Federal Register

Friday,

December 30, 2005

Part VII

Department of Labor

Mine Safety and Health Administration

30 CFR Part 48

Shaft and Slope Construction Workers at Underground Mines and Surface Areas of Underground Mines; Final Rule

30 CFR Part 75

Low- and Medium-Voltage Diesel-Powered Electrical Generators; Final Rule

DEPARTMENT OF LABOR

Mine Safety and Health Administration

30 CFR Part 48

RIN 1219–AB35

Training Standards for Shaft and Slope Construction Workers at Underground Mines and Surface Areas of Underground Mines

AGENCY: Mine Safety and Health Administration (MSHA), Labor.

ACTION: Final rule.

SUMMARY: We (MSHA) are revising certain provisions of our regulations addressing the training and retraining of miners. This final rule removes the training exclusion for shaft and slope construction workers. Shaft and slope construction workers will now receive training for new miners, training for experienced miners, task training, annual refresher training, and hazard training. The rule will provide shaft and slope construction workers with the same type of safety and health training afforded other miners.

EFFECTIVE DATE: This regulation is effective June 28, 2006, except that §§ 48.3(o) and 48.23(o) are effective December 30, 2005.

FOR FURTHER INFORMATION CONTACT: Rebecca J. Smith, Acting Director, Office of Standards, Regulations and Variances, MSHA; 1100 Wilson Boulevard, Room 2350, Arlington, Virginia 22209–3939; telephone (202) 693–9440; e-mail: *Smith.Rebecca@dol.gov;* or facsimile (202) 693–9441. The final rule is available on the Internet at *http://www.msha.gov/REGINFO.HTM.*

SUPPLEMENTARY INFORMATION: The preamble to this final rule discusses the proposed requirements for training shaft and slope construction workers, comments received on the proposed rule, our analysis of accident and injury data, and the section-by-section discussion of our final rule determinations. To help the reader, the preamble discussion follows this outline:

I. Background

On October 13, 1978, we promulgated regulations concerning the training and retraining of miners in Title 30 Code of Federal Regulations (CFR) part 48 (43 FR 47453), as provided for in section 115 of the Federal Mine Safety and Health Act of 1977 (Mine Act), 30 U.S.C. 825. Section 115(d) also provided that the Secretary of Labor promulgate ''appropriate standards for safety and health training for coal or other construction workers.'' Accordingly, we determined that certain underground mine construction workers were exposed to significant mining hazards in ongoing operations, and included those construction workers under the coverage of part 48 training standards published in 1978. However, we specifically excluded from the coverage certain other construction workers including shaft and slope construction workers.

On September 30, 1999, we published a final rule, 30 CFR part 46, (64 FR 53080), containing training requirements for specific sectors of the mining industry, including shell dredging, sand, gravel, surface stone, surface clay, colloidal phosphate, and surface limestone mines. That rule covers, among other miners, construction workers who are exposed to hazards of mining operations.

Following the January 2003 accident that occurred during shaft construction at the McElroy Mine, we reviewed mine fatality records from January 1982 through August 2003. The review indicated that miners performing shaft and slope construction work should receive the same training as other underground and surface miners. On July 16, 2004, we proposed to remove the part 48 training exclusion for shaft and slope construction workers (69 FR 42841). Under the proposed rule, shaft and slope construction workers would be treated like extraction and production miners and subject to the part 48 training requirements.

The public was invited to submit comments. We held hearings in Salt Lake City, Utah on August 24, 2004, and Arlington, Virginia on August 26, 2004. The hearing record remained open until September 14, 2004 for post-hearing comments. Eight persons presented oral comments at the hearings, and we received six written comments. Most of the commenters were from the shaft and slope construction industry. All of the comments have been considered in the development of this final rule.

II. Discussion of Final Rule

A. Introduction

The final rule eliminates the part 48 training exclusion found in §§ 48.2(a)(1)(i) and 48.22(a)(1)(i) for shaft and slope construction workers. ''Shaft and slope construction workers'' include ''shaft and slope workers'' and ''workers engaged in construction

activities ancillary to shaft and slope sinking.'' Under this final rule, these miners will receive comprehensive safety and health training like other miners who are significantly exposed to mining hazards. Shaft and slope construction operators, like other mine operators, must train their miners according to an MSHA approved training plan.

There is a clear need for this rule. As discussed in the preamble to the proposed rule (64 FR 42841), we reviewed mine accident fatality records from January 1982 through August 2003. In that period, there were 15 fatalities among miners performing shaft and slope construction work, including the shaft construction accident at McElroy Mine in West Virginia in January 2003 that took the lives of three miners. One commenter took exception to the inclusion in our fatality data of four miners who were fatally injured in capping a shaft at the Blacksville No. 1 mine in 1992. The commenter contended that this event involved construction work in and around a surface mine, and had nothing to do with the actual mining process or the development of the shaft. While it is true that the operator was closing a shaft, we believe that shaft construction can reasonably include such additional construction necessary to effect closure.

Some commenters maintained that this rule is not appropriate for the shaft and slope construction industry. They said that the rule would be burdensome and our estimated costs were too low. In calculating the costs of the proposed rule, we used mining industry-wide data as the basis for turnover rate, retention rate, and miners' level of experience. The commenters, however, disputed these assumptions as inaccurate for the shaft and slope sector. Based on their comments and our reanalysis of the data, we have recalculated the costs of the rule and, while having increased our cost estimates, we have concluded that the rule is economically feasible, as explained in Section III in this preamble and in the Regulatory Economic Analysis (REA).

Analysis of Accident and Injury Data

Commenters were concerned about the appropriateness of the 40 hour new underground miner training requirement. In response to these comments, we further analyzed the accident rate data for new miners obtained from our part 50 database (Notification, Investigation, Reports and Records of Accidents, Injuries, Illnesses, Employment, and Coal Production in Mines) for the period January 1994 through March 14, 2005. Mine operators and independent contractors, including shaft and slope construction operators, are required to file these reports.

The purpose of this analysis was to further evaluate the need for comprehensive training. This analysis is a snapshot of a subset of the current shaft and slope industry. It is indicative of safety performance.

There were 219,703 accidents reported in the period, January 1994 to March 14, 2005. For comparative purposes we did a separate analysis of: (1) Employee accidents from all mining operations, (2) six shaft and slope construction companies, five of which, according to one commenter represented the majority of the shaft and slope industry, and (3) all independent contractors excluding the six shaft and slope construction companies. We eliminated all records where no data was entered in the field for ''Total Mining Experience.'' We counted all reported accidents of miners, shaft and slope construction workers, and independent contractors with one year or less of total mining experience. Table 1 outlines the results of our analysis:

TABLE 1.—REPORTED ACCIDENTS—MINERS WITH LESS THAN ONE YEAR OF TOTAL MINING EXPERIENCE

Class	Total accidents reported	1 year or less	Percent
Mine Employees [1]	161,160	19,783	12.27
Independent Contractor Employees [2]	11,542	3,699	32.05
Shaft and Slope Employees	583	257	44.08

[1] Excludes independent contractors and the six shaft and slope construction companies.
[2] Excludes shaft and slope construction companies.

We found that in the mining industry, excluding all independent contractors, new miners account for 12.27% of the total reported accidents for that group. For independent contractors, excluding shaft and slope companies, new miners were involved in 32.05% of the total. By contrast, new shaft and slope construction workers accounted for 44.08% of the total accidents reported for that group.

We further reviewed the nonfatal days lost (NFDL) injury incidence rate for six shaft and slope construction companies, and compared their rates to the average rates for all underground and surface areas of underground coal mines and metal/nonmetal mines. These incidence rates, which represent the number of NFDL injuries per 200,000 miner hours, are calculated from the part 50 accident reports submitted to us and cover injuries of all miners, including experienced miners. The results are summarized in Table 2.

TABLE 2.—NFDL INCIDENCE RATES

Year	Metal UG & surf. at UG operations	Coal UG & surf. at UG operations	Shaft & slope
2003	3.98	6.44	9.45
2002	3.69	7.44	16.79
2001	3.82	7.32	9.72
2000	5.38	8.34	18.66
1999	5.82	8.16	20.26
1998	6.09	8.82	13.37
1997	5.48	8.28	10.44
1996	6.31	8.7	15.93

TABLE 2.—NFDL INCIDENCE RATES—Continued

Year	Metal UG & surf. at UG operations	Coal UG & ≤ surf. at UG operations	Shaft & slope
1995	5.79	10.18	13.7

The injury rate for shaft and slope construction is higher than the rest of the mining industry. The results from both tables 1 and 2 indicate that shaft and slope work is dangerous and that shaft and slope miners should be provided the same comprehensive training as other miners.

We received comments suggesting that the hazards shaft and slope construction workers face are distinguishable from those faced by other miners. To address these comments, we further reviewed the data from January 1994 through March 14, 2005 for the type of accident classifications these three groups had reported. Table 3 outlines the findings.

TABLE 3.—TOP FIVE ACCIDENT CLASSIFICATIONS

Ranking	Accident classification	Mining operations (percent)	Independent contractors (percent)	Shaft & slope construction operations (percent)
1	Handling of Materials	32.44	31.87	27.24
2	Slip or Fall Of Person	18.19	20.74	17.90
3	Machinery	13.49	14.95	26.46
4	Handtools (nonpowered)	12.46	11.68	6.23
5	Powered Haulage	8.74	9.33	5.45

As indicated in Table 3, mining operations, independent contractors, and shaft and slope construction operations have the same top five accident classifications. While the comparative percentages may vary between mining sectors, the data generally indicate the similarities in accident types throughout mining, including shaft and slope construction.

One commenter said that hazards from working at heights distinguish shaft and slope construction from other mining. Yet, the data in Table 3 suggest that, to the extent slip and fall hazards correlate to heights, all miners experience about the same percentage of slip and fall accidents.

Comparative Tasks and Hazards

In proposing the rule, we found that the tasks performed and hazards encountered by shaft and slope construction workers were similar to those of other miners already covered under the part 48 training provisions. Commenters stated, however, that shaft and slope work is unique from mining and should have its own training requirements. They said that special training requirements for their industry should be incorporated under a new part 48, subpart C. Commenters said that shaft and slope construction work is like other mine construction work and differs from mining. Specifically, the commenters noted particular tasks and hazards characteristic of shaft and slope work, which takes place in a ''vertical environment.'' The commenters also cited hazards incident to heights, lifting, uneven ground, pinch points, chemicals, noise, mine gases, compressed air, hoisting, and electricity. But these hazards are found in other types of mining operations, where miners work in confined spaces, handle materials, work in proximity to mobile equipment, and with and around wire rope, and explosives and blasting and encounter falling or sloughing material from roof and ribs.

The commenters also mentioned certain tasks specific to shaft and slope construction, including welding, hoisting, drilling, blasting, and mucking. While there may be some tasks that are more characteristic, in degree or kind, to shaft and slope work, similar tasks are conducted at other mining operations. For example, in many cases shotcreting and mucking done in shaft and slope work is like shotcreting and mucking done by ''muckers'' in other mining operations. Both shaft and slope construction operations and active mines drill, blast, and muck.

Diverse Small and Mobile Crews

Commenters described a diverse shaft and slope construction industry, encompassing various locales, projects, mining methods and crews. The commenters were concerned that one type of training would not fit all.

Mining operations, which are already subject to part 48, range from massive underground coal mines to small surface hard rock operations in remote areas. These mining operations employ a variety of mining methods and tasks, exposing miners to a broad array of safety and health hazards that are addressed under the flexible training approach of part 48. Similarly, part 48 applies to different types of mine operators in different settings, including a variety of independent contractors who are on mine property temporarily. Some mobile equipment operators, for example, travel to different sites, and may not have a formal office. For over 26 years, part 48 has successfully covered mining operations of varying sizes, locations, circumstances, and conditions.

Commenters pointed to high turnover rates in certain types of shaft and slope construction operations, especially conventional underground work. They were especially concerned about the availability of trained labor in remote areas. Shaft and slope crews may be small, they said, and dependent upon all miners showing up ready to work for the project to progress on time.

There are many independent contractors in mining working in small crews. It is our understanding that these mining operations may hire from a local labor force that has already received 32 hours of underground new miner training. The training may be provided through vocational-technical schools or cooperative programs. Typically, where state grant programs provide this training, they offer 32 hours of new miner training for underground mining at a reasonable cost or for no cost. With

32 hours of training completed, 8 hours of mine site training are given by the operator. These new miner training programs available to the industry have helped create the labor pool that operators may draw from quickly.

We are mindful that causes for crew shortages extend beyond turnover and training, for example, sickness and personal emergencies. Short-term crew shortages commonly are handled by cross-shifting the miners.

We expect training may facilitate a ready labor pool. Training could alert prospective miners about a job that is not right for them, causing them to withdraw from consideration. By taking the initiative to be trained, new miners may be less likely to prematurely leave a job for which they have invested an amount of time and possibly money prior to employment. Further, contractors may retroactively compensate miners for the training costs after working a specified period of time. This may reduce the high turnover rates experienced by the industry.

We understand that small crews are particularly characteristic of raised bore drilling, which constitutes a small proportion of shaft and slope construction projects. We also understand that this type of shaft and slope work does not experience the turnover rate of conventional projects. Raised bore drilling is mainly from the surface; therefore, the 24-hour new miner training applies. This allows, with District Manager approval, for 8 hours of pre-work training, with the remaining 16 hours to be done within 60 calendar days following assignment (known as the 8/16 split). This training conforms to the preferred approach advocated by commenters who give their miners 8 hours of orientation training and then proceed to train them incrementally following assignment.

Applicability of Part 48 Training

Several commenters questioned the subject-matter applicability of part 48 training to shaft and slope construction work. They said that part 48 training was designed for ''miners'' and is not relevant or useful to shaft and slope construction workers. The commenters' primary concern, however, appears to be the 40 hour requirement (in existing § 48.5) for new underground miners.

We considered the relevance to shaft and slope construction operations of each of the courses required in the new miner training program under existing § 48.5. Following is a discussion of the applicability of the existing § 48.5 new miner training requirements to shaft and slope construction workers.

1. *Miners' rights*—This course provides all miners with important information on supervisory responsibilities, company policies, and Mine Act rights impacting safety and health, such as protection in reporting hazardous conditions.

2. *Self-rescue and respiratory devices*—These devices are important for all miners working in an underground mine, including drillers and blasters. The training can be vital for shaft and slope miners because their work area is essentially a ''one entry'' system. In addition, if the shaft and slope intersects with an existing mine, there is exposure to that mine's atmosphere.

3. *Entering and leaving the mine; transportation; communications*—While we recognize that some shaft and slopes are not complex, shaft and slope miners need to be instructed in how to safely enter, exit, and handle buckets, cages, or other conveyances, as well as hoists and cranes. Also important is their knowledge of the differences between transportation of personnel and material, as well as communication systems, such as how to operate the bell system and use a pager telephone. Instruction in the use of a workdeck is needed, especially when the workdeck is the secondary means of exit from a shaft.

4. *Introduction to the work environment*—This course is mine-specific, focusing on a representative part of the operation and mining method used. Mine operators cover this training during the mine-site training required by part 48. For shaft and slope work, it could emphasize the confined spaces involved and provide some appreciation of the associated hazards. The new miner could observe hoisting activities and became familiarized with the equipment, particularly pneumatic equipment used in shaft and slope work. We recognize that shaft and slope construction, like other mining, goes through different phases and that training for those environments can also be covered in subsequent annual refresher training and new task training.

5. *Mine map; escapeways; emergency evacuation; barricading*—This course focuses on emergency procedures, which all types of operations must have. The confined spaces and limited means of access in shaft and slope construction can make an emergency even more significant. As with all mining operations, applicable training adapted to the particular operation is the objective.

6. *Roof or ground control and ventilation plans*—This course covers key features regulating ground control and ventilation. At coal mines, these features are described in the plan submitted by the shaft and slope construction operator as required by 30 CFR part 77, subpart T (Slope and Shaft Sinking). Roof and ground conditions are constantly changing in shaft and slope work, and miners are regularly exposed to unsupported ribs during the drill-blast-muck-line shaft cycle. Miners need to be instructed in examination methods, so they can recognize failing or inadequate roof support and maintain adequate ventilation.

7. *Health*—This course covers the purposes of taking exposure measurements, which is required as part of the shaft and slope construction plan for coal mines. Shaft and slope miners are commonly exposed to dust, noise, and chemicals. They are exposed to dust while drilling and mucking, and may be involved in activities that exceed noise action levels. The training also includes the operators' hazard communication program, which is vital for shaft and slope miners who work with and around oils, diesel fuel, concrete additives, and other hazardous chemicals.

8. *Cleanup; rock dusting*—Cleanup is essential on a workdeck or elevated platform to remove tripping hazards and falls from elevations, and to prevent loose materials from falling and striking someone below. Water may make the workdeck extremely slick, and good housekeeping minimizes slipping hazards. The rock dust component of this training applies to those shaft and slope projects involving rock dusting. When shaft and slope development reaches a coal seam, the rock dusting program becomes important for miners who may spend considerable time in a ''coal environment.''

9. *Hazard recognition*—This is key training in any safety and health program. Shaft and slope construction hazards, like those of other mining operations, involve working in confined spaces, handling materials, and working in proximity to mobile equipment. The hazards also include slips and falls, falling or sloughing materials from roof and ribs, hoisting and wire rope hazards, and methane. Other hazards characteristic of shaft and slope operations are hazards incident to height, compressed air, and working under suspended loads. The course especially mentions hazards relating to explosives. This is important training because blasting is a prominent feature of many shaft and slope projects.

10. *Electrical hazards*—While the only electricity used underground may be the blasting cable, blasting may be a prominent feature of the work and may

be conducted around water. A number of sources of electricity are typically found on the surface. Surface operations commonly have an electrical substation. There are also circuit breakers for the fan, hoist, compressors, and other equipment that needs to be energized and de-energized. Anyone working in or around the hoist house, in particular, should be instructed on the electrical hazards. Commenters mentioned that they commonly face shock and electrical hazards in shaft and slope construction.

11. *First aid*—This training applies to all mine environments and persons working on mine property. In shaft and slope construction, transporting an injured person can be problematic because of the difficulty in getting the person into a bucket or carrying the person out of a slope for which the means of egress is walking. Shaft and slope crews frequently are small, with only one person fully qualified to administer first aid. This increases the importance of first aid training for the other miners.

12. *Mine gases*—Shaft and slope miners may work in methane and oxygen deficient atmospheres. Gases have been, and continue to be, a problem in some shaft and slope operations. Shaft and slope companies recognize this problem and, as applicable, are required to submit shaft and slope plans addressing methane and oxygen deficiency tests. There may be other workplace exposures, such as diesel equipment exhaust gases.

13. *Health and safety aspects of tasks*—This course is practically oriented to the specific duties that new shaft and slope miners will be performing. As miners are assigned new tasks, they will also receive new task training, including health and safety aspects of those tasks.

14. *Other courses required by the District Manager*—When additional training is required, it should be focused on the particular training needs of the operation. Circumstances may justify, for example, having special emphasis training on scaling, fall protection, rigging, compressed air, explosives, or hoisting.

As described above, part 48 new miner courses are relevant and flexible to the needs of shaft and slope miners. The training serves as a general primer for introducing new shaft and slope construction miners to hazards they are likely to face and the ways those hazards can be effectively avoided. The training also provides an overview of mining methods, conditions, and circumstances that can be problematic to persons new to mining. Such training takes time to accomplish and we believe 40 hours is appropriate to prepare a new miner for the rigors and hazards of a dangerous underground environment.

We also note that some shaft and slope projects occur around other mining operations. Other mine personnel may assist the shaft and slope workers. For example, ream cuttings from raised drill work commonly are removed by mine personnel. It is important that the shaft and slope construction workers be fully trained so that they do not present a hazard to themselves or to the other miners.

Part 48 does not force operators to provide training that does not apply to their operations. We recognize that different mining operations have different training needs and should emphasize different aspects of the training. It is left primarily to the mine operator to provide training that is meaningful to the miners within the course framework of part 48. Part 48, in effect, requires that the subject matter be relevant to the particular mining operation. As one industry commenter observed, part 48 is a ''container that all sorts of types of training could go into.''

A commenter questioned whether the absence of training contributed to fatalities. Section 115 of the Mine Act specifically recognized the role training plays in mine safety. While, in 1978, we promulgated part 48 training regulations, in many cases part 48 training did not begin until late in 1979. In 1979 there were 267 mining related fatalities. Twenty-four years later, in 2003, the mining industry recorded 56 fatal accidents. Further, at underground and surface areas of underground mines there were 18,873 nonfatal days lost (NFDL) in 1979 and 3,043 in 2003.

As indicated in Table 3, operations that are required to conduct part 48 training have experienced a lower NFDL incidence rate. While we do not believe training was the only reason for the reduction in accidents, we believe it has played a significant role.

We acknowledge that shaft and slope construction operators already provide some training. However, by requiring part 48 training for shaft and slope construction workers, we ensure they receive the same type of safety and health training as all other miners. Requiring part 48 training assures that shaft and slope construction workers will receive the training they need on a timely basis from approved instructors.

Section 101(a)(9) of the Mine Act provides that no promulgated standard shall reduce the protection afforded miners by an existing mandatory health or safety standard. By promoting consistent, comprehensive training for miners previously excluded, the final rule increases health and safety protections for miners, and is fully consonant with Section 101(a)(9).

Compliance Assistance

We will offer compliance assistance to the shaft and slope construction operators. Our Educational Field Service will assist with the assessment of training needs and in developing training programs for shaft and slope construction operations. Additionally, other resources are available for developing training such as the American National Standards Institute criteria (ANSI Z490.1–2001) as suggested by one commenter.

B. Section-by-Section Analysis

1. Sections 48.2(a)(1) and 48.22(a)(1) Definitions Shaft and Slope Construction Workers as ''Miners''

Existing §§ 48.2(a)(1) and 48.22(a)(1) contain the definition of ''miner'' under part 48. We proposed to delete the exclusion contained in subparagraph (i), for ''shaft and slope workers'' and, for underground, ''workers engaged in construction activities ancillary to shaft and slope construction.'' The definition of ''miner'' for training purposes would include any person engaged in shaft or slope construction. The final rule is unchanged from the proposed rule.

A commenter said that shaft and slope construction workers are not ''miners'' and should not be subject to training requirements for miners.

Section 3(g) of the Mine Act defines ''miner'' as any individual working in a mine. Additionally, Section 3(h)(1) of the Mine Act defines ''mine'' to include, among other things, any shafts, slopes, facilities, and equipment used in or to be used in mining. Section 115(d) discusses rulemaking for mine construction workers. Congress recognized that construction work is a part of mining. The terms of the Mine Act encompass shaft and slope construction workers, both surface and underground, as ''miners.'' The Mine Act's implementing regulations and standards found in 30 CFR apply to shaft and slope and other construction operations. For example, the training requirements under 30 CFR part 46 cover construction workers exposed to hazards of mining operations.

Clarification of Terms

A commenter requested that the term ''shaft and slope workers'' appearing in the current exclusion be clarified. Another commenter asked what is intended by ''ancillary'' construction activities. Yet another commenter said

that ''shaft and slope construction'' should be defined, and another inquired about including preliminary work.

In response, we have taken the terms from the current training exclusion, ''shaft and slope workers'' and, additionally for underground, ''workers engaged in construction activities ancillary to shaft and slope sinking,'' and referred to them as ''any person * * * engaged in shaft and slope construction,'' or ''shaft and slope construction workers.''

Shaft and slope workers'' refers to miners involved in shaft and slope construction activities such as: drilling, blasting, mucking, loading, installing equipment in the completed shaft or slope, opening up the excavation, sinking and lining a hole, grouting the shaft, and installing panning, shaft steel, and the fan over the shaft or hoist.

In addition to the construction activities listed above, ''shaft and slope construction work'' encompasses construction incidental to sinking the shaft or slope and is commonly performed by shaft and slope contractors. On the surface, this includes construction such as building a hoist house or installing a permanent hoist. In the underground context, this construction was referenced in the existing rule as ''ancillary'' construction activities and includes construction such as the building of equipment housing or mine shaft facilities.

Shaft and slope construction activities pertain to the various types of shaft and slope operations, including conventional, raised bore drilling, and blind drilling, as applicable. The approach is functional; thus a company may do any number of activities and be considered involved in shaft and slope construction work. A shaft and slope construction company may contract with other companies to do some of these activities, in which case all of the companies would be performing shaft and slope construction work. Shaft and slope construction work does not include preliminary work, such as road building, timbering, and site clearance, typically not performed by shaft and slope construction operations.

Coverage of All Construction Workers and Subpart C

Commenters said that special training requirements should be developed and applied to all mine construction workers, not just shaft and slope construction workers, and contained in a new subpart C to part 48. Some commenters stated that the Mine Act requires separate training standards for construction workers.

In addressing these comments we point to Section 115(d) of the Mine Act, which authorizes us to issue ''appropriate'' construction training standards. There is no statutory requirement for training standards that apply exclusively to mine construction workers. As we previously stated, the part 46 miner training requirements apply to construction workers at covered operations. Likewise, as explained in this preamble, experience has shown that shaft and slope construction workers perform work and face hazards similar to other miners and should receive similar training. Moreover, most shaft and slope construction workers perform work underground, and the Mine Act acknowledges that such construction workers may not be practicably differentiated from other underground miners. Indeed, the legislative history of the Mine Act evidences a congressional belief that underground construction workers generally face the same hazards as do other underground miners.

A commenter said that the part 48 training exclusion should be eliminated for all mine construction workers, not just those engaged in shaft or slope construction.

We have analyzed the accident and injury data for shaft and slope construction workers and we believe it supports the need to eliminate the training exclusion for them. However, we are not prepared at this time to expand the rulemaking to cover other construction workers. Any rulemaking for other mine construction workers is reserved for future consideration consistent with Section 115(d) of the Mine Act.

Comprehensive Training or Hazard Training

We proposed to apply the comprehensive training requirements of part 48 to all shaft and slope construction workers. Consequently, they would receive new miner, experienced miner, task, and annual refresher training, as applicable. One commenter suggested that only hazard training would be appropriate for persons working on-site for five days or less. Like extraction and production miners, shaft and slope construction workers face hazards that are significant. The final rule accordingly requires all shaft and slope construction workers to complete comprehensive training without regard to the amount of time spent on-site. However, we recognize that shaft and slope construction companies may contract out some maintenance and service jobs. In keeping with existing requirements, such maintenance or service contractors, who are not at the mine for frequent periods or extended periods of more than five days, would receive hazard training, and not be required to receive comprehensive training.

Further, the final rule, like the proposed rule, applies the short-term specialized contractor provision in §§ 48.2(a)(1) and 48.22(a)(1) to shaft and slope construction workers who move from site-to-site. Such miners who have received experienced miner training could receive hazard training at each new site. There was no comment on this provision and the final rule remains unchanged.

Applicability of Part 48 Subpart A Training (Underground) and Subpart B Training (Surface)

Many shaft and slope construction workers work underground. Subpart A training would apply to them. Commenters pointed out that there are some types of shaft and slope construction operations, such as blind drilling operations, where the miners are only on the surface. In those cases, subpart B training would apply.

Most shaft and slope construction workers perform both surface and underground work. There are shaft and slope miners who, for example, mobilize a project by building surface facilities in preparation of shaft sinking, and then proceed to work underground. Commenters asked whether both subpart A training and subpart B training would apply, and if new miners falling under both sections would have to take a possible total of 64 hours of training before being assigned work duties. Additionally, a commenter asked whether those individuals who completed the training would be considered both experienced underground and surface miners.

A new miner training program of 40 hours would suffice for these miners, but only to the extent that the miners are specifically hired to work both on the surface and underground. This training would not apply, for example, to surface miners who are only subject to subpart B training, and are later reassigned to work underground (these miners would then have to take training for new underground miners).

The focus of the training is flexible and should reflect the needs of the miners. As underground activities are emphasized, we anticipate that the training will focus on the underground duties, with some surface training. For example, initial practical orientation at the beginning of a project could contain instruction germane to an underground environment, such as fall protection,

rigging, and familiarization of equipment, tools, and safety procedures, such as bell signals. These miners will be considered underground miners for training purposes. After they complete the training, they can work at surface areas of a shaft or slope construction site or underground. Once these miners have worked 12 months at a shaft or slope construction site or in an underground mine, they will be considered experienced underground miners for life.

2. Sections 48.2(b)(4) and 48.22(b)(4) ''Experienced Miner'' Qualifications and Grandfather Provision

Existing §§ 48.2(b) and 48.22(b) define ''experienced miner'' as: (1) A miner who has completed MSHA-approved new miner training or training acceptable to MSHA from a State agency, and who has had at least 12 months of mining experience; (2) a supervisor who is certified under an MSHA-approved State certification program and who is employed as a supervisor on October 6, 1998; or (3) an experienced miner on February 9, 1999.

We proposed to amend 48.2(b) and 48.22(b) to add a new paragraph (b)(4) specifying that miners employed as shaft and slope construction workers on the effective date of the final rule are ''experienced miners.''

Commenters said that the proposed rule was too limited and did not recognize the transient nature of shaft and slope construction work. They suggested an additional grandfather provision for miners who have six months experience within the 24 month period before the effective date of the rule. We agree. The final rule specifies that shaft and slope construction workers, either who are employed on the effective date of this rule, or who have six months of shaft or slope construction experience within the 24 month period before the effective date, are ''experienced miners.'' The final rule makes clear that an ''experienced miner'' status for surface or underground purposes is accorded to current surface workers or underground workers, respectively. This grandfather provision is intended to recognize previous experience of those miners who are already employed in shaft and slope construction.

One commenter suggested the grandfather provision be expanded to include all shaft and slope construction workers regardless of when they were employed. The commenter also recommended that Occupational Safety and Health Administration (OSHA) training in the previous 12 months and 12 months cumulative experience should qualify shaft and slope construction workers as ''experienced.''

We do not believe that such expansion of the grandfather and ''experienced miner'' provisions for shaft and slope construction is justified. The grandfather provision should be limited to those miners who currently are or recently have been a part of shaft and slope construction. We are mindful, however, that shaft and slope construction is no less dangerous than extraction and production and other mine contract work. The experienced miner requirements for shaft and slope construction workers generally should be like those of other miners. Moreover, the training they receive needs to be appropriate for mining.

Some commenters were concerned that the status of being an ''experienced miner'' may not be permanent for shaft and slope construction workers. Consistent with the current rule, the final rule provides that once a miner is an ''experienced miner,'' that miner is always an ''experienced miner'' for training purposes.

The final rule retains the approach of the current rule under which there are two basic ways of becoming an ''experienced miner'': Through the grandfather provision, or through a combination of training and experience. Once a shaft and slope construction worker is an ''experienced miner'' for underground or surface purposes, that status carries over to other underground or surface mining operations, respectively. Similarly, an experienced miner coming from another type of mining operation is considered an experienced miner for shaft and slope construction.

3. Sections 48.3 and 48.23 Training Plans

a. Shaft and Slope Training Plans

Sections 48.3 and 48.23 require each mine operator to have an MSHA-approved plan containing programs for new miner training, experienced miner training, new task training, annual refresher training, and hazard training. The standards contain the specific requirements for filing, approval and disapproval of training plans, and commencement of training.

We proposed a new paragraph (o) that would require shaft and slope construction operators to have an approved training plan. This was implementing language, allowing a reasonable amount of time for operators to obtain an approved plan. The final rule retains this provision.

Several commenters expressed concern that this would mean they would be required to have a new plan developed and approved for each new project. Like other independent contractors that are mobile and work at different sites, the shaft and slope construction operators can have one training plan for all of their project sites.

Some shaft and slope construction operators work in different MSHA districts, and commenters were concerned about varying interpretations affecting approval from the districts. A plan approved in one MSHA district is considered approved in all other MSHA districts.

Commenters also said that shaft and slope construction operators should have the option to have their own plan or use the plan of other mine operators. Consistent with the existing rule and practice for other mine operators, shaft and slope construction operators may opt to have their own plan or use the plan of another operator or programs of a cooperative, provided that the plan adequately addresses hazards characteristic of the shaft and slope construction work (existing §§ 48.4 and 48.24).

b. Training Plan Development, Submission, and Approval

We proposed in the new paragraph (o) to allow current shaft and slope construction operators 120 days from the date the final rule is published, unless extended by us, to submit a training plan. There were no adverse comments on the proposed provision, and the final rule remains unchanged. The shaft and slope construction operators are subject as well to existing plan development requirements of notice and posting under §§ 48.3(d)/48.23(d).

Some commenters were concerned about the applicability of the training plan requirements to the schedule of shaft and slope construction projects. One commenter indicated the requirements of plan development, such as the two week notice to miners' representatives, would be impractical. Another commenter supported the 120 day timeframe but said that we should waive this provision on a case-by-case basis to accommodate new shaft and slope construction projects started on short notice.

We believe the requirements are reasonable. They have been applied successfully to other independent mine contractors who acquire work on short notice. Miner input into training will be no less valuable in shaft and slope construction than in other mining operations. Shaft and slope construction contractors can use one plan to basically cover all projects and do not need to

constantly create new plans as they move from mine to mine.

Under the proposed rule, new operators must have a training plan prior to commencing operations. This is consistent with the requirement for other mining operations. We did not receive any comments on this provision. We have added the date of 180 days after the rule's publication to clarify what is meant by a ''new'' operator. Otherwise, the provision remains unchanged in the final rule.

For a new shaft and slope construction operation that begins work after the publication date and before [insert date 180 days after the date of publication] we will allow the same number of days as existing operators to submit a plan (120 days), commencing from the work starting date.

c. Training Programs and Hours

Under the proposed rule, the required training plan would contain programs for training new miners, training experienced miners, task training, annual refresher training, and hazard training. The final rule retained these requirements.

The new miner training requirements drew numerous comments. They said that the requirements of 40 hours for underground and 24 hours for surface are excessive and unduly focus on classroom instruction.

Those hour requirements are in the current rule covering other mining operations and are taken from section 115(a) of the Mine Act. Congress felt they were appropriate for new miners entering into a hazardous environment. New shaft and slope construction miners, like other miners, work in a dangerous environment and are exposed to potentially lethal hazards. These miners must receive the amount of training necessary for them to adequately cope with the hazards of their job.

While many mine operators take advantage of classroom instruction, there is no requirement for classroom training. The regulations provide that the training must duplicate the actual mining conditions to the extent practicable and approximately 8 hours of training is to be conducted at the mine.

Commenters stated that the part 48 new miner training places too much emphasis on training before assignment to duties. They said that training is more effectively done in intervals while on-the-job. One commenter remarked about the short attention span of workers. Commenters said they have, for example, 4 to 8 hours of orientation training, task training over a number of shifts with recorded supervisor observations, and safety training at periodic meetings.

Constructing a shaft or slope can present a work environment where hazards may not be easily identified without advance training. Shaft and slope construction workers, like other miners, are not necessarily presented hazards one at a time, but may be exposed to several hazards at once (unstable ground, tripping, gases, and mobile equipment, for example). New shaft and slope construction workers, like other new miners, should not be subject to work hazards before they are fully trained. The Mine Act contemplates that a significant amount of training, particularly new miner training, be done in sessions set aside for training rather than simply ''on-the-job'' with attendant exposure to job hazards.

Part 48 training also includes training after assignment to work duties as well as training in intervals. The training for surface miners permits the 24 hours of new miner training to be split. Eight hours can be given to the miner at the mine site immediately before being assigned work duties, and then 16 hours of training thereafter. In both underground and surface training, miners can take periods of annual refresher training (§§ 48.3(c)(7) and 48.23(c)(7) and §§ 48.8(e) and 48.28(e)). Additionally, they receive new task training, as applicable, which may include supervised equipment operation on-the-job. If operators want to provide additional training, they are free to do so. The flexible framework of part 48 allows operators to provide beneficial training beyond what is required.

d. Crediting Prior Training and Experience

One commenter, citing our approach for training under part 46, said that previous training and experience should be taken into account and applied toward meeting the requirements for new miner training and annual refresher training. The commenter indicated that new shaft and slope construction workers may already have had some task experience and training, particularly OSHA training, which would remain relevant to their mining jobs. Another commenter claimed that tunneling is relevant experience for mining. And another commenter said that past training from other contractors should be credited.

While we want to avoid undue duplication of training, we are mindful that a mining environment may present unique circumstances and hazards. Those aspects of mining are usually best addressed in training designed specifically for mining. Having instructors approved to teach mining courses provides a qualitative factor not available in other training.

On the other hand, there are subjects, such as first aid, that are more generic in nature and essentially apply in any type of work environment. We are aware that shaft and slope construction workers previously may have received some occupational training that is relevant to mining.

Balancing these considerations, we may grant partial credit in certain instances. Generic training courses such as first aid will be credited (this includes qualifications obtained more than a year before, but which are still current). Other training, particularly from OSHA and state OSH sources, may be considered for credit upon application.

We recognize that some jobs are similar whether in a mining or non-mining environment. We already allow operators to credit pertinent prior experience for some miners in order to meet the experience requirements under existing §§ 48.5 and 48.25.

Likewise, we will allow shaft and slope construction operators to credit relevant job experience. Operators should evaluate the experience as to the similarity of work environment, the hazards encountered, and the work skills and practices used.

e. Approved Instructors

Consistent with existing part 48, much of the training required by the final rule must be conducted by MSHA-approved instructors (§§ 48.3(i) and 48.23(i)). A commenter said that it will be extremely impractical for construction companies to get their own personnel ''MSHA approved'' as instructors in a timely manner, when they may only perform one or two jobs at a mine in the entire business life-cycle. The commenter said that the rule should allow ''competent persons'' and OSHA instructors to conduct the training. This would allow for comparable expertise and take into account the realities of shaft and slope construction work, which often demands the availability of varying crews at remote locations.

It has been our experience under part 48, however, that mine operators, including small operators and those working in remote areas, generally have been able to obtain approved instructors when needed. Approved instructors have been readily available through three sources: Operators' staffs, state grantees, and private vendors. Even small mine operators have become

approved instructors themselves, available to train employees as necessary. Some commenters indicated they have staff training resources.

We have approved thousands of instructors. There are various ways described in §§ 48.3(l) and 48.23(l) of becoming an approved instructor. Many instructors are approved based on expertise, and that can include shaft and slope construction. If the demand is there, we anticipate even more individuals will seek certification as instructors.

4. Sections 48.8 and 48.28 Annual Refresher Training

We proposed to amend existing paragraph (d) to require all shaft and slope construction workers employed on the effective date of the final rule to receive annual refresher training no later than 12 months from the effective month of the rule. There were no comments on the proposed provision, and therefore, it remains unchanged in the final rule.

This will establish an annual refresher training cycle for shaft and slope construction workers. To maintain this training cycle, shaft and slope construction operators may complete the annual refresher training during the last calendar month of the miners' annual refresher training cycle.

5. Effective Date

Under the proposed rule, the rule would be effective 180 days after publication except for §§ 48.3(o) and 48.23(o). Those sections, requiring submission of a training plan, would be effective on the date of publication. We did not receive any comments on the proposed effective date, and it remains unchanged in the final rule.

III. Executive Order 12866

Executive Order (E.O.) 12866 as amended by E.O. 13258 requires that regulatory agencies assess both the costs and benefits of intended regulations. We have fulfilled this requirement for the final rule, and have determined that the final rule will not have an annual effect of $100 million or more on the economy. Therefore, it is not an economically significant regulatory action pursuant to section 3(f)(1) of E.O. 12866.

The rule will provide shaft and slope construction workers with the same type of safety and health training afforded other miners. Shaft and slope construction workers will now receive training for new miners, training for experienced miners, task training, annual refresher training, and hazard training, as applicable. The affected mining sectors and costs and benefits of the final rule are discussed below. A full discussion of the economic impacts of the final rule is provided in the Regulatory Economic Analysis which is provided on our webpage at *www.msha.gov,* under Rules and Regulations.

Mining Sectors Affected

This final rule extends part 48 training to coal and metal and nonmetal shaft and slope construction workers who work in underground mines or at surface areas of underground mines. Based on the second quarter of 2003 data, the final rule will cover about 690 full-time equivalent shaft and slope construction workers. Of this total, about 570 (or 83%) are employed by coal contractor firms, while the remaining 120 (or 17%) are employed by metal and nonmetal contractor firms. All of these contractor firms are large by our standards, employing 20 to 500 people. The final rule covers more shaft and slope construction workers than the number reported above because the number discussed above only represents the number of full-time equivalent employees. For instance, if a contractor hires 4 new shaft and slope miners, and three quit, the contractor firm would have paid the cost to train all 4 new hires, although only one remains employed. The one remaining miner is reported in the number of shaft and slope construction workers.

Hence, the final rule covers both currently employed shaft and slope construction workers and all the newly hired shaft and slope construction workers.

Benefits

Safety and health professionals from all sectors of the shaft and slope construction industry recognize that training is a critical element of an effective safety and health program. Training informs miners of safety and health hazards inherent in the workplace and enables them to identify and avoid such hazards. Training further teaches miners health and safety principles and safe operating procedures in performing their work tasks. Training becomes more important with the influx of new and less experienced miners and mine operators; longer work hours to meet demands; and increased demand for contractors who may be less familiar with the dangers on mine property.

There were 15 shaft and slope construction worker fatalities and an estimated 1,819 NFDL injuries from 1982 to 2005.[1] This is equivalent to 0.69 fatalities and 86.64 NFDL injuries annually for shaft and slope construction workers. We further analyzed the incidence rates of six shaft and slope construction contractors, five of which represent the majority of the industry. We used the number of the industry's fatalities as the basis for determining the industry-wide accident and injury rates.

In support of our 1999 part 46 final rule, we estimated the effect of metal and nonmetal miner training using data on injury and fatality rates for mines that conducted training versus those that did not. On average, mines that conducted training had fatality rates that were 60 percent lower and days-lost injury rates that were 26 percent lower, relative to mines that did not conduct training. We noted that the mines with training tended to be larger and safer (independent of training) and assumed that only half of the observed lower injury and fatality rates was due to training itself. Therefore, for part 46, we estimated that miner training will reduce fatality rates by 30 percent and injury rates by 13 percent.

Applying these same rates to shaft and slope construction worker training, we estimate that the final rule will prevent approximately 0.2 fatalities and 11 NFDL injuries annually.

Compliance Costs

All cost estimates are presented in 2003 dollars. The total yearly costs of the final rule are estimated to be about $555,000 for all coal contractor firms and $118,000 for all metal and nonmetal contractor firms. In addition, as a result of this rule, coal contractor miners are estimated to incur yearly costs of about $96,000, and metal and nonmetal contractor miners to incur yearly costs of about $20,000 for training prior to employment.

IV. Feasibility

We have concluded that the requirements of the final rule are both technologically and economically feasible. This final rule is not a technology-forcing standard and does not involve activities on the frontiers of scientific knowledge. In addition, it

[1] MSHA does not have a separate system identifier for shaft and slope contractors in its accident database. However, because MSHA conducts an accident investigation of each mine fatality, we are able to tabulate the total number of shaft and slope fatalities from 1982–2005. To estimate the number of NFDL injuries for all shaft and slope contractors from 1982–2003, we used the ratio of NFDL injuries to fatalities for the six known shaft and slope construction companies and multiplied them by the total number of shaft and slope fatalities from 1982 through August 2003.

does not require the purchase of any machinery or equipment to implement these training plans as prescribed in part 48. Therefore, we have concluded that this final rule is technologically feasible.

The total costs of the final rule are about $555,000 annually for all coal contractor firms and $118,000 annually for all metal and nonmetal contractor firms. We had to combine these coal and metal and nonmetal contractor firms together to estimate the yearly revenues because these contractor firms are not generally limited to one industry, and they could do shaft and slope construction work at both coal and metal and nonmetal mines. These compliance costs are well under 1 percent (about 0.19 percent) of the yearly estimated revenues of $357 million for these contractor firms. We believe this is convincing evidence that the final rule is economically feasible.

V. Regulatory Flexibility Act Certification

Pursuant to the Regulatory Flexibility Act of 1980 as amended, we analyzed the impact of the final part 48 rule on small businesses. Further, we made a determination with respect to whether or not we can certify that the final rule does not have a significant economic impact on a substantial number of small entities that are covered by this rulemaking. Under the Small Business Regulatory Enforcement Fairness Act (SBREFA) amendments to the Regulatory Flexibility Act (RFA), we must include in the rule a factual basis for this certification. If the final rule were to impose a significant economic impact on a substantial number of small entities, then we must develop an initial regulatory flexibility analysis.

Definition of a Small Mine

Under the RFA, in analyzing the impact of a final rule on small entities, we must use the SBA definition for a small entity, or after consultation with the SBA Office of Advocacy, establish an alternative definition for the mining industry by publishing that definition in the **Federal Register** for notice and comment. We have not taken such an action, and hence are required to use the SBA definition.

The SBA defines a small entity in the mining industry as an establishment with 500 or fewer employees (13 CFR 121.201). All of the underground coal and metal and nonmetal contractor firms affected by this rulemaking fall into this category, and so can be viewed as sharing the special regulatory concerns which the RFA was designed to address.

Traditionally, we have also looked at the impacts of our final rules on a subset of mines with 500 or fewer employees—those with fewer than 20 employees, which the mining community refers to as ''small mines.'' These small mines differ from larger mines not only in the number of employees, but also, among other things, in economies of scale, in material produced, in the type and amount of production equipment, and in supply inventory. Therefore, their costs of complying with the final rule and its impact on them will also tend to be different. It is for this reason that ''small mines,'' as traditionally defined by the mining community, are of special concern to us.

This analysis complies with the legal requirements of the RFA for an analysis of the economic impacts on ''small entities'' while continuing our traditional look at ''small mines.'' We conclude that we can certify that the final part 48 rule does not have a significant economic impact on a substantial number of small entities that are covered by this rulemaking.

Factual Basis for Certification

Our analysis of economic impacts on ''small entities'' begins with a ''screening'' analysis. The screening compares the estimated compliance costs of a final rule for small entities in the sector covered by the rule to the estimated revenues for those small entities. When estimated compliance costs are less than 1 percent of the estimated revenues (for the size categories considered), we believe it is generally appropriate to conclude that there is no significant economic impact on a substantial number of small entities. When estimated compliance costs exceed 1 percent of revenues, it tends to indicate that further analysis may be warranted.

Derivation of Costs and Revenues

Both coal and metal and nonmetal contractor firms would incur costs to comply with this final rule. We examined the relationship between costs and revenues for the coal and metal and nonmetal contractor sectors as two independent entities, rather than combining them into one category. However, we had to combine these two entities to perform impact analysis in this section for the following reasons. Most of the 23 coal and metal and nonmetal contractor firms affected by this final rule are privately owned and do not make their financial data available to the public. The only two contractor firms for which we were able to obtain financial data were listed as coal contractor firms.[2] However, these contractor firms are not generally limited to one industry, and they could perform shaft and slope construction work at both coal and metal and nonmetal mines.

We used available financial data for the two publicly-traded, middle-sized contractor firms [3] together with *Industry Norms & Key Business Ratios* [4] and extrapolated the revenues to estimate revenues for the entire shaft and slope contractor industry. The financial data for each of the two contractor firms was a range of assets (*i.e.*, $1 million to $5 million; $25 million to $50 million). To be conservative, we chose to use the lower bound for the reported assets to calculate the average assets for a contractor firm. The next step was to use the assets to sales ratio for the mining industry from *Industry Norms & Key Business Ratios* [5] to obtain an estimate of average revenues for each contractor firm. Then, we multiplied that revenue number by the 23 contractor firms (from Table IV–2).

Results of Screening Analysis

Our analysis of economic impacts on ''small entities'' begins with a ''screening'' analysis. The screening compares the estimated compliance costs of a final rule for small entities in the sector covered by the rule to the estimated revenues for those small entities. When estimated compliance costs are less than 1 percent of the estimated revenues (for the size categories considered), we believe it is generally appropriate to conclude that there is no significant economic impact on a substantial number of small entities. When estimated compliance costs exceed 1 percent of revenues, it tends to indicate that further analysis may be warranted.

The combined estimated yearly cost of the final rule for both coal and metal and nonmetal contractor firms is about $673,000 as compared to estimated annual revenues of about $357 million

[2] The source of the financial data for these two contractor firms was the Thomas Registry, located online at *www.thomasregistry.com.* Thomas Register is an online resource for finding companies and products manufactured in North America.

[3] Since there were no costs to either small coal or metal and nonmetal contractor firms that employ between one to 19 contractor employees, we did not perform separate impact analysis for that mine size category. To satisfy the requirements of SBREFA, we only have to consider a subset of the SBA's definition of ''small entities''—contractor firms that employ 20–500 employees.

[4] *Industry Norms & Key Business Ratios,* pp. 8–10.

[5] The assets to sales ratio is calculated by taking the average assets to sales ratio (of 128.9%) for coal, metal and non-metallic mineral operations, excluding fuel.

for the affected firms.[6] Costs as percentage of revenues are well below one percent (0.19 percent for coal and metal and nonmetal contractor firms) and, therefore, we conclude that the rule will not have a significant economic impact on a substantial number of small entities.

VI. Paperwork Reduction Act of 1995

The part 48 rule has four provisions: §§ 48.3 and 48.23; and §§ 48.9 and 48.29 that impose a paperwork burden requirement. This final rule does not require a new type of training plan. It requires shaft and slope contractor firms to comply with the paperwork burden requirements as specified in §§ 48.3 and 48.23, and §§ 48.9 and 48.29. The reporting of this paperwork burden requirement is approved under OMB control number 1219–0009. Total first year burden hours consist of two components: first year burden hours and annual burden hours in year one. Total first year costs are equal to the total annualized costs in the first year plus total annual costs in year one. Contractor firms working in coal mines would incur about 296 paperwork burden hours in the first year with associated burden hours costs of $4,091; contractor firms working in metal and nonmetal mines would incur about 72 paperwork burden hours in the first year with associated burden hours costs of $1,081. Of the 296 paperwork burden hours in the first year for contractor firms working in coal mines, only 132 hours were first-year only burden hours, with associated costs of $5,229 (which is equivalent to $366 of annualized costs) of the 72 paperwork burden hours in the first year for contractor firms working in metal and nonmetal mines, only 28 hours were first-year only burden hours, with associated costs of $1,101, which is equivalent to $77 of annualized costs (from Table VII–1 in the REA). Contractor firms working in coal mines would incur about 183 annual burden hours starting in year two with associated costs of $4,425; contractor firms working in metal and nonmetal mines would incur about 49 annual burden hours starting in year two with associated costs of $1,164.

[6] One concern about the robustness of the screening analysis is that it is based on (available) financial data for only 2 of the 23 contractor firms. If the assets and revenues for these two contractor firms were non-representative of the other contractors and in particular significantly over-estimated average contractor firm assets and revenues, then it is possible that actual revenues for all the contractor firms would be insufficient to pass the screening analysis. To address this concern, we obtained employment data, from web pages and MSHA testimony, for several of the corporations controlling the contractor firms. For the two contractor firms for which we have financial data, employment was 50–99 employees and 100–249 employees. For two other contractor firms, total employment was 50–150 employees and up to 300 employees. We found that another contractor firm was owned by Germany's largest mining contractor, with over $2 billion in completed projects in the Americas in recent decades. Just for these five firms, extrapolating the employment and project information to estimate revenue, we were able to estimate sufficient revenues to pass the screening analysis.

VII. Other Regulatory Considerations

A. The Unfunded Mandates Reform Act

This final rule does not include any Federal mandate that may result in increased expenditures by State, local, or tribal governments; nor does it increase private sector expenditures by more than $100 million annually; nor does it significantly or uniquely affect small governments. Accordingly, the Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1501 *et seq.*) requires no further agency action or analysis.

B. National Environmental Policy Act

We have reviewed this final rule in accordance with the requirements of the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 *et seq.*), the regulations of the Council on Environmental Quality (40 U.S.C. part 1500), and the Department of Labor's NEPA procedures (29 CFR part 11). This final rule is categorically excluded from NEPA requirements because it involves educational activities which have no possibility of significant environmental impact (29 CFR 11.10(a)(1)(vi)). Accordingly, we have not conducted an environmental assessment nor provided an environmental impact statement.

C. The Treasury and General Government Appropriations Act of 1999: Assessment of Federal Regulations and Policies on Families

This final rule has no affect on family well-being or stability, marital commitment, parental rights or authority, or income or poverty of families and children. Accordingly, section 654 of the Treasury and General Government Appropriations Act of 1999 (5 U.S.C. 601 note) requires no further agency action, analysis, or assessment.

D. Executive Order 12630: Government Actions and Interference With Constitutionally Protected Property Rights

This final rule does not implement a policy with takings implications. Accordingly, Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights, requires no further agency action or analysis.

E. Executive Order 12988: Civil Justice Reform

This final rule was written to provide a clear legal standard for affected conduct and was carefully reviewed to eliminate drafting errors and ambiguities, so as to minimize litigation and undue burden on the Federal court system. Accordingly, this final rule meets the applicable standards provided in section 3 of Executive Order 12988, Civil Justice Reform.

F. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

This final rule has no adverse impact on children. Accordingly, Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks, as amended by Executive Orders 13229 and 13296, requires no further agency action or analysis.

G. Executive Order 13132: Federalism

This final rule does not have ''federalism implications,'' because it does not ''have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.'' Accordingly, Executive Order 13132, Federalism, requires no further agency action or analysis.

H. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This final rule does not have ''tribal implications,'' because it does not ''have substantial direct effects on one or more Indian tribes, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes.'' Accordingly, Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, requires no further agency action or analysis.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy, Supply, Distribution, or Use

This final rule is not a ''significant energy action,'' because it is not ''likely to have a significant adverse effect on the supply, distribution, or use of energy'' ''(including a shortfall in supply, price increases, and increased use of foreign supplies).'' Accordingly, Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use, requires no further agency action or analysis.

J. Executive Order 13272: Proper Consideration of Small Entities in Agency Rulemaking

We have thoroughly reviewed this final rule to assess and take appropriate account of its potential impact on small businesses, small governmental jurisdictions, and small organizations. We have determined and certified that this final rule will not have a significant economic impact on a substantial number of small entities. We took appropriate account of comments received relevant to the rule's potential impact on small entities. Accordingly, Executive Order 13272, Proper Consideration of Small Entities in Agency Rulemaking, requires no further action or analysis by us.

VIII. Regulatory Text

List of Subjects in 30 CFR Part 48

Mine safety and health, Reporting and recordkeeping requirements, Training programs and mining.

Dated: December 23, 2005.

David G. Dye,

Acting Assistant Secretary for Mine Safety and Health.

■ For reasons set out in the preamble, Chapter I of Title 30 of the Code of Federal Regulations is amended as follows:

PART 48—[AMENDED]

■ 1. The authority citation for part 48 continues to read as follows:

Authority: 30 U.S.C. 811, 825.

■ 2. Section 48.2 is amended by revising paragraphs (a)(1) introductory text and (a)(1)(i) and by adding paragraph (b)(4) as follows:

§ 48.2 Definitions.

* * * * *

(a)(1) *Miner* means, for purposes of §§ 48.3 through 48.10 of this subpart A, any person working in an underground mine and who is engaged in the extraction and production process, or engaged in shaft or slope construction, or who is regularly exposed to mine hazards, or who is a maintenance or service worker employed by the operator or a maintenance or service worker contracted by the operator to work at the mine for frequent or extended periods. This definition shall include the operator if the operator works underground on a continuing, even if irregular basis. Short-term, specialized contract workers, such as drillers and blasters, who are engaged in the extraction and production process or engaged in shaft or slope construction and who have received training under § 48.6 (Experienced miner training) of this subpart A may, in lieu of subsequent training under that section for each new employment, receive training under § 48.11 (Hazard training) of this subpart A. This definition does not include:

(i) Workers under subpart C of this part 48, engaged in the construction of major additions to an existing mine which requires the mine to cease operations;

* * * * *

(b) * * *

* * * * *

(4)(i) A person employed as an underground shaft or slope construction worker on June 28, 2006; or

(ii) A person who has six months of underground shaft or slope experience within 24 months before June 28, 2006.

* * * * *

■ 3. Section 48.3 is amended by revising paragraph (a) introductory text and adding paragraph (o) as follows:

§ 48.3 Training plans; time of submissions; where filed; information required; time for approval; method for disapproval; commencement of training; approval instructors.

(a) Except as provided in paragraph (o) of this section, each operator of an underground mine shall have an MSHA-approved plan containing programs for training new miners, training experienced miners, training miners for new tasks, annual refresher training, and hazard training for miners as follows:

* * * * *

(o) Each operator engaged in shaft or slope construction shall have an MSHA-approved training plan, as outlined in this section, containing programs for training new miners, training experienced miners, training miners for new tasks, annual refresher training, and hazard training for miners as follows:

(1) In the case of an operator engaged in shaft or slope construction on December 30, 2005, the operator shall submit a plan for approval by May 1, 2006, unless extended by MSHA.

(2) In the case of a new shaft or slope construction operator after June 28, 2006, the operator shall have an approved plan prior to commencing shaft or slope construction.

■ 4. Paragraph (d) of § 48.8 is revised to read as follows:

§ 48.8 Annual refresher training of miners; minimum courses of instruction; hours of instruction.

* * * * *

(d) All persons employed as shaft or slope construction workers on June 28, 2006 must receive annual refresher training within 12 months of June 2006.

* * * * *

Subpart B—[Amended]

■ 5. Section 48.22 is amended by revising paragraphs (a)(1) introductory text and (a)(1)(i) and by adding paragraph (b)(4) as follows:

§ 48.22 Definitions.

* * * * *

(a)(1) *Miner* means, for purposes of §§ 48.23 through 48.30 of this subpart B, any person working in a surface mine or surface areas of an underground mine and who is engaged in the extraction and production process, or engaged in shaft or slope construction, or who is regularly exposed to mine hazards, or who is a maintenance or service worker employed by the operator or a maintenance or service worker contracted by the operator to work at the mine for frequent or extended periods. This definition shall include the operator if the operator works at the mine on a continuing, even if irregular, basis. Short-term, specialized contract workers, such as drillers and blasters, who are engaged in the extraction and production process or engaged in shaft or slope construction and who have received training under § 48.26 (Experienced miner training) of this subpart B, may in lieu of subsequent training under that section for each new employment, receive training under § 48.31 (Hazard training) of this subpart B. This definition does not include:

(i) Construction workers under subpart C of this Part 48;

* * * * *

(b) * * *

* * * * *

(4)(i) A person employed as a surface shaft or slope construction worker on the June 28, 2006; or,

(ii) A person who has six months of surface shaft or slope experience within 24 months before June 28, 2006.

* * * * *

■ 6. Section 48.23 is amended by revising paragraph (a) introductory text and adding paragraph (o) as follows:

§ 48.23 Training plans; time of submission; where filed; information required; time for approval; method for disapproval; commencement of training; approval of instructors.

(a) Except as provided in paragraph (o) of this section, each operator of a surface mine shall have an MSHA-approved plan containing programs for training new miners, training experienced miners, training miners for new tasks, annual refresher training,

and hazard training for miners as follows:

* * * * *

(o) Each operator engaged in shaft or slope construction shall have an MSHA-approved training plan, as outlined in this section, containing programs for training new miners, training experienced miners, training miners for new tasks, annual refresher training, and hazard training for miners as follows:

(1) In the case of an operator engaged in shaft or slope construction on December 30, 2005, the operator shall submit a plan for approval by May 1, 2006, unless extended by MSHA.

(2) In the case of a new shaft or slope construction operator after June 28, 2006, the operator shall have an approved plan prior to commencing shaft or slope construction.

■ 7. Paragraph (d) of § 48.28 is revised to read as follows:

§ 48.8 Annual refresher training of miners; minimum courses of instruction; hours of instruction.

* * * * *

(d) All persons employed as shaft or slope construction workers on June 28, 2006 must receive annual refresher training within 12 months of June 2006.

* * * * *

[FR Doc. 05–24624 Filed 12–29–05; 8:45 am]

BILLING CODE 4510–43–P

DEPARTMENT OF LABOR

Mine Safety and Health Administration

30 CFR Part 75

RIN 1219–AA98

Low- and Medium-Voltage Diesel-Powered Electrical Generators

AGENCY: Mine Safety and Health Administration (MSHA), Labor.

ACTION: Final rule.

SUMMARY: This final rule amends an existing safety standard to allow the use of low- and medium-voltage diesel-powered electrical generators as an alternative means of powering electrical equipment in underground coal mines. The final rule eliminates the need for mine operators to file petitions for modification to use these portable generators to power electrical equipment and does not reduce the protections afforded miners by the existing standards, in fact it increases protections.

EFFECTIVE DATE: February 28, 2006.

FOR FURTHER INFORMATION CONTACT: Rebecca J. Smith, Acting Director, Office of Standards, Regulations and Variances, MSHA, 1100 Wilson Boulevard, Arlington, Virginia 22209–3939. Ms. Smith can be reached at *smith.rebecca@dol.gov* (Internet e-mail) (202–693–9443) (voice) or (202–693–9441) (facsimile). The final rule also is available on the Internet at *http://www.msha.gov/REGSINFO.HTM.*

SUPPLEMENTARY INFORMATION:

I. Background Information

We (MSHA) are amending § 75.901 to permit the use of low- and medium-voltage diesel-powered electrical generators as a means for providing a portable source of power to move equipment in, out, and around the mine and to perform work in areas where permissible equipment is not required. This final rule does not reduce the protections for miners in the current standards, but increases miner safety by updating the electrical requirements with new commercially-available technology so miners may use diesel-powered electrical generators as a source of power. The final rule provides protective systems and testing procedures to limit the amount of voltage and current that miners can be exposed to under ground fault conditions; thus, it reduces the possibility of a fire, shock, or burn hazard when miners use these generators.

Furthermore, by issuing this final rule, we are responding to the requirements of the Regulatory Flexibility Act and Executive Order 12866 that agencies review their regulations to determine their effectiveness and to implement any changes indicated by the review that will make the regulation more flexible and efficient for stakeholders and small businesses. In accordance with the requirements of the Mine Act, § 101(a)(9), this final rule does not reduce the protection afforded to miners by the existing standard.

Generally, power centers are the main means of supplying electricity in an underground mine. Power centers are placed underground to provide power to permanent or stationary electrical equipment, such as belt conveyor drives, and to mining equipment on working sections. Power centers in areas where permissible equipment is not required are generally stationary. Mine operators use various means to move electrical equipment and to perform work in areas where permissible equipment is not required. In these situations, they are unable to use power centers to energize the machines for the move because of the excessive length of cable required to reach the power center. If longer trailing cables are installed in order to reach remote power centers, proper electrical protection for these low- and medium-voltage three-phase circuits may be compromised and overheating of, or damage to the cables may occur.

Over a 13-year period (1990–2003), through our petition for modification (PFM) process, mine operators have been using low- and medium-voltage diesel-powered electrical generators as an efficient means for providing a portable source of power to move and operate electrical equipment in areas where permissible equipment is not required. These portable diesel-powered electrical generators are easily taken to areas where power centers or other sources of electrical power are not available to move mobile equipment or supply power to other electric equipment needed to do work in outby areas. Proper electrical protection for these low- and medium-voltage three-phase circuits can safely be provided by portable diesel-powered electrical generators.

Existing mandatory safety standards § 75.701 (Grounding metallic frames, casings, and other enclosures of electric equipment) and § 75.901 (Protection of low- and medium-voltage three-phase circuits used underground), specify the grounding requirements for electrical equipment and low- and medium-voltage three-phase circuits. However, when using these generators, mine operators are unable to comply with the existing electrical protection requirements of § 75.901. Currently, § 75.901 requires a grounding circuit to originate from the grounded side of a grounding resistor located at a power center. In addition, § 75.901 does not address the use of a generator frame for the purpose of grounding.

To address their inability to comply with § 75.901, mine operators file PFMs under section 101(c) of the Federal Mine Safety and Health Act of 1977 (Mine Act). PFMs may be granted when the Secretary determines that an alternative method of achieving the result of a standard exists that will at all times guarantee the same measure of protection afforded to miners under a standard, or when the application of a standard to the mine will result in a diminution of safety to the miners at the mine. The PFM process results in safety requirements and procedures that are applicable only to an individual mine. Once a final written decision pertaining to a PFM has been issued, the governing terms and conditions contained in the decision become the mandatory standard at the individual mine. After