

**PART 25—GIFT TAX; GIFTS MADE AFTER DECEMBER 31, 1954**

■ 5. The authority for part 25 continues to read in part as follows:

Authority: 26 U.S.C. 7805 \* \* \*

■ 6. Section 25.2522(c)–3 is amended as follows:

- 1. Paragraph (c)(2)(vi)(f) is revised.
- 2. Paragraph (c)(2)(vii)(e) is revised.
- 3. In paragraph (d)(2)(iv), *Example (4)* is removed.

The revisions read as follows:

**§ 25.2522(c)–3 Transfers not exclusively for charitable, etc., purposes in the case of gifts made after July 31, 1969.**

\* \* \* \* \*

- (c) \* \* \*
- (2) \* \* \*
- (vi) \* \* \*

(f) Where a charitable interest in the form of a guaranteed annuity interest is in trust, and the gift of such interest is made after May 21, 1972, the charitable interest generally is not a guaranteed annuity interest if any amount may be paid by the trust for a private purpose before the expiration of all the charitable annuity interests. There are two exceptions to this general rule. First, the charitable interest is a guaranteed annuity interest if the amount payable for a private purpose is in the form of a guaranteed annuity interest and the trust’s governing instrument does not provide for any preference or priority in the payment of the private annuity as opposed to the charitable annuity. Second, the charitable interest is a guaranteed annuity interest if under the trust’s governing instrument the amount that may be paid for a private purpose is payable only from a group of assets that are devoted exclusively to private purposes and to which section 4947(a)(2) is inapplicable by reason of section 4947(a)(2)(B). For purposes of this paragraph (c)(2)(vi)(f), an amount is not paid for a private purpose if it is paid for an adequate and full consideration in money or money’s worth. See § 53.4947–1(c) of this chapter for rules relating to the inapplicability of section 4947(a)(2) to segregated amounts in a split-interest trust.

\* \* \* \* \*

- (vii) \* \* \*

(e) Where a charitable interest in the form of a unitrust interest is in trust, the charitable interest generally is not a unitrust interest if any amount may be paid by the trust for a private purpose before the expiration of all the charitable unitrust interests. There are two exceptions to this general rule. First, the charitable interest is a unitrust

interest if the amount payable for a private purpose is in the form of a unitrust interest and the trust’s governing instrument does not provide for any preference or priority in the payment of the private unitrust interest as opposed to the charitable unitrust interest. Second, the charitable interest is a unitrust interest if under the trust’s governing instrument the amount that may be paid for a private purpose is payable only from a group of assets that are devoted exclusively to private purposes and to which section 4947(a)(2) is inapplicable by reason of section 4947(a)(2)(B). For purposes of this paragraph (c)(2)(vii)(e), an amount is not paid for a private purpose if it is paid for an adequate and full consideration in money or money’s worth. See § 53.4947–1(c) of this chapter for rules relating to the inapplicability of section 4947(a)(2) to segregated amounts in a split-interest trust.

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**Robert E. Wenzel,**  
*Deputy Commissioner for Services and Enforcement.*

Approved: June 30, 2003.

**Gregory F. Jenner,**  
*Deputy Assistant Secretary of the Treasury.*  
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**DEPARTMENT OF LABOR**

**Mine Safety and Health Administration**

**30 CFR Part 75**

**RIN 1219–AA98**

**Improving and Eliminating Regulations, Phase 5, Miscellaneous Technology Improvements (Methane Testing)**

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

**ACTION:** Final rule.

**SUMMARY:** This final rule provides an alternative method of compliance with the requirement for qualified persons to make periodic methane tests at face areas from under permanent roof support, using extendable probes or other acceptable means. The rule applies only during roof bolting activities in room and pillar mining operations which use continuous mining machines. It allows methane tests to be made by sweeping a probe in by the last roof support, provided that a number of requirements for roof support, ventilation, and continuous methane monitoring at the roof bolting machine are met to protect the miners.

The rule results in increased mining efficiency and provides an equivalent level of safety to miners.

**DATES:** This rule becomes effective on August 6, 2003.

**FOR FURTHER INFORMATION CONTACT:**  
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This rule is available in alternative formats, such as a large print version or an electronic file, and is also available at <http://www.msha.gov>, under “Statutory and Regulatory Information.”

**SUPPLEMENTARY INFORMATION:**

*A. Background*

As part of a comprehensive revision of ventilation standards, MSHA published the existing rule, § 75.362, On-shift Examination, on March 11, 1996 (61 FR 9764). Section 75.362(d)(1) requires that a qualified person test for methane at the start of each shift at each working place before electrically powered equipment is energized, taken into or operated in a working place; immediately before equipment is energized, taken into or operated in a working place; and at 20-minute intervals, or more often if required in the approved ventilation plan at specific location, during the operation of equipment in the working place. Section 75.362(d)(2) requires that these methane tests be made at the face from under permanent roof support, using extendable probes or other acceptable means. On September 25, 2002, in response to a joint petition from a labor and an industry group, MSHA published the proposed rule (67 FR 60611) to allow the alternative method of testing for methane. The comment period closed on November 25, 2002. Four commenters responded to the proposed rule. MSHA received no hearing requests.

On-shift examinations of working sections have long been accepted as a standard safety practice in coal mining due to the variable nature of mining conditions and the potential for hazards to develop quickly. These examinations ensure that the environment is safe while miners work during the shift by identifying existing or developing hazards, and permitting rapid correction of hazardous conditions before miners are endangered. Methane tests are a key part of the on-shift examination.

Methane is an invisible, odorless, and highly flammable product of coal off-gassing which liberates from the coal at

the face, roof, ribs and floor, as well as from pieces of broken coal that have been crushed by the mining machine. A five to 15 per cent level of methane in the air is capable of igniting, which in turn can result in a fire or an explosion. Frictional methane ignitions in mining can occur when sparks or hot metal fragments from the drill bits on mining equipment or roof bolting machines contact the liberated methane. Ventilation, as provided by an approved ventilation plan, dilutes and removes the liberated methane.

Over the years, the coal mining industry has expanded its use of a number of mining methods that increase production. One such method is deep cut mining, also called extended cut mining, where a continuous mining machine makes cuts greater than 20 feet into the coal seam. Formerly, when most continuous mining machines were operated by an on-board miner positioned in the cab at the rear of the machine, the cut was limited to the distance between the cutting head and the cab, or about 20 feet, to protect the miner in the cab from hazards associated with unsupported roof. Today, most continuous mining machines are manufactured to operate with remote control devices, which allow the machines to cut well beyond 20 feet into the coal seam while the miner stands under supported roof and in an area of reduced coal dust.

Most of the mining operations today use continuous mining machines that make deep cuts. These longer distances to the face make monitoring and removing methane more difficult. The devices used to test for methane often consist of a methane detector attached to either a pole which may be held by the miner or an extension device which the miner slides forward to the face. In mining sections with deep cuts, the longer probe arrangements can telescope 40 feet or more. The comments and testimony from the 1996 rulemaking include suggestions that back injuries could result from holding the longer probes, although some miners testified that the arrangements are practicable without causing injuries. MSHA is not aware of any empirical testing concerning injuries from the use of these probe arrangements; however, we are mindful of the importance of seeking compliance alternatives that will ensure safe working practices.

Generally, miners begin a deep cut operation by directing the ventilation to the face, usually by positioning tubes or curtains. A qualified person then makes a methane test, and the continuous mining machine is moved into the area. The continuous mining machine

generally cuts from 20 to 40 feet into the coal seam. When the coal is mined from the cut, the continuous mining machine is backed out, and the ventilation may be adjusted to redirect more air to the next face area.

The roof bolting machine then moves into the working place. Virtually every roof bolting machine in operation today is equipped with an automated temporary roof support (ATRS) system. When the ATRS is deployed, steel hydraulic jacks position a support against the roof. This configuration provides the protection of temporary roof support for the miners who are positioned at the drill head control to install the roof bolts. Once the ATRS is fully deployed, the miner begins the installation process. Generally four or more roof bolts are installed across the width of the cut. When the row of roof bolts is installed, the roof bolting machine advances approximately four feet, depending on the roof bolting plan and machine design, and the process is repeated until the entire roof is supported up to the face.

During this entire process, a qualified person, as defined in § 75.151, makes a methane test at the face before electrically powered equipment is energized, taken into or operated in the workplace, and at intervals not exceeding 20 minutes during the operation of this equipment.

In 1997 MSHA tested an arrangement for making methane tests at the face by magnetically attaching a portable methane detector to the head of the continuous mining machine, which would be trammed forward by remote control to the face for the test. However, similar arrangements for making methane tests from roof bolting machines are not practicable because roof bolting machines do not operate by remote control.

The National Institute for Occupational Safety and Health (NIOSH) conducted a study ("Comparison of Methane Concentrations at a Simulated Coal Mine Face During Bolting") which examined issues related to methane in working places during roof bolting. In 1999, NIOSH presented the study at the 8th U.S. Mine Ventilation Symposium, sponsored by the Society of Mining Engineers' Underground Ventilation Committee. The testing consisted of gallery simulations using a model roof bolting machine fitted with instrumentation to record methane levels at various locations in the simulated working place under different methane release conditions. A part of this study examined MSHA's 38 accident investigation reports from 1981

to 1994 which involved methane ignitions at roof bolting machines. The ignition source was at the roof bolting machine in 37 of these accidents, and no ignition source was identified in the one remaining accident. The report shows that a combination of continuous monitoring near the drill head together with methane tests in by the roof bolting machine would be effective in identifying methane hazards when the primary source of methane liberation is at the drill hole.

During the period 1994 through 2001, MSHA investigated 16 accidents which involved methane ignitions at roof bolting machines. Twelve of these accidents directly involved roof drilling or bolt installation. Consistent with the ignitions studied by NIOSH, the accidents involving roof drilling or bolt installation occurred when a hot drill bit being pulled out of the drill hole ignited a flammable methane-air mixture, or when the miner inadvertently drilled through metal roof straps or encountered harder than normal rock strata in the mine roof.

In November, 1998, the United Mine Workers of America (UMWA) and the Bituminous Coal Operators Association (BCOA) jointly recommended that MSHA amend the current rule to allow the option of making methane tests by sweeping a probe 16 feet in by the last area of supported roof, provided that a number of mandatory precautions are taken, such as providing the roof bolting machine with both an integral ATRS and a permanently-mounted continuous methane monitor. The joint recommendation cited the draft NIOSH study, and UMWA and BCOA further stated that the suggested compliance option would promote greater safety. MSHA believes that this optional method for methane testing does not diminish safety provided in the existing rule, and is therefore publishing this final rule, which is largely based on the NIOSH research and the joint recommendation of labor and industry. The rule is designed to protect the miner and to be easily integrated into the mining cycle.

## **I. Discussion of the Rule**

### *A. Paragraph 75.362(d)(2)*

This final rule adds a new subparagraph after the existing § 75.362(d)(2) to allow an optional method for making methane tests during roof bolting activities in room and pillar mining operations using continuous mining machines. Thus the phrase "Except as provided in subparagraph 75.362(d)(3)" is added to the beginning

of § 75.362(d)(2) to clearly show that this option follows.

*B. Paragraph 75.362(d)(3)*

This final subparagraph allows an alternative method of compliance with subparagraph (d)(2) during roof bolting. This section remains unchanged from the proposed rule. The required methane tests may be made by using a probe or other acceptable means to sweep not less than 16 feet in by the last area of permanently supported roof, provided certain requirements are met, as outlined in subparagraphs 75.362(d)(3)(i) through (vi). MSHA believes that testing at the 16 foot in by minimum distance provides protection equivalent to the current requirement and does not diminish safety. The probe extends a sufficient distance into the unsupported area to test for methane which may be accumulating in by the roof bolting machine.

Certain difficulties exist in actually making the tests under the current standard. The longer probe arrangements required to reach the face of a deep cut can be unwieldy, and therefore difficult to position accurately at the face. Methane tests at the face currently must be made with the detector positioned at least 12 inches from the roof, rib and face.

The NIOSH study determined that:

Compliance with the methane standard would be easier if there were alternative sampling locations out by the face. Out by sampling locations closer to the bolting operation could also provide better measurements of methane when the primary liberation is the drill hole.

The study further determined that:

The primary way to assure that methane concentrations are not ignitable is to monitor methane levels near the drill hole. Measurements must also be taken during bolting to determine methane concentrations at the face.

Prior to the 1996 rulemaking on ventilation standards, methane tests were made at the last permanent roof support, unless the approved ventilation plan required the tests to be made closer to the working face by using extendable probes or other acceptable means. When MSHA published the proposed revisions in 1994, some commenters expressed concerns about possible higher accumulations of methane in the deep cuts, particularly at the face area, where the freshly exposed surfaces allow more methane to liberate. These commenters wanted the methane tests to be made as close to the working face as practicable without endangering the miner. MSHA agreed with these comments. Additionally, data from

research done by MSHA and the former Bureau of Mines during the prior 25 years, such as Bureau of Mines Report of Investigation 7223, "Face Ventilation in Underground Bituminous Coal Mines," published in 1969, suggested higher methane concentrations near the face area. The final rule published in 1996 required that methane tests be made at the face area.

The existing requirement to make all methane tests at the face area was intended to provide adequate testing in extended cuts. However, as stated above, the ignition hazard during roof bolting is not necessarily at the same location as during cutting, that is, the face area. The conditions required for an ignition may be present at the drill head when the miner drills into the roof. Methane tests made at a minimum distance of 16 feet in by the last area of permanently supported roof, augmented with the continuous methane monitor on the ATRS, provide adequate assurance that hazardous levels of methane are not present or accumulating either in the cut or around the roof bolting machine at the time the roof bolter is drilling. The alternative testing method does not diminish safety and provides at least equivalent protection by supplementing methane tests in by the area where roof bolting takes place with continuous monitoring at the roof bolting machine where methane ignitions have occurred at the time that drilling is occurring. This optional compliance method may only be used if the conditions of subparagraphs § 75.362(d)(3)(i) through (vi) are met, as discussed below.

Several commenters suggested that the 20-minute methane tests should be made either by sweeping a shorter distance, e.g., two rows of bolts or ten feet, or by using a handheld methane detector to make the test at the last area of supported roof. Two of these commenters suggested that testing with the shorter probe or the hand-held methane detector at more frequent intervals, such as before or after the roof bolting machine advances, would ensure protection.

One commenter stated that there was no reason to select a distance of 16 feet. MSHA believes that the combination of 16-foot minimum sweeps to test for methane accumulating in the cut and continuous methane monitoring at the site where drilling occurs provides the level of protection that is equivalent to the current requirement and does not diminish safety. As discussed above, methane liberates at higher rates from the freshly exposed surfaces at the face area than from out by areas. In addition, ventilation controls ordinarily do not

extend substantially beyond the roof bolting machine. Accordingly, it is prudent to perform methane tests to ensure that bodies of methane are not accumulating in the cut. Testing with a shorter probe or with a hand-held detector, as suggested by these commenters, would not provide adequate assurance that methane is not accumulating further in the cut. Finally, the joint recommendation of labor and industry, which was based on the NIOSH study, identified 16 feet as an appropriate testing distance. For these reasons, MSHA has not revised the testing distance in the final rule. However, based on the conditions at a particular mine, an operator may, as a mine procedure, specify that testing in addition to the requirements of this final rule would be of value.

Other commenters suggested that the probes required for a 16-foot sweep would be unwieldy, thereby compromising the accuracy of the test. MSHA notes that 20-foot probes have been used in the coal industry for many years. Therefore, MSHA concludes that the probe arrangements required to sweep 16 feet in by are manageable and do not present any hazards to miners.

One commenter suggested that the methane tests made during roof bolting should be made between six and twelve inches from the roof, at the roof bolting machine, immediately before each row of roof bolts is installed, noting that the likely ignition source would be close to the roof. The commenter added that the potential hazard during roof bolting is not the same as that presented during mining (and addressed by testing at the face). MSHA believes that the in by methane hazard during roof bolting is comparable to that found in by during the mining process. Testing for methane at a minimum distance of 12 inches from the roof has been an MSHA requirement for a number of years, and the procedure has proven to be effective. Therefore, this provision remains unchanged.

A commenter recommended expanding the rule to allow dual methane monitors mounted on the continuous mining machine as an alternative method to test for methane while the continuous mining machine is operating. This recommendation has not been addressed because this change is beyond the scope of the proposal.

*C. Subparagraph 75.362(d)(3)(i)*

This subparagraph of the final rule requires the roof bolting machine to be equipped with an integral automated temporary roof support (ATRS) system if the alternative testing method is used, and further requires the ATRS to meet

the requirements of § 75.209. Section 75.209 provides technical requirements for ATRS systems, which are installed on virtually all roof bolting machines. The ATRS provides the miner with an additional level of protection during roof bolting operations. This final section is unchanged from the proposed rule. No comments were received concerning this provision.

*D. Subparagraph 75.362(d)(3)(ii).*

This subparagraph of the final rule requires the roof bolting machine to have a permanently mounted methane monitor. The subparagraph is unchanged from the proposed rule. MSHA believes that a methane monitor on the roof bolting machine is an effective method of testing for methane at a potential principal ignition source during roof bolting operations, and is consistent with the NIOSH study determinations.

The subparagraph further requires that the methane monitor complies with the requirements of existing §§ 75.342(a)(4), 75.342(b) and 75.342(c). Section 75.342(a)(4) establishes maintenance and calibration requirements, requires training for miners who perform this maintenance and calibration, and establishes recordkeeping and records retention requirements for the calibration tests. While this final rule allows an alternative method for making methane tests, it also requires the methane monitors on the roof bolting machines to be properly maintained at all times, and thus does not allow the use of a methane detector and probe in lieu of a poorly maintained or inoperative methane monitor on the roof bolting machine. Section 75.342(b) requires the methane monitor to give a warning signal when the air-methane concentration reaches 1.0 per cent, and further requires this warning signal to be visible to someone who is able to de-energize the machine to which the monitor is mounted. Section 75.342(c) requires the methane monitor to automatically de-energize the machine to which it is mounted when the methane-air mixture reaches 2.0 per cent or when the monitor is not operating properly. The warning signal and automatic de-energization capability provide an additional measure of protection to miners.

Although methane monitors can be magnetically mounted on roof bolting machines, this subparagraph requires that they be permanently mounted for reliable operation and to assure that the sensor remains in an effective location. Although MSHA does not anticipate that permanently mounting the methane

monitor on the ATRS would require recertification of the ATRS by the manufacturer, certification issues may be avoided by using clamping brackets, steel strapping, or high-strength adhesives to permanently mount the methane monitor to the ATRS. MSHA anticipates that equipment manufacturers and rebuilders will incorporate provisions into the ATRS design to accommodate the permanently mounted monitors. Additionally, 30 CFR part 18 requires MSHA approval before changes are made to approved equipment to ensure that permissibility of the equipment to operate in a gassy atmosphere has not been compromised. Section 18.81 outlines the requirements and application procedure for MSHA approval of this field modification.

*E. Subparagraph 75.362(d)(3)(iii).*

This subparagraph of the final rule sets requirements for the position of the methane monitor sensor on the ATRS. The sensor must be mounted in a protected position near the inby end of the ATRS support; it must be within 18 inches of the longitudinal center of the ATRS; and it must be positioned at least 12 inches from the roof when the ATRS is fully deployed.

MSHA's requirement to mount the sensor near the inby end of the ATRS is based on the NIOSH study. In that study, NIOSH found the highest statistical correlation to be between face methane concentration and a point which would be near the downwind end of the ATRS. The requirement to position the methane sensor near the longitudinal center of the ATRS is intended to protect the methane sensor from damage during the mining cycle. Finally, the requirement for the methane sensor to rest at least 12 inches below the roof when the ATRS is deployed reflects the standard practice of measuring methane at least 12 inches from the roof to obtain a result representative of the general environment being measured. MSHA believes this distance achieves a balance between effectiveness and practicality.

The proposed rule would have required the methane sensor to be mounted "on the inby end and within 18 inches of the longitudinal center of the ATRS." One commenter expressed a concern that this wording could be interpreted to mean requiring the methane sensor to be mounted on the front of the ATRS itself, where it would be subject to damage and would be isolated from potential methane accumulations nearer to the drill assembly. The language from the proposed rule has been modified to address this concern by requiring the

sensor to be mounted "near the inby end and within 18 inches of the longitudinal center of the ATRS support." The rule provides some flexibility in the position of the sensor with the intent of placing the sensor at a location where it will be protected from damage while providing effective detection of methane near the most likely ignition source at the drilling assembly.

The continuous methane monitor mounted to the roof bolting machine, together with the probe used to sweep inby for methane, comprise a two-element system for methane detection. MSHA believes this two-element system is effective in detecting methane in the zone containing the most likely ignition source.

*F. Subparagraph 75.362(d)(3)(iv).*

This subparagraph of the final rule specifies the frequency of manual methane tests, and is consistent with § 75.362(d)(1)(iii), which in turn is derived from the statutory provision requiring methane tests to be made at least every 20 minutes while electrically powered equipment is operated (Mine Act, section 303(h)(1)). Additionally, the subparagraph specifies the location of the qualified person making the test.

In addition to the existing provisions contained in the final rule, the proposed subparagraph included the statement, "The manual methane test must be made immediately before the roof bolting machine enters the working place unless the last test was made within 20 minutes." Two commenters disagreed with this provision. One of these commenters suggested that the wording was inconsistent with 30 CFR 75.362(d)(1). This commenter further discussed several examples of how the wording of the proposed rule could introduce confusion and how miners could tend to assume that test had been made. MSHA agrees with these commenters, and has removed this provision from the final rule. However, this test may be made using the 16-foot minimum inby sweep, as described in the above analysis for subparagraph 75.362(d)(3). The combination of the 16-foot minimum sweeps and the continuous methane monitor on the roof bolting machine ensures an accurate determination of the methane levels present during roof bolting. A further consideration is the rate of methane liberation during roof bolting. That is, methane liberates from the coal at a higher rate during the time that the coal is being cut. During that time, ventilation is directed toward the face, with the tubes, curtains, or other ventilation devices positioned behind

the continuous mining machine and moving forward as the coal is cut. Since coal is not actively mined in the cut during roof bolting, methane liberation decreases. For these reasons, MSHA believes this alternative method does not diminish safety.

The proposed rule required the manual methane test to be made either "from under the last permanent roof support" or from the roof bolter's work position protected by the deployed ATRS. The final rule changes this language to require making the test either "from under permanent roof support" or from the roof bolter's work position protected by deployed ATRS. This change allows the final rule to better conform to MSHA's existing roof control rules and policies because most approved roof control plans do not generally permit miners past the second to the last row of permanent roof supports.

#### G. Subparagraph 75.362(d)(3)(v)

Subparagraph 75.362(d)(3)(v) of the final rule requires that, once a methane test is made at the face, all subsequent methane tests must be made at the face. As the roof bolting machine advances toward the face, the probe used for the methane test will eventually reach the face. A number of rows of roof bolts will then be installed before the roof bolting machine reaches the face area and the cut is completely bolted. Methane tests will be made at the face area while these final rows of roof bolts are installed.

One commenter suggested deleting this provision as part of an overall suggestion to test with a hand-held methane detector at the last permanent roof support. Another commenter suggested phrasing the rule so that testing at the face would be required when the roof bolting machine reaches a distance from the face equal to two rows of bolts. This distance would generally be about eight feet. As stated above, MSHA believes that the combination of 16-foot inby sweeps to test for methane accumulating in the cut and continuous methane monitoring at the roof bolting machine provides a level of protection that does not diminish safety. Testing with a hand-held methane detector at the last working place or with a shorter probe would not provide adequate assurance that methane is not accumulating further in the cut. Therefore, this subparagraph remains unchanged from the proposed rule.

#### H. Subparagraph 75.362(d)(3)(vi)

Subparagraph 75.362(d)(3)(vi) of the final rule allows the district manager to require that the ventilation plan include

a minimum air quantity and the position and placement of ventilation controls to be maintained during roof bolting operations. No comments were received on this subparagraph. The final rule is unchanged from the proposed rule.

The NIOSH study, as well as MSHA's experience, shows that ventilation is effective and appropriate during roof bolting operations under certain mining conditions. Some mines liberate substantial quantities of methane, or have a history of ignitions or noncompliance with respirable dust standards for bolting machine operators. The ventilation plans for such mines generally require minimum air quantities to be maintained at the roof bolting machine. In evaluating ventilation plans, district managers will continue to assess these and other factors to determine the necessity for plan parameters for air quantities and ventilation control devices.

The NIOSH study was conducted using ventilating air quantities of 4,000 cfm and 7,000 cubic feet per minute (cfm), with methane released at various points at a rate of five cfm. The study shows that ventilation is effective in removing methane from working areas around roof bolting machines where significant quantities of methane are liberated in the working place and at the face. In these conditions, mine ventilation plans could specify minimum ventilation quantities and the position of the ventilation control devices.

After the NIOSH study was completed, MSHA reviewed the accident reports for all of the 41 reported methane ignitions that occurred at roof bolting machines between 1994 and 1998. The MSHA report, "Methane Ignitions on Roof Bolters in Underground Coal Mines" found that all these ignitions occurred in mines that are considered to have the highest methane liberation. Each of these mines liberated over 850,000 cubic feet of methane per day. Section 103(i) of the Mine Act requires MSHA to conduct spot inspections at least every ten working days at mines liberating over 500,000 cubic feet of methane during a 24-hour period, and at least every five working days at mines liberating over one million cubic feet of methane during a 24-hour period.

The MSHA report, as well as MSHA's experience, indicates that most ignitions at roof bolting machines in mines that liberate significant quantities of methane can be avoided by maintaining adequate ventilation during roof bolting. The rule provides an equivalent level of safety as the existing rule and does not

diminish safety, while at the same time allowing flexibility by permitting MSHA to set mine-specific requirements through the ventilation plan.

## II. Impact Analyses

### A. Cost and Benefits: Executive Order 12866

Executive Order 12866 requires regulatory agencies to assess both the costs and benefits of regulations. In making this assessment, MSHA determined that although this final rule will not have an annual effect of \$100 million or more on the economy, and therefore is not a significant regulatory action as defined by § 3(f)(1) of E.O. 12866, the rule meets the § 3(f)(4) definition, that is, the rule may " \* \* \* raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order." MSHA completed a Regulatory Economic Analysis (REA) which estimates both the costs and benefits of the rule. This REA is available from MSHA and is summarized below.

The final rule allows an alternative method of methane testing that ensures at least an equivalent level of protection as the existing standard and results in net cost savings of \$6.9 million annually to the industry.<sup>1</sup> The alternative testing method augments periodic inby methane tests with continuous methane monitoring at the roof bolting machine. This two-tiered approach assures that hazardous levels of methane are not present or accumulating either inby or at the roof bolting machine.

The inby methane tests are made at least every 20 minutes by sweeping a probe or other acceptable arrangement at least 16 feet inby the last permanent roof support. However, when the probe reaches the face area, the remaining tests are made with the methane detector positioned at least 12 inches from the roof, rib, and face. A probe not longer than 20 feet will allow the qualified person to make this test from a safe position four feet outby the last permanent roof support. The shorter probe arrangements required for the 16-foot sweep are easier to maneuver and cost less than those used to comply with the existing requirements. Additionally, the sweeps can be made more quickly than the test required under the existing rule.

The alternative testing method also requires each roof bolting machine to have both an MSHA-approved, permanently mounted methane monitor

<sup>1</sup> Cost data are provided by MSHA's Regulatory Economic Analysis for this rule, dated January, 2003.

and an integral ATRS system. The methane monitor must meet the maintenance and calibration requirements of § 75.342(a)(4), the warning signal requirements of § 75.342(b), and the automatic de-energization requirements of § 75.342(c). Further, the rule requires the sensor head of the methane monitor to be positioned at a specific location on the ATRS. In addition to continuously monitoring the atmosphere at the roof bolting site, the monitor will warn miners when methane levels reach one per cent, and will de-energize the roof bolting machine when methane levels reach two per cent. This continuous monitoring provision is significant in light of the number of ignitions involving roof drilling or bolt installation. These ignitions generally occur when sparks, hot metal fragments, or hot drill bits ignite a flammable methane-air mixture. They can also occur when the miner inadvertently drills through metal roof straps or encounters harder than normal material in the mine roof.

#### *B. Regulatory Flexibility Certification*

The Regulatory Flexibility Act (RFA) requires regulatory agencies to consider a rule's economic impact on small entities. Under the RFA, MSHA must use the Small Business Act definition of a "small business concern" in determining a rule's economic impact unless, after consultation with the SBA Office of Advocacy, and after opportunity for public comment, MSHA establishes a definition which is appropriate to the activities of the agency and publishes that definition in the **Federal Register**. For the mining industry, SBA defines "small" as having 500 or fewer workers. MSHA has traditionally considered small mines to be those with fewer than 20 workers. To ensure that the rule conforms with the RFA, MSHA analyzed the economic impact on mines with 500 or fewer workers and also on mines with fewer than 20 workers. MSHA concluded that the rule will not have a significant economic impact on a substantial number of small entities under either definition.

#### *C. Unfunded Mandates Reform Act of 1995*

For purposes of the Unfunded Mandates Reform Act of 1995, the rule does not include any Federal mandate that may result in increased expenditures of more than \$100 million incurred by State, local, or tribal governments, or by the private sector.

#### *D. Paperwork Reduction Act of 1995 (PRA)*

The information collection requirements contained in this final rule have been approved by the Office of Management and Budget (OMB) and were issued control numbers pursuant to the Paperwork Reduction Act of 1995 (PRA), as codified at 44 U.S.C. 3501–3520 and implemented by OMB in regulations at 5 CFR part 1320. The PRA defines collection of information as "the obtaining, causing to be obtained, soliciting, or requiring the disclosure to third parties or the public of facts or opinions by or for an agency regardless of form or format." All paperwork burden hours and cost data used in this preamble are taken from MSHA's Regulatory Economic Analysis (REA), dated January, 2003. The REA can be accessed at <http://www.msha.gov/reginfo.htm>.

MSHA estimates that the information collection requirements in this rule will impose a total of 315 paperwork burden hours in the first year, with an annualized burden of 117 hours each year thereafter. The estimated total annualized cost associated with these paperwork burden hours is \$4,045.

Two information collection requirements are associated with § 75.362(d)(3)(ii). The first involves obtaining approval for field modifications to permissible electrical equipment, as required by § 18.81, and was approved by OMB as part of Information Collection No. 1219–0066, Permissible Equipment Testing, which expires on July 31, 2005. MSHA's Approval and Certification Center must approve all modifications to permissible equipment (including roof bolting machines) to ensure that permissibility of the equipment to operate in a gassy atmosphere has not been compromised. Each machine model at a mine requires a separate application for approval.

The second information collection requirement associated with § 75.362(d)(3)(ii) involves recording calibrations of methane monitors, as required by § 75.342(a)(4), and was approved by OMB as part of Information Collection No. 1219–0088, Ventilation Plans, Tests, and Examinations in Underground Coal Mines, which expires on March 31, 2004. Each methane monitor must be calibrated at least every 31 days, and a record of the calibration test must be maintained for at least one year from the date of the test.

Additionally, any information collection requirements that would be associated with the ventilation provision of § 75.362(d)(3)(vi) would be approved as part of Information

Collection No. 1219–0088. This provision of the final rule imposes no additional paperwork burden.

#### *E. Executive Order 12630 Governmental Actions and Interference With Constitutionally Protected Property Rights*

This rule is not subject to Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights. That is, this rule does not involve implementation of any policy with takings implications.

#### *F. Executive Order 13045 Protection of Children From Environmental Health Risks*

In accordance with Executive Order 13045, Protection of Children from Environmental Health Risks, MSHA has evaluated the environmental health and safety effects that this rule could have on children. MSHA has determined that the rule will not have an adverse impact on children.

#### *G. Executive Order 12988 Civil Justice Reform*

MSHA has reviewed Executive Order 12988, Civil Justice Reform, and determined that the rule will not unduly burden the Federal court system. The rule has been written so as to provide a clear legal standard for affected conduct, and has been reviewed carefully to eliminate drafting errors and ambiguities.

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

MSHA certifies that this rule will not impose any substantial direct compliance costs on Indian tribal governments.

#### *I. Executive Order 13132 Federalism*

MSHA has reviewed this rule in accordance with Executive Order 13132 regarding federalism and has determined that the rule has no "federalism implications." In other words, the rule does not have any 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.

#### *J. Executive Order 13211 Energy*

MSHA has reviewed this rule in accordance with Executive Order 13211 regarding the energy effects of Federal regulations, and has determined that the rule does not have any adverse effects on energy supply, distribution, or use.

Therefore, no reasonable alternatives to this action are necessary.

References:

1. Taylor, Charles, et al., "Comparison of Methane Concentrations at a Simulated Coal Mine Face During Bolting," U.S. Department of Health and Human Services, Center for Disease Control, National Institute for Occupational Safety and Health (NIOSH), 1999.

2. Urosek, John E., et al., "Methane Ignitions on Roof Bolters in Underground Coal Mines," U.S. Department of Labor, MSHA, presented at and included in the proceedings of the 8th U.S. Mine Ventilation Symposium, June 11-17, 1999.

List of Subjects in 30 CFR Part 75

Fire Prevention, Mine safety and health, Reporting and recordkeeping requirements, Underground coal mining, ventilation.

Accordingly, Chapter I of Title 30 of the Code of Federal Regulations is amended as follows:

PART 75—MANDATORY SAFETY STANDARDS—UNDERGROUND COAL MINES

1. The authority citation for Part 75 continues to read as follows:

Authority: 30 U.S.C. 811.

2. Section 75.362 is amended by adding at the beginning of paragraph (d)(2) the phrase "Except as provided for in paragraph (d)(3) of this section," and by adding paragraph (d)(3) to read as follows:

§ 75.362 On-shift examination.

\* \* \* \* \*

(d) \* \* \*

(3) As an alternative method of compliance with paragraph (d)(2) of this section during roof bolting, methane tests may be made by sweeping an area not less than 16 feet inby the last area of permanently supported roof, using a probe or other acceptable means. This method of testing is conditioned on meeting the following requirements:

(i) The roof bolting machine must be equipped with an integral automated temporary roof support (ATRS) system that meets the requirements of 30 CFR 75.209.

(ii) The roof bolting machine must have a permanently mounted, MSHA-approved methane monitor which meets the maintenance and calibration requirements of 30 CFR 75.342(a)(4), the warning signal requirements of 30 CFR 75.342(b), and the automatic de-energization requirements of 30 CFR 75.342(c).

(iii) The methane monitor sensor must be mounted near the inby end and within 18 inches of the longitudinal center of the ATRS support, and positioned at least 12 inches from the roof when the ATRS is fully deployed.

(iv) Manual methane tests must be made at intervals not exceeding 20 minutes. The test may be made either from under permanent roof support or from the roof bolter's work position protected by the deployed ATRS.

(v) Once a methane test is made at the face, all subsequent methane tests in the same area of unsupported roof must also be made at the face, from under permanent roof support, using extendable probes or other acceptable means at intervals not exceeding 20 minutes.

(vi) The district manager may require that the ventilation plan include the minimum air quantity and the position and placement of ventilation controls to be maintained during roof bolting.

\* \* \* \* \*

Dated: June 27, 2003.

Dave D. Lauriski,

Assistant Secretary of Labor for Mine Safety and Health.

[FR Doc. 03-16866 Filed 7-3-03; 8:45 am]

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DEPARTMENT OF THE INTERIOR

Office of Surface Mining Reclamation and Enforcement

30 CFR Part 913

[IL-099-FOR]

Illinois Regulatory Program

AGENCY: Office of Surface Mining Reclamation and Enforcement, Interior.

ACTION: Final rule; approval of amendment.

SUMMARY: We, the Office of Surface Mining Reclamation and Enforcement (OSM), are approving an amendment to the Illinois regulatory program (Illinois program) under the Surface Mining Control and Reclamation Act of 1977 (SMCRA or the Act). The Illinois Department of Natural Resources, Office of Mines and Minerals (Department or Illinois) revised its regulations pertaining to definitions, areas designated by Act of Congress, criteria for designating areas as unsuitable for surface coal mining operations, requirements for permits and permit processing, coal exploration, and performance bond release. Illinois also corrected or removed outdated references in several regulations. Illinois

revised its program to be consistent with the corresponding Federal regulations and to clarify ambiguities.

EFFECTIVE DATE: July 7, 2003.

FOR FURTHER INFORMATION CONTACT: Andrew R. Gilmore, Director, Indianapolis Field Office. Telephone: (317) 226-6700. Internet: IFOMAIL@osmre.gov.

SUPPLEMENTARY INFORMATION:

- I. Background on the Illinois Program
II. Submission of the Amendment
III. OSM's Findings
IV. Summary and Disposition of Comments
V. OSM's Decision
VI. Procedural Determinations

I. Background on the Illinois Program

Section 503(a) of the Act permits a State to assume primacy for the regulation of surface coal mining and reclamation operations on non-Federal and non-Indian lands within its borders by demonstrating that its State program includes, among other things, "a State law which provides for the regulation of surface coal mining and reclamation operations in accordance with the requirements of this Act \* \* \*; and rules and regulations consistent with regulations issued by the Secretary pursuant to this Act." See 30 U.S.C. 1253(a)(1) and (7). On the basis of these criteria, the Secretary of the Interior conditionally approved the Illinois program on June 1, 1982. You can find background information on the Illinois program, including the Secretary's findings, the disposition of comments, and the conditions of approval, in the June 1, 1982, Federal Register (47 FR 23858). You can also find later actions concerning the Illinois program and program amendments at 30 CFR 913.10, 913.15, and 913.17.

II. Submission of the Amendment

By letter dated April 8, 2002 (Administrative Record No. IL-5077), Illinois sent us an amendment to its program under SMCRA (30 U.S.C. 1201 et seq.). Illinois sent the amendment in response to a letter dated August 23, 2000 (Administrative Record No. IL-5060), that we sent to Illinois in accordance with 30 CFR 732.17(c), concerning valid existing rights. Illinois also included some changes at its own initiative. Illinois amended its surface coal mining and reclamation regulations at Title 62 of the Illinois Administrative Code (IAC).

We announced receipt of the proposed amendment in the May 17, 2002, Federal Register (67 FR 35072). In the same document, we opened the public comment period and provided an opportunity for a public hearing or