SUPPORTING STATEMENT

30 C.F.R §§75.1321, 75.1327, and 77.1909-1 - Applications for a permit to fire more than 20 boreholes and for the use of non-permissible blasting units or for the posting of notices of misfired holes (pertaining to underground coal mines) and the use of nonpermissible explosives and shotfiring units in shaft and slope construction (pertains to coal mining industry).

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.

Under Section 313 of the Federal Mine Safety and Health Act of 1977 (Mine Act), 30 U.S.C. § 873, any explosives used in underground coal mines must be permissible. The Mine Act also provides that under safeguards prescribed by the Secretary of Labor, a mine operator may permit the firing of more than 20 shots and the use of nonpermissible explosives in sinking shafts and slopes from the surface in rock. Title 30 C.F.R. § 75.1321 outlines the procedures by which a permit may be issued for the firing of more than 20 boreholes and/or the use of nonpermissible shot-firing units in underground coal mines. In those instances in which there is a misfire of explosives, 30 C.F.R. § 75.1327 requires that a qualified person post each accessible entrance to the affected area with a warning to prohibit entry. Title 30 C.F.R. § 77.1909-1 outlines the procedures by which a coal mine operator may apply for a permit to use nonpermissible explosives and/or shot-firing units in the blasting of rock while sinking shafts or slopes for underground coal mines.

To obtain a permit, the mine operator files an application with the MSHA district manager in the district in which the mine is located. Applications may be mailed or faxed, using company letterhead stationery and should contain the name and address of the mine, the designated active workings in which the units will be used and the approximate number of shots to be fired, the period of time during which such units are to be used, the nature of the development or construction for which they will be used, a plan to protect miners, a statement of the specific hazards anticipated, and the method to be employed to avoid the dangers anticipated.

The district manager may permit the firing of more than 20 boreholes of permissible explosives in a round where he has determined that it is

necessary to reduce the overall
hazard to which miners are exposed during underground blasting. The district manager issues a permit to use nonpermissible items when he finds that a permissible shot-firing unit does not have adequate blasting capacity and the use of such permissible units will create development or construction hazards. As a condition of use, the district manager may include safeguards, in addition to those proposed by the operator, that he determines are necessary to protect the safety of the miners at the time the blasting is permitted.

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.

MSHA uses the information requested to issue a permit to the mine operator for the use of nonpermissible explosives and/or shot-firing units. The permit informs mine management and the miners of the steps to be employed to protect the safety of any person exposed to such blasting while using nonpermissible items.

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. The applications to use nonpermissible blasting units, to fire more than 20 bore holes or to use nonpermissible explosives and/or non-permissible blasting units in shaft or slope construction are narrative descriptions of the equipment and explosives to be used, the number and pattern of the bore holes to be fired and the safety precautions to be employed and may include schematics, tables and drawings. Such narrative plans and simple graphics can be prepared using personal computers and word processing programs and submitted via E-mail, where the mine operator has the capability of affixing transmittable authorization signatures or where the E-mail or facsimile is followed by a signed hard copy. However, neither the use of nor absence of access to electronic media significantly affect the burden imposed by the standard.

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 is no similar or duplicate information that could be used. Permits are issued on a mine-by-mine basis for a period of time specified by the district manager. As far as could be determined, no state agency or other party requires such permit approval.

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.

This information collection does not have a significant impact on small businesses or other small entities. However, MSHA has made available on our web-site various sources of information, such as "Technical Assistance," "Best Practices," and an "Accident Prevention" site. These provide tips and general information on various topics.

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.

In the absence of this collection, or permits for blasting units, explosives and shot-firing units, the mine operator or shaft and slope contractors would be putting the miners at risk. There would be no guarantee that the mine operator would have a plan designed to ensure the protection of life and the prevention of injuries to the miners exposed to underground blasting. In addition to the lack of accountability on the part of the mine operator for the miners' health and safety, MSHA would not be able to effectively enforce the requirements of the Federal Mine Safety and Health Act of 1977.

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.**

Permit applications, which contain all pertinent information, are submitted only one time at any given mine. There are no requirements for the respondent to report the ongoing or occasional use of the District Manager approved blasting plan, including the use of nonpermissible blasting units or the firing of more than 20 boreholes. Although a mine operator is not explicitly required to submit information more than once, revised applications would need to be submitted to MSHA any time the conditions outlined in item 6 of this statement occur. This collection of information is otherwise consistent with the guidelines in 5 C.F.R. § 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. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.
Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years -- even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.

MSHA published a 60-day preclearance Federal Register notice on February 9, 2007 (Volume 72, Number 27, Page 6296), soliciting public comments regarding the extension of this information collection. No comments were received.

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.

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 the respondents.

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~~ 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.**

Based on FY 2005 records, MSHA estimates that approximately 50 permit applications (19 under § 75.1321 and 29 under § 77.1909-1) will be received each year. MSHA safety specialists estimate that it would take a mine operator approximately one hour to prepare and submit a permit application:

50 applications x 1 hour/application = 50 hours

MSHA experience indicates that the permit applications are prepared by engineers and other technically trained persons. As such, MSHA estimates the cost per hour for preparation to be $57.82 (Salaries based on data from the U.S. Coal Mine Salaries, Wages, & Benefits - 2005 Hourly Wage Rates for

Coal Mines):

50 hours x $57.82/hour = $2,891

On occasion, the use of explosives may result in the misfire of some of those explosives. In such cases, a qualified person is required to post a conspicuous warning notice at the entrance to the affected area. The number of active mining units using explosives to break coal has declined from 43 in January 2004 to 42 in December 2006. MSHA correspondingly estimates that the number of misfired bore holes requiring notices has proportionally decreased. MSHA estimates that not more than 57 misfires occur each year and that it takes approximately 20 minutes (0.33 hours) to post a notice warning that an undisposed of misfire is present. The 2005 Hourly Wage Rate for a coal miner is estimated to be $26.55 per hour.

57 notices x 0.33 hours /notice = 19 hours

19 hours x $26.55/hour = $504

Total Burden Hours = 69

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.**

MSHA estimates that the narrative and any tables, charts or drawing created for use in the permit application can be produced on normal office equipment used in the customary and usual course of business. Applications submitted by email only would not incur mailing costs. When mailing is used, MSHA estimates that it will cost approximately $5.33 to mail each application (FY 2003 cost inflated by Consumer Price Index to FY 2005):

50 applications x $5.33/application = $267

MSHA also estimates that the notices warning of a misfire will be non-reusable, pre-printed “danger / misfire” placards costing approximately $6.45 each (FY 2003 cost inflated by Consumer Price Index to FY 2005):

57 postings x $6.45 = $368

Total Burden Cost = $635

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.

MSHA estimates that the review and preparation of a written response approving or disapproving a permit application requires approximately four hours. Applications are reviewed by MSHA technical specialists earning approximately $30.57 per hour (U.S. Office of Personnel Management General Schedule FY 2007 wage rate for Coal Mine Inspector GS-12/5).

50 applications x 4 hours = 200 hours
200 hours x $30.57/hour = $6,114

Cost to the Federal Government = $6,114

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

The number of burden hours (from 67 to 69), responses (from 105 to 107), applications for permits (from 48 to 50) and the number of misfire notices (57) has remained relatively stable.

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 either display or not display the expiration date for OMB approval of this information collection. There are no forms associated with this information collection 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.

MSHA is not requesting an exception to the certification statement.

B. Collection of Information Employment 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 methods 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 frequently 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 person(s) who will actually collect and/or analyze the information for the agency.

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

Federal Mine Safety & Health Act of 1977, Public Law 91-173, as amended by Public Law 95-164*

BLASTING AND EXPLOSIVES

SEC. 313. (a) Black blasting powder shall not be stored or used underground. Mudcaps (adobes) or other unconfined shots shall not be fired underground.

(b) Explosives and detonators shall be kept in separate containers until immediately before blasting. In underground anthracite mines, (1) mudcaps or other open, unconfined shake shots may be fired, if restricted to battery starting when methane or a fire hazard is not present, and if it is otherwise impracticable to start the battery; (2) open, unconfined shake shots in pitching veins may be fired, when no methane or fire hazard is present, if the taking down of loose hanging coal by other means is too hazardous; and (3) tests for methane shall be made immediately before such shots are fired and if 1.0 volume per centum or more of methane is present, when tested, such shot shall not be made until the methane content is reduced below 1.0 volume per centum.

(c) Except as provided in this subsection, in all underground areas of a coal mine only permissible explosives, electric detonators of proper strength, and permissible blasting devices shall be used and all explosives and blasting devices shall be used in a permissible manner. Permissible explosives shall be fired only with permissible shot firing units. Only incombustible materials shall be used for stemming boreholes. The Secretary may, under such safeguards as he may prescribe, permit the firing of more than twenty shots and allow the use of nonpermissible explosives in sinking shafts and slopes from the surface in rock. Nothing in this section shall prohibit the use of compressed air blasting.

(d) Explosives or detonators carried anywhere underground in a coal mine by any person shall be in containers constructed of non-conductive material, maintained in good condition, and kept closed.

(e) Explosives or detonators shall be transported in special closed containers (1) in cars moved by means of a locomotive or rope, (2) on belts, (3) in shuttle cars, or (4) in equipment designed especially to transport such explosives or detonators.

(f) When supplies of explosives and detonators for use in one or more working sections are stored underground, they shall be kept in section boxes or magazines of substantial construction with no metal exposed on the inside, located at least twenty-five feet from roadways and power wires, and in a dry, well rock-dusted location protected from falls of roof, except in pitching beds, where it is not possible to comply with the location requirement, such boxes shall be placed in niches cut into the solid coal or rock.

(g) Explosives and detonators stored in the working places shall be kept in separate closed containers which shall be located out of the line of blast and not less than fifty feet from the working face and fifteen feet from any pipeline, powerline, rail, or conveyor, except that, if kept in niches in the rib, the distance from any pipeline, powerline, rail, or conveyor shall be at least five feet. Such explosives and detonators, when stored, shall be separated by a distance of at least five feet.

[Code of Federal Regulations]
[Title 30, Volume 1]
[Revised as of July 1, 2006]
From the U.S. Government Printing Office via GPO Access
[CITE: 30CFR75.1321]
[Page 575-576]

TITLE 30--MINERAL RESOURCES

CHAPTER I--MINE SAFETY AND HEALTH ADMINISTRATION, DEPARTMENT OF LABOR
PART 75_MANDATORY SAFETY STANDARDS_UNDERGROUND COAL MINES--Table of Contents

Subpart N_Explosives and Blasting

Sec. 75.1321 Permits for firing more than 20 boreholes and for use of nonpermissible blasting units.

(a) Applications for permits for firing more than 20 boreholes in a round and for the use of nonpermissible blasting units shall be submitted in writing to the District Manager for the district in which the mine is located and shall contain the following information:

(1) The name and address of the mine;

(2) The active workings in the mine affected by the permit and the approximate number of boreholes to be fired;

(3) The period of time during which the permit will apply;

(4) The nature of the development or construction for which they will be used, e.g., overcasts, undercasts, track grading, roof brushing or boom holes;

(5) A plan, proposed by the operator designed to protect miners in the mine from the hazards of methane and other explosive gases during each multiple shot, e.g., changes in the mine ventilation system, provisions for auxiliary ventilation and any other safeguards necessary to minimize such hazards;

(6) A statement of the specific hazards anticipated by the operator in blasting for overcasts, undercasts, track grading, brushing of roof, boom holes or other unusual blasting situations such as coalbeds of abnormal thickness; and

(7) The method to be employed to avoid the dangers anticipated during development or construction which will ensure the protection of life and the prevention of injuries to the miners exposed to such underground blasting.

(b) The District Manager may permit the firing of more than 20 boreholes of permissible explosives in a round where he has determined that it is necessary to reduce the overall hazard to which miners are exposed during underground

[[Page 576]]

blasting. He may also permit the use of nonpermissible blasting units if he finds that a permissible blasting unit does not have adequate blasting capacity and that the use of such permissible units will create any of the following development or construction hazards:

(1) Exposure to disturbed roof in an adjacent cavity while scaling

and supporting the remaining roof prior to wiring a new series of boreholes;

(2) Exposure to underburden boreholes where prior rounds have removed the burden adjacent to a remaining borehole;

(3) Exposure to an unsupported roof while redrilling large fragmented roof rock following the loss of predrilled boreholes during earlier blasting operations; or

(4) Any other hazard created by the use of permissible blasting units during underground development or construction.

(c) Permits shall be issued on a mine-by-mine basis for periods of time to be specified by the District Manager.

(d) Permits issued under this section shall specify and include as a condition of their use, any safeguards, in addition to those proposed by the operator, which the District Manager issuing such permit has determined will be required to ensure the welfare of the miners employed in the mine at the time of the blasting permitted.

[35 FR 17890, Nov. 20, 1970, as amended at 60 FR 33723, June 29, 1995]

[Code of Federal Regulations]
[Title 30, Volume 1]
[Revised as of July 1, 2006]
From the U.S. Government Printing Office via GPO Access
[CITE: 30CFR75.1327]
[Page 577]

TITLE 30--MINERAL RESOURCES

CHAPTER I--MINE SAFETY AND HEALTH ADMINISTRATION, DEPARTMENT OF LABOR
PART 75_MANDATORY SAFETY STANDARDS_UNDERGROUND COAL MINES--Table of Contents

Subpart N_Explosives and Blasting

Sec. 75.1327 Misfires.

(a) When misfires occur, only work by a qualified person to dispose of misfires and other work necessary to protect persons shall be done in the affected area.

(b) When a misfire cannot be disposed of--

(1) A qualified person shall post each accessible entrance to the area affected by the hazard of the misfire with a warning at a conspicuous location to prohibit entry; and

(2) The misfire shall be immediately reported to mine management.

[53 FR 46786, Nov. 18, 1988; 54 FR 27641, June 30, 1989]

[Code of Federal Regulations]
[Title 30, Volume 1]
[Revised as of July 1, 2006]
From the U.S. Government Printing Office via GPO Access
[CITE: 30CFR77]

[Page 671]

TITLE 30--MINERAL RESOURCES

CHAPTER I--MINE SAFETY AND HEALTH ADMINISTRATION, DEPARTMENT OF LABOR

PART 77_MANDATORY SAFETY STANDARDS, SURFACE COAL MINES AND SURFACE WORK AREAS OF UNDERGROUND COAL MINES--Table of Contents

Subpart T_Slope and Shaft Sinking

Sec. 77.1909-1 Use of nonpermissible explosives and nonpermissible shot-firing units; approval by Health and Safety District Manager.

Where the Coal Mine Health and Safety District Manager has determined that the use of nonpermissible explosives and nonpermissible shot-firing units will not pose a hazard to any person during the development of a slope or shaft, he may, after written application by the operator, approve the use of such explosives and shot-firing units and issue a permit for the use of such explosives and devices setting forth the safeguards to be employed by the operator to protect the health and safety of any person exposed to such blasting.

(Pub. L. No. 96-511, 94 Stat. 2812 (44 U.S.C. 3501 et seq.))

[36 FR 9364, May 22, 1971, as amended at 60 FR 33723, June 29, 1995]