |
| 3 | 94 | \$5,115 | \$358 | 177 | \$9,644 | \$675 | 2 | \$90 | \$6 | 272 | \$14,849 | \$1,039 |
| 7 | 670 | \$31,932 | \$2,235 | 1,376 | \$68,256 | \$4,778 | 14 | \$685 | \$48 | 2,059 | \$100,873 | \$7,061 |
| 8 | 17 | \$812 | \$57 | 35 | \$1,726 | \$121 | 0 | \$17 | \$1 | 53 | \$2,555 | \$179 |
| 9 | 335 | \$18,268 | \$1,279 | 786 | \$42,861 | \$3,000 | 8 | \$450 | \$31 | 1,129 | \$61,578 | \$4,310 |
| 10 | 8 | \$438 | \$31 | 19 | \$1,018 | \$71 | 0 | \$11 | \$1 | 27 | \$1,467 | \$103 |
| 11 | 268 | \$10,011 | \$701 | 491 | \$20,038 | \$1,403 | 5 | \$194 | \$14 | 764 | \$30,243 | \$2,117 |
| Total | 1,392 | \$66,576 | \$4,660 | 2,884 | \$143,543 | \$10,048 | 28 | \$1,446 | \$101 | 4,304 | \$211,565 | \$14,810 |

Table 2: Summary of Annual Burden Hours and Costs

| | <20 Emp. | | 20 to 500 Emp. | | >500 Emp. | | Total | |
|--------|----------|---------|----------------|----------|-----------|--------|--------|----------|
| | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |
| Table | Burden | Burden | Burden | Burden | Burden | Burden | Burden | Burden |
| Number | Hours | Costs | Hours | Costs | Hours | Costs | Hours | Costs |
| 4 | 19 | \$1,023 | 16 | \$868 | 0 | \$0 | 35 | \$1,891 |
| 5 | 40 | \$2,202 | 260 | \$14,168 | 12 | \$630 | 312 | \$17,000 |
| 6 | 28 | \$1,522 | 328 | \$17,859 | 4 | \$204 | 359 | \$19,585 |
| Total | 87 | \$4,747 | 603 | \$32,894 | 15 | \$835 | 706 | \$38,476 |

<u>Proposed §75.1501(c)</u> Burden Hours and Costs for Operators to Prepare and Give Instructions to Workers Concerning §75.1501 Requirements

Underground coal mine operators shall instruct all miners about the requirements of §75.1501 and the identity of the responsible person designated by the operator for their work-shift. On average, MSHA estimates that a mine supervisor would need 0.25 hours (15 minutes) to prepare for giving the instructions required under §75.1501. In addition, on average, the mine supervisor is estimated to spend 0.1 hours (6 minutes) providing the instruction per shift. On average, the number of shifts where instruction would be given would be: 1 shift in mines employing fewer than 20 workers; 2 shifts in mines employing 20 to 500 workers; and 3 shifts in mines employing more than 500 workers. Since the instruction is only provided once (only being repeated for new workers), these first year costs were annualized using an annualization factor of 7 percent.

Table 3 shows underground coal operators' first year burden hours and related costs to prepare and give instructions required by §75.1501.

| | | Time to | | | | First |
|-----------|--------------------|------------------------|--------|-----------|----------|-------------------------|
| | | Prepare & | First | Superv. | First | Year |
| Mine Size | Total | Give | Year | Wage | Year | Burden |
| by No. of | No. of | Instruction | Burden | Rate | Burden | Costs |
| Employees | Mines ^a | (in hrs.) ^b | Hours | (per hr.) | Costs | Annualized ^c |
| <20 | 268 | 0.35 | 93.80 | 54.53 | \$5,115 | \$358 |
| 20-500 | 393 | 0.45 | 176.85 | 54.53 | \$9,644 | \$675 |
| >500 | 3 | 0.55 | 1.65 | 54.53 | \$90 | \$6 |
| Total | 664 | | 272.30 | | \$14,849 | \$1,039 |

Table 3: First Year Burden Hours and Costs to Prepare and Give Instructions Required by 75.1501

^a Source: Table IV-4 in PREA.

^b Time for mine supervisor to prepare and give instruction = (0.25 + (0.1 x S)), where 0.25 is the number of hours needed for a supervisor to prepare instruction, 0.1 is the number of hours the supervisor spends in instructing one shift, and S is the number of shifts to instruct, S=1 for mines employing fewer than 20 workers, S=2 for mines employing 20 to 500 workers, and S=3 for mines employing more than 500 workers.

^c First year burden costs annualized = first year burden costs x 0.07, where 0.07 is the annualization factor.

New underground coal mine operators would also need to instruct miners about the instruction required by §75.1501. On average, MSHA estimates that the number of new mines per year to be: 54 mines employing fewer than 20 workers; 35 mines employing 20 to 500 workers; and no new mines employing more than 500 workers.

Table 4 shows underground coal operators' annual burden hours and related costs to prepare and give instructions required by §75.1501 <u>for new mines</u>.

Table 4: Annual Burden Hours and Costs to Prepare and Give Instructions Required by 75.1501 for New Mines

| | | Time to | | | |
|-----------|--------------------|------------------------|--------|-----------|---------|
| | Total | Prepare & | | Superv. | |
| Mine Size | No. of | Give | Annual | Wage | Annual |
| by No. of | New | Instruction | Burden | Rate | Burden |
| Employees | Mines ^a | (in hrs.) ^b | Hours | (per hr.) | Costs |
| <20 | 53.60 | 0.35 | 18.76 | 54.53 | \$1,023 |
| 20-500 | 35.37 | 0.45 | 15.92 | 54.53 | \$868 |
| >500 | 0.00 | 0.55 | 0.00 | 54.53 | \$0 |
| Total | 88.97 | | 34.68 | | \$1,891 |

^a Source: Table IV-5 in PREA.

 $^{^{\}rm b}$ Time for mine supervisor to prepare and give instruction = (0.25 + (0.1 x S)), where 0.25 is the number of hours needed for a supervisor to prepare instruction, 0.1 is the number of hours the supervisor spends in instructing one shift, and S is the number of shifts to instruct, S=1 for mines employing fewer than 20 workers, S=2 for mines employing 20 to 500 workers, and S=3 for mines employing more than 500 workers.

Underground coal mine operators would also need to instruct <u>new miners</u> about the instruction required by §75.1501. MSHA assumes that a supervisor would instruct a new miner one-on-one. Therefore, MSHA estimates that it would take 0.1 hours (6 minutes) for a supervisor to instruct a new worker. On average, MSHA estimates that the number of new workers per year would be: 404 workers in mines employing fewer than 20 workers; 2,598 workers in mines employing 20 to 500 workers; and 116 workers in new mines employing more than 500 workers.

Table 5 shows underground coal operators' annual burden hours and related costs to prepare and give instructions required by §75.1501 to new workers.

Table 5: Annual Burden Hours and Costs to Give Instructions Required by 75.1501 for New Workers

| | | Time to | | | |
|-----------|----------------------|-------------|--------|-----------|----------|
| | Total | Prepare & | | Superv. | |
| Mine Size | No. of | Give | Annual | Wage | Annual |
| by No. of | New | Instruction | Burden | Rate | Burden |
| Employees | Workers ^a | (in hrs.) | Hours | (per hr.) | Costs |
| <20 | 403.83 | 0.1 | 40.38 | 54.53 | \$2,202 |
| 20-500 | 2,598.12 | 0.1 | 259.81 | 54.53 | \$14,168 |
| >500 | 115.57 | 0.1 | 11.56 | 54.53 | \$630 |
| Total | 3,117.52 | | 311.75 | | \$17,000 |

^a Source: Table IV-6 in PREA.

At times throughout the year the person at the mine who is identified to be the responsible person will change. For purposes of this PREA, we assume that the mine supervisor would notify miners of the change by writing the name of the new responsible person on a chalkboard. On average, MSHA estimates that it would take 0.004 hours (15 seconds) to write the change on the mine chalkboard. On average, MSHA estimates that annually changes per shift would occur: 25 times in mines employing fewer than 20 workers, and 100 times in mines employing 20 or more workers. On average, the number of shifts per mine is estimated to be: 1 shift at mines employing fewer than 20 workers, 2 shifts at mines employing 20 to 500 workers, and 3 shifts at mines employing more than 500 workers.

Table 6 shows underground coal operators' annual burden hours and related costs to notify miners of changes in the person identified to be the responsible person at the mine.

Table 6: Annual Burden Hours and Costs to Notify Miners of Change of Responsible Person

| | | Annual | | Time | | | |
|-----------|--------------------|---------|--------|-------------|--------|-----------|----------|
| | | No. of | | to | | Superv. | |
| Mine Size | Total | Changes | No. | Make | Annual | Wage | Annual |
| by No. of | No. of | per | of | Change | Burden | Rate | Burden |
| Employees | Mines ^a | Shift | Shifts | (in hrs.) b | Hours | (per hr.) | Costs |
| <20 | 268 | 25 | 1 | 0.004167 | 27.92 | 54.53 | \$1,522 |
| 20-500 | 393 | 100 | 2 | 0.004167 | 327.50 | 54.53 | \$17,859 |
| >500 | 3 | 100 | 3 | 0.004167 | 3.75 | 54.53 | \$204 |
| Total | 664 | 225 | | | 359.17 | | \$19,585 |

^a Source: Table IV-7 in PREA.

^b 0.004 hrs. = (15 seconds/3,600 seconds per hr.)

<u>Proposed §75.1502(a)</u> Burden Hours and Costs for Operators to Revise Mine Evacuation Plan

All underground coal operators would need to revise their evacuation plan to include a program for the instruction of all miners in the proper evacuation procedures to be followed in the event one of the specified mine emergencies occur, and the location and use of fire-fighting equipment, location of escapeways, exits, and routes of travel to the surface. On average, MSHA estimates that revising the mine evacuation plan would take a supervisor: 2 hours in a mine employing fewer than 20 workers, 3 hours in a mine employing 20 to 500 workers, and 4 hours in mines employing more than 20 workers. In addition, on average, a clerical worker would spend 0.5 hours (30 minutes) to edit, print out, photocopy, and send the revised plan to MSHA. Since these costs only occur in the first year, they were annualized using an annualization rate of 0.07.

Table 7 shows underground coal operators' first year burden hours and related costs to revise the evacuation plan in accordance with §75.1502(a).

| Table 7: | First Year Burden Hours and Costs |
|----------|-----------------------------------|
| to | Revise Mine Evacuation Plan |

| | | Time | | | | First |
|-----------|--------------------|------------------------|----------|-------------|-----------|-------------------------|
| | | to | First | | First | Year |
| Mine Size | Total | Revise | Year | Wage | Year | Burden |
| by No. of | No. of | Plan | Burden | Rate | Burden | Costs |
| Employees | Mines ^a | (in hrs.) ^b | Hours | (per hr.) c | Costs | Annualized ^d |
| <20 | 268 | 2.5 | 670.00 | 47.66 | \$31,932 | \$2,235 |
| 20-500 | 393 | 3.5 | 1,375.50 | 49.623 | \$68,256 | \$4,778 |
| >500 | 3 | 4.5 | 13.50 | \$50.71 | \$685 | \$48 |
| Total | 664 | | 2,059.00 | | \$100,873 | \$7,061 |

^a Source: Table IV-8 in PREA.

After the underground coal operators have revised their evacuation plans to include a program in accordance with §75.1502, some operators would have their plans rejected by MSHA and therefore would need to re-revise their plan. On average, MSHA estimates that re-revising the mine evacuation plan would take a supervisor: 1 hour in a mine employing fewer than 20 workers, 1.5 hours in a mine employing 20 to 500 workers, and 2 hours in mines employing more than 20 workers. In addition, on average, a clerical worker would spend 0.3 hours (18 minutes) to edit, print out, photocopy, and send the re-revised plan to MSHA.

Table 8 shows underground coal operators' first year burden hours and related costs to re-revise the evacuation plan in accordance with §75.1502(a).

^b Time to revise evacuation plan = (r + 0.5), where r is the number of hours for a mine supervisor to revise the evacuation plan, r=2 for mines employing fewer than 20 workers, r=3 for mines employing 20 to 500 workers, and r=4 for mines employing more than 500 workers. In addition, a clerical worker would take 0.5 hours to edit, print out, photocopy, and mail the revised plan.

 $^{^{\}rm c}$ Wage rate = $((r \times s) + (t \times u)) / (r + t)$, where r is the time for the supervisor to revise the plan (noted above in footnote b), s is the hourly wage rate for a supervisor, and s=\$54.53; t is the time for the clerical worker to edit, print out, photcopy, and mail the revised plan (noted above in footnote b); u is the hourly wage rate for a clerical worker, and u=\$20.18.

^d First year burden costs annualized = first year burden costs x 0.07, where 0.07 is the annualization factor.

| Table 8: | First Year I | Burden Hours | and Costs |
|----------|--------------|---------------|-----------|
| to Rev | ise Rejected | d Mine Evacua | tion Plan |

| | | Time | | | | First |
|-----------|--------------------|------------------------|--------|-------------|---------|-------------------------|
| | | to Revise | First | | First | Year |
| Mine Size | Total | Rejected | Year | Wage | Year | Burden |
| by No. of | No. of | Plan | Burden | Rate | Burden | Costs |
| Employees | Mines ^a | (in hrs.) ^b | Hours | (per hr.) c | Costs | Annualized ^d |
| <20 | 13.40 | 1.3 | 17.42 | \$46.60 | \$812 | \$57 |
| 20-500 | 19.65 | 1.8 | 35.37 | \$48.81 | \$1,726 | \$121 |
| >500 | 0.15 | 2.3 | 0.35 | \$50.05 | \$17 | \$1 |
| Total | 33.20 | | 53.14 | | \$2,555 | \$179 |

^a Source: Table IV-8 in PREA.

Furthermore, the operator must instruct all miners in the changes that were made to the evacuation plan. On average, MSHA estimates that to prepare the instruction a mine supervisor would take: 1 hour in mines employing fewer than 20 workers, 1.5 hours in mines employing 20 to 500 workers, and 2 hours in mines employing more than 500 workers. On average, the instruction would take 0.25 hours (15 minutes) per shift. The number of shifts is estimate to be: 1 shift in mines employing fewer than 20 workers, 2 shifts in mines employing 20 to 500 workers, and 3 shifts in mines employing more than 500 workers.

Table 9 shows underground coal operators first year burden hours and related costs to prepare and instruct miners concerning changes to the evacuation plan.

^b Time to revise rejected evacuation plan = (r + 0.3), where r is the number of hours for a mine supervisor to revise a rejected evacuation plan, r=1 for mines employing fewer than 20 workers, r=1.5 for mines employing 20 to 500 workers, and r=2 for mines employing more than 500 workers. In addition, a clerical worker would take 0.3 hours to edit, print out, photocopy, and mail the revised plan.

^c Wage rate = $((r \times s) + (t \times u)) / (r + t)$, where r is the time for the supervisor to revise a rejected plan (noted above in footnote b), s is the hourly wage rate for a supervisor, and s=\$54.53; t is the time for the clerical worker to edit, print out, photocopy, and mail the revised plan (noted above in footnote b); u is the hourly wage rate for a clerical worker, and u=\$20.18.

^d First year burden costs annualized = first year burden costs x 0.07, where 0.07 is the annualization factor.

| Table 9: First Year Burden Hours and Costs to Prepare and Give |
|--|
| Instructions to Miners Concerning the Revised Evacuation Plan |

| | | Time to | | | | First |
|-----------|--------------------|------------------------|----------|-----------|----------|-------------------------|
| | | Prepare & | First | Superv. | First | Year |
| Mine Size | Total | Give | Year | Wage | Year | Burden |
| by No. of | No. of | Instruction | Burden | Rate | Burden | Costs |
| Employees | Mines ^a | (in hrs.) ^b | Hours | (per hr.) | Costs | Annualized ^c |
| <20 | 268 | 1.25 | 335.00 | 54.53 | \$18,268 | \$1,279 |
| 20-500 | 393 | 2.00 | 786.00 | 54.53 | \$42,861 | \$3,000 |
| >500 | 3 | 2.75 | 8.25 | 54.53 | \$450 | \$31 |
| Total | 664 | | 1,129.25 | | \$61,578 | \$4,310 |

^a Source: Table IV-9 in PREA.

Mine operators that have their evacuation plans rejected must re-instruct miners concerning such re-revised plans. On average, MSHA estimates that to prepare to re-instruct the mine supervisor would take: 0.5 hour in mines employing fewer than 20 workers, 0.75 hours in mines employing 20 to 500 workers, and 1 hour in mines employing more than 500 workers. On average, the re-instruction would take 0.1 hours (6 minutes) per shift. The number of shifts is estimate to be: 1 shift in mines employing fewer than 20 workers, 2 shifts in mines employing 20 to 500 workers, and 3 shifts in mines employing more than 500 workers.

Table 10 shows underground coal operators' first year burden hours and related costs to re-prepare and re-instruct miners concerning changes to the evacuation plan.

 $^{^{\}rm b}$ Time for mine supervisor to prepare and give instruction = (h + (0.25 x s)), where r is the number of hours to prepare the instruction, and h=1 for mines employing fewer than 20 workers, h=1.5 for mines employing 20 to 500 workers, and h=2 for mines employing more than 500 workers; 0.25 is the number of hours of instruction per shift; and s is the number of shifts, and s=1 for mines employing fewer than 20 workers, s=2 for mines employing 20 to 500 workers, and s=3 for mines employing more than 500 workers.

^c First year burden costs annualized = first year burden costs x 0.07, where 0.07 is the annualization factor.

<20

20-500

>500

Total

| | No. of | Time to | | | | First |
|-----------|--------------------|------------------------|--------|-----------|--------|-------------------------|
| | Mines | Re-prepare & | First | Superv. | First | Year |
| Mine Size | With | Re-give | Year | Wage | Year | Burden |
| by No. of | Rejected | Instruction | Burden | Rate | Burden | Costs |
| Employees | Plans ^a | (in hrs.) ^b | Hours | (per hr.) | Costs | Annualized ^c |

8.04

0.20

26.90

18.67

54.53

54.53

54.53

\$438

\$11

\$1,018

\$1,467

\$31

\$71

\$103

\$1

Table 10: First Year Burden Hours and Costs to Re-prepare and Re-give Instructions to Miners Concerning the Revised Evacuation Plan

13.40

19.65

0.15

33.20

0.6

1.3

0.95

Under section 75.1502(c)(1), which essentially retains and expands the requirements of existing section 75.1101-23(c)(1), the operator is required to certify by signature and date that the mine emergency evacuation drills were held in accordance with the requirements of that section. Certifications are to be kept at the mine and made available on request to an authorized representative of the Secretary. Note: MSHA is not taking burden for this section in this ICR. This burden is already covered under 1219-0054; expiration 9/30/03, however, upon approval of the final rule, ICWs will be submitted to reflect this burden being transferred from 1219-0054 to this approved collection.

Proposed §48.8(b)(4) Burden Hours and Costs to Revise Part 48 Training Plans

The annual refresher training program for all miners under §48.8 shall be revised to include the review of the procedures for maintaining and controlling ventilation, and review of the roof or ground controls plans and emergency evacuation and fire-fighting plans in effect at the mine. On average, MSHA estimates that to revise a part 48 plan would take a mine supervisor: 0.5 hours (30 minutes) in mines employing fewer than 20 workers; 0.75 hours (45 minutes) in mines employing 20 to 500 workers, and 1 hour in mines employing more than 500 workers. In addition, on average, it would take a clerical worker 0.5 hours (30 minutes) to edit, printout, photocopy, and mail the revised part 48 plan. Note: Information collection under Part 48 is currently approved by OMB (§48.3

^a Source: Table IV-10 in PREA.

^b Time for mine supervisor to prepare and give instruction = (h + (0.1 x s)), where r is the number of hours to prepare the instruction, and h=0.5 for mines employing fewer than 20 workers, h=0.75 for mines employing 20 to 500 workers, and h=1 for mines employing more than 500 workers; 0.25 is the number of hours of instruction per shift; and s is the number of shifts, and s=1 for mines employing fewer than 20 workers, s=2 for mines employing 20 to 500 workers, and s=3 for mines employing more than 500 workers.

^c First year burden costs annualized = first year burden costs x 0.07, where 0.07 is the annualization factor.

under 1219-0070, with an expiration date of 11/30/04). Upon final approval of this rule, an ICW will be submitted for 1219-0070 to reflect this revision.

Table 11 shows underground coal operators' first year burden hours and related costs to revise part 48 training plans.

Time to First Revise First Superv. Year First Mine Size Total Part 48 Year Wage Year Burden by No. of No. of Plan Burden Rate Burden Costs (in hrs.) b Mines ^a (per hr.) c Annualized ⁶ Employees Hours Costs <20 268 268.00 \$37.36 \$10.011 \$701 491.25 \$20,038 20-500 393 1.25 \$40.79 \$1,403 >500 3 1.5 4.50 \$43.08 \$194 \$14 Total 664 763.75 \$30,243 \$2,117

Table 11: First Year Burden Hours and Costs to Revise Part 48 Training Plans

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

^a Source: Table IV-11 in PREA.

^b Time for mine supervisor to revise part 48 training plan = (h + 0.5), where h is the number of hours to revise the part 48 training plan, and h=0.5 for mines employing few er than 20 workers, h=0.75 for mines employing 20 to 500 workers, and h=1 for mines employing more than 500 workers; and 0.5 is the number of hours for a clerical worker to edit, print out, photocopy, and mail revised part 48 plan.

 $^{^{\}rm c}$ Wage rate = ((r xs) + (t x u)) / (r + t), w here r is for the supervisor to revise the part 48 training plan (noted above in footnote b), s is the hourly w age rate for a supervisor, and s=\$54.53; t is the time for the clerical w orker to edit, print out, photocopy, and mail the revised plan (noted above in footnote b); u is the hourly w age rate for a clerical w orker, and u=\$20.18.

 $^{^{}m d}$ First year burden costs annualized = first year burden costs x 0.07, where 0.07 is the annualization factor.

- the time period over which costs will be incurred. Capital and startup 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.

<u>Proposed §75.1502(a) – Burden Cost for Operators to Revise Mine Evacuation</u> Plan

All underground coal operators would need to send to MSHA a revised evacuation plan. The length of the plan would be: 4 pages for mines employing fewer than 20 workers, 8 pages for mines employing 20 to 500 workers, and 12 pages for mines employing more than 500 workers. Photocopy costs are \$0.15 per page. Postage costs are: \$1 for mines employing fewer than 20 workers, \$2 for mines employing 20 to 500 workers, and \$3 for mines employing more than 500 workers. The number of mines affected are: 268 mines employing fewer than 20 workers, 393 mines employing 20 to 500 workers, and 3 mines employing more than 500 workers. Since the costs occur only once, they are annualized using a factor of 0.07.

```
268 mines x ((\$0.15 per pg. x 4 pgs.) + \$1) x 0.07 = \$30
393 mines x ((\$0.15 per pg. x 8 pgs.) + \$2) x 0.07 = \$88
3 mines x ((\$0.15 per pg. x 12 pgs.) + \$3) x 0.07 = \$1
Total first year costs annualized \$119
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After the underground coal operators have revised their evacuation plans to include a program in accordance with §75.1502, some operators would have their plans rejected by MSHA and therefore would need to re-revise their plans and send those re-revised plans into MSHA. The length of the re-revised plan would be: 4 pages for mines employing fewer than 20 workers, 8 pages for mines employing 20 to 500 workers, and 12 pages for mines employing more than 500 workers. Photocopy costs are \$0.15 per page. Postage costs are: \$1 for mines employing fewer than 20 workers, \$2 for mines employing 20 to 500 workers, and \$3 for mines employing more than 500 workers. The number of mines affected are: 13 mines employing fewer than 20 workers, 20 mines employing 20 to 500 workers, and 0.2 mines employing more than 500 workers. Since the costs only occur once, they are annualized using a factor of 0.07.

```
13 mines x ((\$0.15 per pg. x 4 pgs.) + \$1) x 0.07 = \$2
20 mines x ((\$0.15 per pg. x 8 pgs.) + \$2) x 0.07 = \$5
0.2 mines x ((\$0.15 per pg. x 12 pgs.) + \$3) x 0.07 = \$1
Total first year costs annualized \$8
```

Proposed §48.8(b)(4) Burden Costs to Revise Part 48 Training Plans

All mines must revise their annual refresher training programs. The length of the plan would be: 8 pages for mines employing fewer than 20 workers, 12 pages for mines employing 20 to 500 workers, and 16 pages for mines employing more than 500 workers. Photocopy costs are \$0.15 per page. Postage costs are: \$2 for mines employing fewer than 20 workers, \$3 for mines employing 20 to 500 workers, and \$4 for mines employing more than 500 workers. The number of mines affected are: 268 mines employing fewer than 20 workers, 393 mines employing 20 to 500 workers, and 3 mines employing more than 500 workers. Since the costs only occur once they are annualized using a factor of 0.07.

```
268 mines x ((\$0.15 per pg. x 8 pgs.) + \$2) x 0.07 = \$60
393 mines x ((\$0.15 per pg. x 12 pgs.) + \$3) x 0.07 = \$132
3 mines x ((\$0.15 per pg. x 16 pgs.) + \$4) x 0.07 = \$132
Total first year costs annualized \$193
```

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.

As a result of this rulemaking, MSHA would have to examine mine operators' revised evacuation plans and part 48 training plans. The rule does not require mine operators to make annual revisions to such plans. Rather, the rule requires that operators make a one-time revision to their evacuation and part 48 plans. Currently, MSHA staff is routinely involved in examining revisions to various types of plans submitted by mine operators. MSHA current staff is capable of handling the one-time revisions that would be required by this rulemaking.

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

<u>Respondents:</u> There has been an increase of 664 respondents (0 to 664). In the first year of the rule <u>each</u> underground coal mine would be required to submit to MSHA a mine emergency evacuation and fire-fighting program no later than 30 days from the date of publication of this ETS. This encompasses all 664 underground coal mines.

<u>Responses:</u> There has been an increase of 55,908 responses (0 to 55,908). Each task required by this rule involve the mine operators' cumulative response from varying combinations of "groups", i.e. each mine, each shift, and/or each coal miner. After the first year; however, those applicable responses will be removed from the total number of responses.

<u>Hours:</u> There has been an increase of 5,010 hours (0 to 5,010). Issuance of this emergency standard is an extraordinary measure by which MSHA is able to react quickly to grave dangers that threaten miners. The burden hours associated with this rule are the minimum necessary to ensure miners receive the required training in miner emergency evacuation procedures and fire-fighting plans. 4,304 hours are attributed to the first year of this rule and therefore will be removed in subsequent years.

<u>Costs:</u> There is no cost associated with this rule. This is not a technology-forcing standard. This emergency standard addresses revisions to mine emergency evacuation plans and associated training. It does not require underground coal mines to procure any addition equipment; therefore, costs are miniscule.

16. For collections of information whose results will be published, outline plans for tabulations, and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates and 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 has no forms associated with this collection of information on which to display an expiration date.

18. Explain each exception to the certification statement identified in Item 19, "Certification for Paperwork Reduction Act Submission," of OMB 83-I.

There are no certification exceptions identified with this information collection.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

The agency should be prepared to justify its decision not to use statistical methods in any case where such methods might reduce burden or improve accuracy of results. When Item 17 on the Form OMB 83-I is checked "Yes", the following documentation should be included in the Supporting Statement to the extent that it applies to the methods proposed:

- 1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.
- 2. Describe the procedures for the collection of information including:
 - Statistical methodology for stratification and sample selection,
 - Estimation procedure,
 - Degree of accuracy needed for the purpose described in the justification,
 - Unusual problems requiring specialized sampling procedures, and
 - Any use of periodic (less frequent than annual) data collection cycles to reduce burden.
- 3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.
- 4. Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to

minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of tests may be submitted for approval separately or in combination with the main collection of information.

5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other persons(s) who will actually collect and/or analyze the information for the agency.

The collection of this information does not employ statistical methods.