# Comments of the United Mine Workers of America 2010 MAP 15nd A 8: 44 On the Proposed Information Collection Request Submitted for Public Commentated A 8: 44 Recommendations; Ventilation Plans, Test and Examinations in Underground Coal Mines March 15, 2010

MSHA indicates that this proposal is part of the Department of Labor's continuing effort to reduce paperwork and respondent burden in accordance with the requirements of the Paperwork Reduction Act of 1995. This proposal provides the general public and Federal agencies with an opportunity to comment on proposed and/or continuing collections of information to ensure that requested data can be provided in the desired format, reporting burden is minimized, collection instruments are clearly understood, and the impact of collection requirements on respondents can be properly assessed. MSHA indicates it is particularly interested in comments that:

- Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
- Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
- Enhance the quality, utility, and clarity of the information to be collected; and
- Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submissions of responses.

This proposal concerns the Ventilation Plans, Tests, and Examinations in Underground Coal Mines as follows:

# 30 CFR § 75.310 Installation of main mine fans.

- (a) Each main mine fan shall be--
- (1) Installed on the surface in an incombustible housing;
- (2) Connected to the mine opening with incombustible air ducts;
- (3) Equipped with an automatic device that gives a signal at the mine when the fan either slows or stops. A responsible person designated by the operator shall always be at a surface location at the mine where the signal can be seen or heard while anyone is underground. This person shall be provided with two-way communication with the working sections and work stations where persons are routinely assigned to work for the majority of a shift;

- (4) Equipped with a pressure recording device or system. Mines permitted to shut down main mine fans under §75.311 and which do not have a pressure recording device installed on main mine fans shall have until June 10, 1997 to install a pressure recording device or system on all main mine fans. If a device or system other than a circular pressure recorder is used to monitor main mine fan pressure, the monitoring device or system shall provide a continuous graph or continuous chart of the pressure as a function of time. At not more than 7-day intervals, a hard copy of the continuous graph or chart shall be generated or the record of the fan pressure shall be stored electronically. When records of fan pressure are stored electronically, the system used to store these records shall be secure and not susceptible to alteration and shall be capable of storing the required data. Records of the fan pressure shall be retained at a surface location at the mine for at least 1 year and be made available for inspection by authorized representatives of the Secretary and the representative of miners;
- (5) Protected by one or more weak walls or explosion doors, or a combination of weak walls and explosion doors, located in direct line with possible explosive forces;
- (6) Except as provided under paragraph (e) of this section, offset by at least 15 feet from the nearest side of the mine opening unless an alternative method of protecting the fan and its associated components is approved in the ventilation plan.
- (1) If an electric motor is used to drive a main mine fan, the motor shall operate from a power circuit independent of all mine power circuits.
- (2) If an internal combustion engine is used to drive a main mine fan-
- (i) The fuel supply shall be protected against fires and explosions;
- (ii) The engine shall be installed in an incombustible housing and be equipped with a remote shut-down device;
- (iii) The engine and the engine exhaust system shall be located out of direct line of the air current exhausting from the mine; and
- (iv) The engine exhaust shall be vented to the atmosphere so that the exhaust gases do not contaminate the mine intake air current or any enclosure.
- (c) If a main mine fan monitoring system is used under §75.312, the system shall--
- (1) Record, as described in paragraph (a)(4) the mine ventilating pressure;
- (2) Monitor bearing temperature, revolutions per minute, vibration, electric voltage, and amperage;
- (3) Provide a printout of the monitored parameters, including the mine ventilating pressure within a reasonable period, not to exceed the end of the next scheduled shift during which miners are underground; and

- (4) Be equipped with an automatic device that signals when--
- (i) An electrical or mechanical deficiency exists in the monitoring system; or
- (ii) A sudden increase or loss in mine ventilating pressure occurs.
- (5) Provide monitoring, records, printouts, and signals required by paragraphs (c)(1) through (c)(4) at a surface location at the mine where a responsible person designated by the operator is always on duty and where signals from the monitoring system can be seen or heard while anyone is underground. This person shall be provided with two-way communication with the working sections and work stations where persons are routinely assigned to work for the majority of a shift.
- (d) Weak walls and explosion doors shall have cross-sectional areas at least equal to that of the entry through which the pressure from an explosion underground would be relieved. A weak wall and explosion door combination shall have a total cross-sectional area at least equal to that of the entry through which the pressure from an explosion underground would be relieved.
- (e) If a mine fan is installed in line with an entry, a slope, or a shaft-
- (1) The cross-sectional area of the pressure relief entry shall be at least equal to that of the fan entry;
- (2) The fan entry shall be developed out of direct line with possible explosive forces;
- (3) The coal or other solid material between the pressure relief entry and the fan entry shall be at least 2,500 square feet; and
- (4) The surface opening of the pressure relief entry shall be not less than 15 feet nor more than 100 feet from the surface opening of the fan entry and from the underground intersection of the fan entry and pressure relief entry.
- (f) In mines ventilated by multiple main mine fans, incombustible doors shall be installed so that if any main mine fan stops and air reversals through the fan are possible, the doors on the affected fan automatically close.

Comment - This regulation requires that the mine fan be equipped with a signaling system that warns when the fan slows or stops and further requires a pressure recording device or system. Both are required to be recorded and records retained. Fan pressure is recorded on fan charts or graph and such records must be retained for a period of one year and made available to interested persons. The regulation permits fan pressure recording by electronic means. When records of fan pressure are stored electronically, the system used to store these records shall be secure and not susceptible to alteration and shall be capable of storing the required data. Records of the fan pressure shall be retained at a surface location at the mine for at least 1 year and be made available for inspection by authorized representatives of the Secretary and the representative of miners. This information does have practical utility and is necessary for the functions of the agency. The mine fan is the life's blood of a mine, providing the ventilation to keep the mine

free of gases and dust. When the fan goes down, the mine must be evacuated. Consequently, it is of great importance that the fan be monitored for proper function and these functions recorded. The fan's pressure recordings are plotted on a chart or graph. The fan chart is of critical importance in the event of an explosion, fire or roof fall. Examination of the fan pressure recordings after such an event will provide an accurate time of the event by noting the pressure changes recorded on the fan chart or graph. The fan pressure recording and alarms provide critical information which is regularly made a part of investigation reports after such events occur. It is of utmost importance that these records continue to be maintained and made a part of the mine records.

# 30 CFR § 75.312 Main mine fan examinations and records.

- (a) To assure electrical and mechanical reliability of main mine fans, each main mine fan and its associated components, including devices for measuring or recording mine ventilation pressure, shall be examined for proper operation by a trained person designated by the operator. Examinations of main mine fans shall be made at least once each day that the fan operates, unless a fan monitoring system is used. No examination is required on any day when no one, including certified persons, goes underground, except that an examination shall be completed prior to anyone entering the mine.
- (b) If a main mine fan monitoring system is used, a trained person designated by the operator shall--
- (i) At least once each day review the data provided by the fan monitoring system to assure that the fan and the fan monitoring system are operating properly. No review is required on any day when no one, including certified persons, goes underground, except that a review of the data shall be performed prior to anyone entering the underground portion of the mine. Data reviewed should include the fan pressure, bearing temperature, revolutions per minute, vibration, electric voltage, and amperage; and
- (ii) At least every 7 days--
- (A) Test the monitoring system for proper operation; and
- (B) Examine each main mine fan and its associated components to assure electrical and mechanical reliability of main mine fans.
- (2) If the monitoring system malfunctions, the malfunction shall be corrected, or paragraph (a) of this section shall apply.
- (c) At least every 31 days, the automatic fan signal device for each main mine fan shall be tested by stopping the fan. Only persons necessary to evaluate the effect of the fan stoppage or restart, or to perform maintenance or repair work that cannot otherwise be made while the fan is operating, shall be permitted underground. Notwithstanding the requirement of §75.311(b)(3), underground power may remain energized during this test provided no one, including persons

identified in §75.311(b)(1), is underground. If the fan is not restarted within 15 minutes, underground power shall be deenergized and no one shall enter any underground area of the mine until the fan is restarted and an examination of the mine is conducted as described in §75.360(b) through (e) and the mine has been determined to be safe.

- (d) At least every 31 days, the automatic closing doors in multiple main mine fan systems shall be tested by stopping the fan. Only persons necessary to evaluate the effect of the fan stoppage or restart, or to perform maintenance or repair work that cannot otherwise be made while the fan is operating, shall be permitted underground. Notwithstanding the provisions of §75.311, underground power may remain energized during this test provided no one, including persons identified in §75.311(b)(1), is underground. If the fan is not restarted within 15 minutes, underground power shall be deenergized and no one shall enter any underground area of the mine, until the fan is restarted and an examination of the mine is conducted as described in §75.360(b) through (e) and the mine has been determined to be safe.
- (e) Circular main mine fan pressure recording charts shall be changed before the beginning of a second revolution.
- (f) Certification. Persons making main mine fan examinations shall certify by initials and date at the fan or another location specified by the operator that the examinations were made. Each certification shall identify the main mine fan examined.
- (2) Persons reviewing data produced by a main mine fan monitoring system shall certify by initials and date on a printed copy of the data from the system that the review was completed. In lieu of certification on a copy of the data, the person reviewing the data may certify electronically that the review was completed. Electronic certification shall be by handwritten initials and date in a computer system so as to be secure and not susceptible to alteration.
- (g) Recordkeeping. By the end of the shift on which the examination is made, persons making main mine fan examinations shall record all uncorrected defects that may affect the operation of the fan that are not corrected by the end of that shift. Records shall be maintained in a secure book that is not susceptible to alteration or electronically in a computer system so as to be secure and not susceptible to alteration.
- (2) When a fan monitoring system is used in lieu of the daily fan examination-
- (i) The certified copies of data produced by fan monitoring systems shall be maintained separate from other computer-generated reports or data; and
- (ii) A record shall be made of any fan monitoring system malfunctions, electrical or mechanical deficiencies in the monitoring system and any sudden increase or loss in mine ventilating pressure. The record shall be made by the end of the shift on which the review of the data is completed and shall be maintained in a secure book that is not susceptible to alteration or electronically in a computer system so as to be secure and not susceptible to alteration.
- (3) By the end of the shift on which the monthly test of the automatic fan signal device or the automatic closing doors is completed, persons making these tests shall record the results of the

tests. Records shall be maintained in a secure book that is not susceptible to alteration or electronically in a computer system so as to be secure and not susceptible to alteration.

(h) Retention period. Records, including records of mine fan pressure and the certified copies of data produced by fan monitoring systems, shall be retained at a surface location at the mine for at least 1 year and shall be made available for inspection by authorized representatives of the Secretary and the representative of miners.

Comment - This section of the regulations requires an examination of the electrical and mechanical components of the mine fans and the pressure recording records on a daily basis to assure the proper operation of the fan. If a fan monitoring system is used, a trained person must review the data from that system to assure the fan's proper operation. These examinations must be certified that they were made in both cases. The standard also requires a weekly test of the fan monitoring system and a monthly test of the fan signal and automatic closing doors for proper function. Each one of these test must be recorded. As pointed out in comments on 75.310, the mine fan is the life blood of the mine and must be tested and maintained in proper functioning order. In addition, those safeguards and tests which indicate the proper function of the fan are a critical part of guaranteeing the safety of the mine. As noted above, this information does have practical utility and is necessary for the functions of the agency and provide a maintenance record for the mine fan(s). Consequently, this recordkeeping requirement should not be changed.

## 30 CFR § 75.342 Methane monitors.

- (a)(1) MSHA approved methane monitors shall be installed on all face cutting machines, continuous miners, longwall face equipment, loading machines, and other mechanized equipment used to extract or load coal within the working place.
- (2) The sensing device for methane monitors on longwall shearing machines shall be installed at the return air end of the longwall face. An additional sensing device also shall be installed on the longwall shearing machine, downwind and as close to the cutting head as practicable. An alternative location or locations for the sensing device required on the longwall shearing machine may be approved in the ventilation plan.
- (3) The sensing devices of methane monitors shall be installed as close to the working face as practicable.
- (4) Methane monitors shall be maintained in permissible and proper operating condition and shall be calibrated with a known air-methane mixture at least once every 31 days. To assure that methane monitors are properly maintained and calibrated, the operator shall:
- (i) Use persons properly trained in the maintenance, calibration, and permissibility of methane monitors to calibrate and maintain the devices.
- (ii) Maintain a record of all calibration tests of methane monitors. Records shall be maintained in

a secure book that is not susceptible to alteration or electronically in a computer system so as to be secure and not susceptible to alteration.

- (iii) Retain the record of calibration tests for 1 year from the date of the test. Records shall be retained at a surface location at the mine and made available for inspection by authorized representatives of the Secretary and the representative of miners.
- (b)(1) When the methane concentration at any methane monitor reaches 1.0 percent the monitor shall give a warning signal.
- (2) The warning signal device of the methane monitor shall be visible to a person who can deenergize electric equipment or shut down diesel-powered equipment on which the monitor is mounted.
- (c) The methane monitor shall automatically deenergize electric equipment or shut down diesel-powered equipment on which it is mounted when--
- (1) The methane concentration at any methane monitor reaches 2.0 percent; or
- (2) The monitor is not operating properly.

Comment - This standard requires that methane monitors be calibrated once every thirty-one days for proper function. The results of those tests must be recorded and maintained for one year and made available for inspection by interested persons. These tests are required to make certain that the methane monitors on face equipment is operating properly. The recordkeeping provisions of this section requires that monthly calibrations be recorded and kept for one year. These records are critical for the Agency; safety committee; state agency or mine management to assure the methane monitors are functioning properly and being maintained properly. Therefore, the recordkeeping requirements for this standard must not be changed. These records would be necessary for the proper performance of the Agency and must continue to be required.

# 30 CFR § 75.351 Atmospheric monitoring system (AMS).

- (a) AMS operation. Whenever personnel are underground and an AMS is used to fulfill the requirements of § § 75.323(d)(1)(ii), 75.340(a)(1)(ii), 75.340(a)(2)(ii), 75.350(b), 75.350(d), or 75.362(f), the AMS must be operating and a designated AMS operator must be on duty at a location on the surface of the mine where audible and visual signals from the AMS must be seen or heard and the AMS operator can promptly respond to these signals.
- (b) Designated surface location and AMS operator. When an AMS is used to comply with § § 75.323(d)(1)(ii), 75.340(a)(1)(ii), 75.340(a)(2)(ii), 75.350(b), 75.350(d), or 75.362(f), the following requirements apply:
- (1) The mine operator must designate a surface location at the mine where signals from the AMS will be received and two-way voice communication is maintained with each working

section, with areas where mechanized mining equipment is being installed or removed, and with other areas designated in the approved emergency evacuation and firefighting program of instruction (§ 75.1502).

- (2) The mine operator must designate an AMS operator to monitor and promptly respond to all AMS signals. The AMS operator must have as a primary duty the responsibility to monitor the malfunction, alert and alarm signals of the AMS, and to notify appropriate personnel of these signals. In the event of an emergency, the sole responsibility of the AMS operator shall be to respond to the emergency.
- (3) A map or schematic must be provided at the designated surface location that shows the locations and type of AMS sensor at each location, and the intended air flow direction at these locations. This map or schematic must be updated within 24 hours of any change in this information.
- (4) The names of the designated AMS operators and other appropriate personnel, including the designated person responsible for initiating an emergency mine evacuation under § 75.1501, and the method to contact these persons, must be provided at the designated surface location.
- (c) Minimum operating requirements. AMSs used to comply with § § 75.323(d)(1)(ii), 75.340(a)(1)(ii), 75.340(a)(2)(ii), 75.350(b), 75.350(d), or 75.362(f) must:
- (1) Automatically provide visual and audible signals at the designated surface location for any interruption of circuit continuity and any electrical malfunction of the system. These signals must be of sufficient magnitude to be seen or heard by the AMS operator.
- (2) Automatically provide visual and audible signals at the designated surface location when the carbon monoxide concentration or methane concentration at any sensor reaches the alert level as specified in § 75.351(i). These signals must be of sufficient magnitude to be seen or heard by the AMS operator.
- (3) Automatically provide visual and audible signals at the designated surface location distinguishable from alert signals when the carbon monoxide, smoke, or methane concentration at any sensor reaches the alarm level as specified in § 75.351(i). These signals must be of sufficient magnitude to be seen or heard by the AMS operator.
- (4) Automatically provide visual and audible signals at all affected working sections and at all affected areas where mechanized mining equipment is being installed or removed when the carbon monoxide, smoke, or methane concentration at any sensor reaches the alarm level as specified in § 75.351(i). These signals must be of sufficient magnitude to be seen or heard by miners working at these locations. Methane signals must be distinguishable from other signals.
- (5) Automatically provide visual and audible signals at other locations as specified in Mine Emergency Evacuation and Firefighting Program of Instruction (§ 75.1502) when the carbon monoxide, smoke, or methane concentration at any sensor reaches the alarm level as specified in § 75.351(i). These signals must be seen or heard by miners working at these locations. Methane alarms must be distinguishable from other signals.

- (6) Identify at the designated surface location the operational status of all sensors.
- (7) Automatically provide visual and audible alarm signals at the designated surface location, at all affected working sections, and at all affected areas where mechanized mining equipment is being installed or removed when the carbon monoxide level at any two consecutive sensors alert at the same time. These signals must be seen or heard by the AMS operator and miners working at these locations.
- (d) Location and installation of AMS sensors. (1) All AMS sensors, as specified in § § 75.351(e) through 75.351(h), must be located such that measurements are representative of the mine atmosphere in these locations.
- (2) Carbon monoxide or smoke sensors must be installed near the center in the upper third of the entry, in a location that does not expose personnel working on the system to unsafe conditions. Sensors must not be located in abnormally high areas or in other locations where air flow patterns do not permit products of combustion to be carried to the sensors.
- (3) Methane sensors must be installed near the center of the entry, at least 12 inches from the roof, ribs, and floor, in a location that would not expose personnel working on the system to unsafe conditions.
  - (e) Location of sensors-belt air course.
- (1) In addition to the requirements of paragraph (d) of this section, any AMS used to monitor belt air courses under Sec. 75.350(b) must have approved sensors to monitor for carbon monoxide at the following locations:
- (i) At or near the working section belt tailpiece in the air stream ventilating the belt entry. In longwall mining systems the sensor must be located upwind in the belt entry at a distance no greater than 150 feet from the mixing point where intake air is mixed with the belt air at or near the tailpiece;
- (ii) No more than 50 feet upwind from the point where the belt air course is combined with another air course or splits into multiple air courses;
- (iii) At intervals not to exceed 1,000 feet along each belt entry. However, in areas along each belt entry where air velocities are between 50 and 100 feet per minute, spacing of sensors must not exceed 500 feet. In areas along each belt entry where air velocities are less than 50 feet per minute, the sensor spacing must not exceed 350 feet;
- (iv) Not more than 100 feet downwind of each belt drive unit, each tailpiece, transfer point, and each belt take-up. If the belt drive, tailpiece, and/or take-up for a single transfer point are installed together in the same air course, and the distance between the units is less than 100 feet, they may be monitored with one sensor downwind of the last component. If the distance between the units exceeds 100 feet, additional sensors are required downwind of each belt drive unit, each tailpiece, transfer point, and each belt take-up; and

- (v) At other locations in any entry that is part of the belt air course as required and specified in the mine ventilation plan.
- (2) Smoke sensors must be installed to monitor the belt entry under Sec. 75.350(b) at the following locations:
- (i) At or near the working section belt tailpiece in the air stream ventilating the belt entry. In longwall mining systems the sensor must be located upwind in the belt entry at a distance no greater than 150 feet from the mixing point where intake air is mixed with the belt air at or near the tailpiece;
- (ii) Not more than 100 feet downwind of each belt drive unit, each tailpiece transfer point, and each belt take-up. If the belt drive, tailpiece, and/or take-up for a single transfer point are installed together in the same air course, and the distance between the units is less than 100 feet, they may be monitored with one sensor downwind of the last component. If the distance between the units exceeds 100 feet, additional sensors are required downwind of each belt drive unit, each tailpiece, transfer point, and each belt take-up; and
  - (iii) At intervals not to exceed 3,000 feet along each belt entry.
- (iv) This provision shall be effective one year after the Secretary has determined that a smoke sensor is available to reliably detect fire in underground coal mines.
- (f) Locations of sensors—the primary escapeway. When used to monitor the primary escapeway under § 75.350(b)(4), carbon monoxide or smoke sensors must be located in the primary escapeway within 500 feet of the working section and areas where mechanized mining equipment is being installed or removed. In addition, another sensor must be located within 500 feet inby the beginning of the panel. The point-feed sensor required by § 75.350(d)(1) may be used as the sensor at the beginning of the panel if it is located within 500 feet inby the beginning of the panel.
- (g) Location of sensors--return air splits. (1) If used to monitor return air splits under § 75.362(f), a methane sensor must be installed in the return air split between the last working place, longwall or shortwall face ventilated by that air split, and the junction of the return air split with another air split, seal, or worked out area.
- (2) If used to monitor a return air split under § 75.323(d)(1)(ii), the methane sensors must be installed at the following locations:
- (i) In the return air course opposite the section loading point, or, if exhausting auxiliary fan(s) are used, in the return air course no closer than 300 feet downwind from the fan exhaust and at a point opposite or immediately outby the section loading point; and
- (ii) Immediately upwind from the location where the return air split meets another air split or immediately upwind of the location where an air split is used to ventilate seals or worked-out areas.

- (h) Location of sensors--electrical installations. When monitoring the intake air ventilating underground transformer stations, battery charging stations, substations, rectifiers, or water pumps under § 75.340(a)(1)(ii) or § 75.340(a)(2)(ii), at least one sensor must be installed to monitor the mine atmosphere for carbon monoxide or smoke, located downwind and not greater than 50 feet from the electrical installation being monitored.
- (i) Establishing alert and alarm levels. An AMS installed in accordance with the following paragraphs must initiate alert and alarm signals at the specified levels, as indicated:
  - (1) For § 75.323(d)(1)(ii) alarm at 1.5% methane.
- (2) For § § 75.340(a)(1)(ii), 75.340(a)(2)(ii), 75.350(b), and 75.350(d), alert at 5 ppm carbon monoxide above the ambient level and alarm at 10 ppm carbon monoxide above the ambient level when carbon monoxide sensors are used; and alarm at a smoke optical density of 0.022 per meter when smoke sensors are used. Reduced alert and alarm settings approved by the district manager may be required for carbon monoxide sensors identified in the mine ventilation plan, § 75.371(nn).
  - (3) For § 75.362(f), alert at 1.0% methane and alarm at 1.5% methane.
- (j) Establishing carbon monoxide ambient levels. Carbon monoxide ambient levels and the means to determine these levels must be approved in the mine ventilation plan (§ 75.371(hh)) for monitors installed in accordance with § § 75.340(a)(1)(ii), 75.340(a)(2)(ii), 75.350(b), and 75.350(d).
- (k) Installation and maintenance. An AMS installed in accordance with § § 75.323(d)(1)(ii), 75.340(a)(1)(ii), 75.340(a)(2)(ii), 75.350(b), 75.350(d), or 75.362(f) must be installed and maintained by personnel trained in the installation and maintenance of the system. The system must be maintained in proper operating condition.
- (1) Sensors. Sensors used to monitor for carbon monoxide, methane, and smoke must be either of a type listed and installed in accordance with the recommendations of a nationally recognized testing laboratory approved by the Secretary; or these sensors must be of a type, and installed in a manner, approved by the Secretary.
- (m) Time delays. When a demonstrated need exists, time delays may be incorporated into the AMS. These time delays must only be used to account for non-fire related carbon monoxide alert and alarm sensor signals. These time delays are limited to no more than three minutes. The use and length of any time delays, or other techniques or methods which eliminate or reduce the need for time delays, must be specified and approved in the mine ventilation plan.
- (n) Examination, testing, and calibration. (1) At least once each shift when belts are operated as part of a production shift, sensors used to detect carbon monoxide or smoke in accordance with § § 75.350(b), and 75.350(d), and alarms installed in accordance with § 75.350(b) must be visually examined.

- (2) At least once every seven days, alarms for AMS installed in accordance with § § 75.350(b), and 75.350(d) must be functionally tested for proper operation.
  - (3) At intervals not to exceed 31 days--
- (i) Each carbon monoxide sensor installed in accordance with § § 75.340(a)(1)(ii), 75.340(a)(2)(ii), 75.350(b), or 75.350(d) must be calibrated in accordance with the manufacturer's calibration specifications. Calibration must be done with a known concentration of carbon monoxide in air sufficient to activate the alarm;
- (ii) Each smoke sensor installed in accordance with § § 75.340(a)(1)(ii), 75.340(a)(2)(ii), 75.350(b), or 75.350(d) must be functionally tested in accordance with the manufacturer's calibration specifications;
- (iii) Each methane sensor installed in accordance with § § 75.323(d)(1)(ii) or 75.362(f) must be calibrated in accordance with the manufacturer's calibration specifications. Calibration must be done with a known concentration of methane in air sufficient to activate an alarm.
- (iv) If the alert or alarm signals will be activated during calibration of sensors, the AMS operator must be notified prior to and upon completion of calibration. The AMS operator must notify miners on affected working sections, areas where mechanized mining equipment is being installed or removed, or other areas designated in the approved emergency evacuation and firefighting program of instruction (§ 75.1502) when calibration will activate alarms and when calibration is completed.
- (4) Gases used for the testing and calibration of AMS sensors must be traceable to the National Institute of Standards and Technology reference standard for the specific gas. When these reference standards are not available for a specific gas, calibration gases must be traceable to an analytical standard which is prepared using a method traceable to the National Institute of Standards and Technology. Calibration gases must be within 2.0 percent of the indicated gas concentration.
- (o) Recordkeeping. (1) When an AMS is used to comply with § § 75.323(d)(1)(ii), 75.340(a)(1)(ii), 75.340(a)(2)(ii), 75.350(b), 75.350(d), or 75.362(f), individuals designated by the operator must make the following records by the end of the shift in which the following event(s) occur:
- (i) If an alert or alarm signal occurs, a record of the date, time, location and type of sensor, and the cause for the activation.
- (ii) If an AMS malfunctions, a record of the date, the extent and cause of the malfunction, and the corrective action taken to return the system to proper operation.
- (iii) A record of the seven-day tests of alert and alarm signals; calibrations; and maintenance of the AMS must be made by the person(s) performing these actions.
  - (2) The person entering the record must include their name, date, and signature in the record.

- (3) The records required by this section must be kept either in a secure book that is not susceptible to alteration, or electronically in a computer system that is secure and not susceptible to alteration. These records must be maintained separately from other records and identifiable by a title, such as the 'AMS log.'
- (p) Retention period. Records must be retained for at least one year at a surface location at the mine and made available for inspection by miners and authorized representatives of the Secretary.
  - (q) Training.
- (1) All AMS operators must be trained annually in the proper operation of the AMS. This training must include the following subjects:
  - (i) Familiarity with underground mining systems;
  - (ii) Basic atmospheric monitoring system requirements;
  - (iii) The mine emergency evacuation and firefighting program of instruction;
  - (iv) The mine ventilation system including planned air directions;
  - (v) Appropriate response to alert, alarm and malfunction signals;
  - (vi) Use of mine communication systems including emergency notification procedures; and
  - (vii) AMS recordkeeping requirements.
  - (2) At least once every six months, all AMS operators must travel to all working sections.
- (3) A record of the content of training, the person conducting the training, and the date the training was conducted, must be maintained at the mine for at least one year by the mine operator.
- (r) Communications. When an AMS is used to comply with § 75.350(b), a two-way voice communication system required by § 75.1600 must be installed in an entry that is separate from the entry in which the AMS is installed no later than August 2, 2004. The two-way voice communication system may be installed in the entry where the intake sensors required by § § 75.350(b)(4) or 75.350(d)(1) are installed.

Comment - This standard governs the use and maintenance of atmospheric monitoring systems (AMS). The recordkeeping requirements for this section requires a record of each alert or alarm of the system with the date, time, location of sensor and type of sensor alerting or alarming. It further requires a record of any malfunction of the AMS including the date, cause and corrective action taken. Every seven days a test of the AMS alert and alarm signals must be performed with a calibration of the system. All records of these maintenance checks must be kept for one

year. The standard further requires recordkeeping for training given to those working with the AMS. A record must be made of the content of the training; the person conducting the training, The AMS has sensors for smoke, carbon monoxide and methane. The standard specifies the locations for each of these sensors. The AMS is the main monitoring system for mine fires and its maintenance is critical to the safety of the miners working underground. It is critical that the function tests and calibration of these systems be performed regularly as required. The records of alerts and alarms are also critical to identify specifics surrounding each time the system gives warning. Therefore, the recordkeeping requirements for this standard must not be changed. It currently permits electronic recordkeeping provided the computer is secured and not susceptible to alteration. The UMWA recommends no change to this requirement. These records are necessary for the proper performance of the agency and does have practical utility.

# 30 CFR § 75.360 Preshift examination.

- (a)(1) Except as provided in paragraph (a)(2) of this section, a certified person designated by the operator must make a preshift examination within 3 hours preceding the beginning of any 8-hour interval during which any person is scheduled to work or travel underground. No person other than certified examiners may enter or remain in any underground area unless a preshift examination has been completed for the established 8-hour interval. The operator must establish 8-hour intervals of time subject to the required preshift examinations.
- (2) Preshift examinations of areas where pumpers are scheduled to work or travel shall not be required prior to the pumper entering the areas if the pumper is a certified person and the pumper conducts an examination for hazardous conditions, tests for methane and oxygen deficiency and determines if the air is moving in its proper direction in the area where the pumper works or travels. The examination of the area must be completed before the pumper performs any other work. A record of all hazardous conditions found by the pumper shall be made and retained in accordance with §75.363.
- (b) The person conducting the preshift examination shall examine for hazardous conditions, test for methane and oxygen deficiency, and determine if the air is moving in its proper direction at the following locations:
- (1) Roadways, travelways and track haulageways where persons are scheduled, prior to the beginning of the preshift examination, to work or travel during the oncoming shift.
- (2) Belt conveyors that will be used to transport persons during the oncoming shift and the entries in which these belt conveyors are located.
- (3) Working sections and areas where mechanized mining equipment is being installed or removed, if anyone is scheduled to work on the section or in the area during the oncoming shift. The scope of the examination shall include the working places, approaches to worked-out areas and ventilation controls on these sections and in these areas, and the examination shall include tests of the roof, face and rib conditions on these sections and in these areas.

- (4) Approaches to worked-out areas along intake air courses and at the entries used to carry air into worked-out areas if the intake air passing the approaches is used to ventilate working sections where anyone is scheduled to work during the oncoming shift. The examination of the approaches to the worked-out areas shall be made in the intake air course immediately inby and outby each entry used to carry air into the worked-out area. An examination of the entries used to carry air into the worked-out areas shall be conducted at a point immediately inby the intersection of each entry with the intake air course.
- (5) Seals along intake air courses where intake air passes by a seal to ventilate working sections where anyone is scheduled to work during the oncoming shift.
- (6)(i) Entries and rooms developed after November 15, 1992, and developed more than 2 crosscuts off an intake air course without permanent ventilation controls where intake air passes through or by these entries or rooms to reach a working section where anyone is scheduled to work during the oncoming shift; and,
- (ii) Entries and rooms developed after November 15, 1992, and driven more than 20 feet off an intake air course without a crosscut and without permanent ventilation controls where intake air passes through or by these entries or rooms to reach a working section where anyone is scheduled to work during the oncoming shift.
- (7) Areas where trolley wires or trolley feeder wires are to be or will remain energized during the oncoming shift.
- (8) High spots along intake air courses where methane is likely to accumulate, if equipment will be operated in the area during the shift.
- (9) Underground electrical installations referred to in §75.340(a), except those pumps listed in §75.340(b)(2) through (b)(6), and areas where compressors subject to §75.344 are installed if the electrical installation or compressor is or will be energized during the shift.
- (10) Other areas where work or travel during the oncoming shift is scheduled prior to the beginning of the preshift examination.
- (c) The person conducting the preshift examination shall determine the volume of air entering each of the following areas if anyone is scheduled to work in the areas during the oncoming shift:
- (1) In the last open crosscut of each set of entries or rooms on each working section and areas where mechanized mining equipment is being installed or removed. The last open crosscut is the crosscut in the line of pillars containing the permanent stoppings that separate the intake air courses and the return air courses.
- (2) On each longwall or shortwall in the intake entry or entries at the intake end of the longwall or shortwall face immediately outby the face and the velocity of air at each end of the face at the locations specified in the approved ventilation plan.

- (3) At the intake end of any pillar line--
- (i) If a single split of air is used, in the intake entry furthest from the return air course, immediately outby the first open crosscut outby the line of pillars being mined; or
- (ii) If a split system is used, in the intake entries of each split immediately inby the split point.
- (d) The person conducting the preshift examination shall check the refuge alternative for damage, the integrity of the tamper-evident seal and the mechanisms required to deploy the refuge alternative, and the ready availability of compressed oxygen and air.
- (e) The district manager may require the certified person to examine other areas of the mine or examine for other hazards during the preshift examination.
- (f) Certification. At each working place examined, the person doing the preshift examination shall certify by initials, date, and the time, that the examination was made. In areas required to be examined outby a working section, the certified person shall certify by initials, date, and the time at enough locations to show that the entire area has been examined.
- (g) Recordkeeping. A record of the results of each preshift examination, including a record of hazardous conditions and their locations found by the examiner during each examination and of the results and locations of air and methane measurements, shall be made on the surface before any persons, other than certified persons conducting examinations required by this subpart, enter any underground area of the mine. The results of methane tests shall be recorded as the percentage of methane measured by the examiner. The record shall be made by the certified person who made the examination or by a person designated by the operator. If the record is made by someone other than the examiner, the examiner shall verify the record by initials and date by or at the end of the shift for which the examination was made. A record shall also be made by a certified person of the action taken to correct hazardous conditions found during the preshift examination. All preshift and corrective action records shall be countersigned by the mine foreman or equivalent mine official by the end of the mine foreman's or equivalent mine official's next regularly scheduled working shift. The records required by this section shall be made in a secure book that is not susceptible to alteration or electronically in a computer system so as to be secure and not susceptible to alteration.
- (h) Retention period. Records shall be retained at a surface location at the mine for at least 1 year and shall be made available for inspection by authorized representatives of the Secretary and the representative of miners.

Comment - This proposal questions the requirement for recording preshift inspections. The UMWA maintains that these records are vital to the safety of the mine; are necessary for the functions of the agency and do have practical utility. The preshift examination is a required inspection prior to miners entering their workplaces. The certified mine examiner inspects the workplace for hazards, including tests for methane and oxygen deficiency. The hazardous conditions found in these examinations are required to be corrected before the miners enter the area to work. These records and examinations are vital to the health and safety of the miners. Further, when MSHA or state inspection agencies inspect the mine, one of the first records they

review is the preshift examination books to see what the mine examiner found and recorded. The MSHA inspector will look to see if these conditions are being corrected or if they could be part of larger problem (such as a ventilation problem in the mine). These records have historically been kept at a central location at the mine where the examiner from each shift can record their findings and any inspection agency, safety committee or interested party can examine them. These records are usually kept in written form in a ledger or book. The UMWA recommends no change to this requirement. These records are necessary for the proper performance of the agency and does have practical utility.

# 30 CFR § 75.361 Supplemental examination.

- (a) Except for certified persons conducting examinations required by this subpart, within 3 hours before anyone enters an area in which a preshift examination has not been made for that shift, a certified person shall examine the area for hazardous conditions, determine whether the air is traveling in its proper direction and at its normal volume, and test for methane and oxygen deficiency.
- (b) Certification. At each working place examined, the person making the supplemental examination shall certify by initials, date, and the time, that the examination was made. In areas required to be examined outby a working section, the certified person shall certify by initials, date, and the time at enough locations to show that the entire area has been examined.

Comment - This proposal requires recordkeeping of the supplemental examination. Like the UMWA's comments on the preshift, we maintain that these records are vital to the safety of the mine; are necessary for the functions of the agency and do have practical utility. These records have historically been kept at a central location at the mine where the examiner from each shift can record their findings and any inspection agency, safety committee or interested party can examine them. These records are usually kept in written form in a ledger or book. The UMWA recommends no change to this requirement. These records are necessary for the proper performance of the agency and does have practical utility.

# 30 CFR § 75.362 On-shift examination.

- (a)(1) At least once during each shift, or more often if necessary for safety, a certified person designated by the operator shall conduct an on-shift examination of each section where anyone is assigned to work during the shift and any area where mechanized mining equipment is being installed or removed during the shift. The certified person shall check for hazardous conditions, test for methane and oxygen deficiency, and determine if the air is moving in its proper direction.
- (2) A person designated by the operator shall conduct an examination to assure compliance with the respirable dust control parameters specified in the mine ventilation plan. In those instances when a shift change is accomplished without an interruption in production on a section, the examination shall be made anytime within 1 hour of the shift change. In those instances when there is an interruption in production during the shift change, the examination shall be made before

production begins on a section. Deficiencies in dust controls shall be corrected before production begins or resumes. The examination shall include air quantities and velocities, water pressures and flow rates, excessive leakage in the water delivery system, water spray numbers and orientations, section ventilation and control device placement, and any other dust suppression measures required by the ventilation plan. Measurements of the air velocity and quantity, water pressure and flow rates are not required if continuous monitoring of these controls is used and indicates that the dust controls are functioning properly.

- (b) During each shift that coal is produced, a certified person shall examine for hazardous conditions along each belt conveyor haulageway where a belt conveyor is operated. This examination may be conducted at the same time as the preshift examination of belt conveyors and belt conveyor haulageways, if the examination is conducted within 3 hours before the oncoming shift.
  - (c) Persons conducting the on-shift examination shall determine at the following locations:
- (1) The volume of air in the last open crosscut of each set of entries or rooms on each section and areas where mechanized mining equipment is being installed or removed. The last open crosscut is the crosscut in the line of pillars containing the permanent stoppings that separate the intake air courses and the return air courses.
- (2) The volume of air on a longwall or shortwall, including areas where longwall or shortwall equipment is being installed or removed, in the intake entry or entries at the intake end of the longwall or shortwall.
- (3) The velocity of air at each end of the longwall or shortwall face at the locations specified in the approved ventilation plan.
  - (4) The volume of air at the intake end of any pillar line-
- (i) Where a single split of air is used in the intake entry furthest from the return air course immediately outby the first open crosscut outby the line of pillars being mined; or
- (ii) Where a split system is used in the intake entries of each split immediately inby the split point.
  - (d)(1) A qualified person shall make tests for methane-
- (i) At the start of each shift at each working place before electrically operated equipment is energized; and
  - (ii) Immediately before equipment is energized, taken into, or operated in a working place; and
- (iii) At 20-minute intervals, or more often if required in the approved ventilation plan at specific locations, during the operation of equipment in the working place.
- (2) These methane tests shall be made at the face from under permanent roof support, using extendable probes or other acceptable means. When longwall or shortwall mining systems are used, these methane tests shall be made at the shearer, the plow, or the cutting head. When mining has been stopped for more than 20 minutes, methane tests shall be conducted prior to the start up of equipment.
- (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.
  - (e) If auxiliary fans and tubing are used, they shall be inspected frequently.
- (f) During each shift that coal is produced and at intervals not exceeding 4 hours, tests for methane shall be made by a certified person or by an atmospheric monitoring system (AMS) in each return split of air from each working section between the last working place, or longwall or shortwall face, ventilated by that split of air and the junction of the return air split with another air split, seal, or worked-out area. If auxiliary fans and tubing are used, the tests shall be made at a location outby the auxiliary fan discharge.
- (g) Certification. (1) The person conducting the on-shift examination in belt haulage entries shall certify by initials, date, and time that the examination was made. The certified person shall certify by initials, date, and the time at enough locations to show that the entire area has been examined.
- (2) The certified person directing the on-shift examination to assure compliance with the respirable dust control parameters specified in the mine ventilation plan shall certify by initials, date, and time that the examination was made.

Comment - This proposal questions the requirement for recording onshift inspections. Like the UMWA's comments on the preshift, we maintain that these records are vital to the safety of the mine; are necessary for the functions of the agency and do have practical utility. These records have historically been kept at a central location at the mine where the examiner from each shift can record their findings and any inspection agency, safety committee or interested party can examine them. These records are usually kept in written form in a ledger or book. The UMWA recommends no change to this requirement. These records are necessary for the proper performance of the agency and does have practical utility.

# 30 CFR § 75.363 Hazardous conditions; posting, correcting and recording.

(a) Any hazardous condition found by the mine foreman or equivalent mine official, assistant mine foreman or equivalent mine official, or other certified persons designated by the operator for the purposes of conducting examinations under this subpart D, shall be posted with a conspicuous danger sign where anyone entering the areas would pass. A hazardous condition shall be corrected immediately or the area shall remain posted until the hazardous condition is corrected. If the condition creates an imminent danger, everyone except those persons referred to in section 104(c) of the Act shall be withdrawn from the area affected to a safe area until the hazardous condition is corrected. Only persons designated by the operator to correct or evaluate the condition may enter

# the posted area.

- (b) A record shall be made of any hazardous condition found. This record shall be kept in a book maintained for this purpose on the surface at the mine. The record shall be made by the completion of the shift on which the hazardous condition is found and shall include the nature and location of the hazardous condition and the corrective action taken. This record shall not be required for shifts when no hazardous conditions are found or for hazardous conditions found during the preshift or weekly examinations inasmuch as these examinations have separate recordkeeping requirements.
- (c) The record shall be made by the certified person who conducted the examination or a person designated by the operator. If made by a person other than the certified person, the certified person shall verify the record by initials and date by or at the end of the shift for which the examination was made. Records shall be countersigned by the mine foreman or equivalent mine official by the end of the mine foreman's or equivalent mine official's next regularly scheduled working shift. The record shall be made in a secure book that is not susceptible to alteration or electronically in a computer system so as to be secure and not susceptible to alteration.
- (d) Retention period. Records shall be retained at a surface location at the mine for at least 1 year and shall be made available for inspection by authorized representatives of the Secretary and the representative of miners.

Comment- This proposal questions the requirement for recording Hazardous conditions; posting, correcting and recording. We maintain that these records are vital to the safety of the mine; are necessary for the functions of the agency and do have practical utility. These records have historically been kept at a central location at the mine where the examiner from each shift can record their findings and any inspection agency, safety committee or interested party can examine them. These records are usually kept in written form in a ledger or book. The UMWA recommends no change to this requirement. These records are necessary for the proper performance of the agency and does have practical utility.

## 30 CFR § 75.364 Weekly examination.

- (a) Worked-out areas. (1) At least every 7 days, a certified person shall examine unsealed worked-out areas where no pillars have been recovered by traveling to the area of deepest penetration; measuring methane and oxygen concentrations and air quantities and making tests to determine if the air is moving in the proper direction in the area. The locations of measurement points where tests and measurements will be performed shall be included in the mine ventilation plan and shall be adequate in number and location to assure ventilation and air quality in the area. Air quantity measurements shall also be made where the air enters and leaves the worked-out area. An alternative method of evaluating the ventilation of the area may be approved in the ventilation plan.
- (2) At least every 7 days, a certified person shall evaluate the effectiveness of bleeder systems

# required by §75.334 as follows:

- (i) Measurements of methane and oxygen concentrations and air quantity and a test to determine if the air is moving in its proper direction shall be made where air enters the worked-out area.
- (ii) Measurements of methane and oxygen concentrations and air quantity and a test to determine if the air is moving in the proper direction shall be made immediately before the air enters a return split of air.
- (iii) At least one entry of each set of bleeder entries used as part of a bleeder system under §75.334 shall be traveled in its entirety. Measurements of methane and oxygen concentrations and air quantities and a test to determine if the air is moving in the proper direction shall be made at the measurement point locations specified in the mine ventilation plan to determine the effectiveness of the bleeder system.
- (iv) In lieu of the requirements of paragraphs (a)(2)(i) and (iii) of this section, an alternative method of evaluation may be specified in the ventilation plan provided the alternative method results in proper evaluation of the effectiveness of the bleeder system.
- (b) Hazardous conditions. At least every 7 days, an examination for hazardous conditions at the following locations shall be made by a certified person designated by the operator:
- (1) In at least one entry of each intake air course, in its entirety, so that the entire air course is traveled.
- (2) In at least one entry of each return air course, in its entirety, so that the entire air course is traveled.
- (3) In each longwall or shortwall travelway in its entirety, so that the entire travelway is traveled.
- (4) At each seal along return and bleeder air courses and at each seal along intake air courses not examined under §75.360(b)(5).
- (5) In each escapeway so that the entire escapeway is traveled.
- (6) On each working section not examined under §75.360(b)(3) during the previous 7 days.
- (7) At each water pump not examined during a preshift examination conducted during the previous 7 days.
- (c) Measurements and tests. At least every 7 days, a certified person shall--
- (1) Determine the volume of air entering the main intakes and in each intake split;
- (2) Determine the volume of air and test for methane in the last open crosscut in any pair or set of developing entries or rooms, in the return of each split of air immediately before it enters the main

returns, and where the air leaves the main returns; and

- (3) Test for methane in the return entry nearest each set of seals immediately after the air passes the seals.
- (d) Hazardous conditions shall be corrected immediately. If the condition creates an imminent danger, everyone except those persons referred to in §104(c) of the Act shall be withdrawn from the area affected to a safe area until the hazardous condition is corrected.
- (e) The weekly examination may be conducted at the same time as the preshift or on-shift examinations.
- (f)(1) The weekly examination is not required during any 7 day period in which no one enters any underground area of the mine.
- (2) Except for certified persons required to make examinations, no one shall enter any underground area of the mine if a weekly examination has not been completed within the previous 7 days.
- (g) Certification. The person making the weekly examinations shall certify by initials, date, and the time that the examination was made. Certifications and times shall appear at enough locations to show that the entire area has been examined.
- (h) Recordkeeping. At the completion of any shift during which a portion of a weekly examination is conducted, a record of the results of each weekly examination, including a record of hazardous conditions found during each examination and their locations, the corrective action taken, and the results and location of air and methane measurements, shall be made. The results of methane tests shall be recorded as the percentage of methane measured by the examiner. The record shall be made by the person making the examination or a person designated by the operator. If made by a person other than the examiner, the examiner shall verify the record by the initials and date by or at the end of the shift for which the examination was made. The record shall be countersigned by the mine foreman or equivalent mine official by the end of the mine foreman's or equivalent mine official's next regularly scheduled working shift. The records required by this section shall be made in a secure book that is not susceptible to alteration or electronically in a computer system so as to be secure and not susceptible to alteration.
- (i) Retention period. Records shall be retained at a surface location at the mine for at least 1 year and shall be made available for inspection by authorized representatives of the Secretary and the representative of miners.

Comment - This section requires the weekly examination of the air courses and escapeways by a certified mine examiner. The results of the weekly examination requires a record of hazardous conditions found during the examination, the corrective action taken and the results and locations of air and methane measurements. As pointed out with the recordkeeping requirements for both the preshift and onshift, , we maintain that these records are vital to the safety of the mine; are necessary for the functions of the agency and do have practical utility. Consequently, we

recommend that they continue to be recorded as has been the historical practice.

# 30 CFR § 75.370 Mine ventilation plan; submission and approval.

- (a)(1) The operator shall develop and follow a ventilation plan approved by the district manager. The plan shall be designed to control methane and respirable dust and shall be suitable to the conditions and mining system at the mine. The ventilation plan shall consist of two parts, the plan content as prescribed in §75.371 and the ventilation map with information as prescribed in §75.372. Only that portion of the map which contains information required under §75.371 will be subject to approval by the district manager.
- (2) The proposed ventilation plan and any revision to the plan shall be submitted in writing to the district manager. When revisions to a ventilation plan are proposed, only the revised pages, maps, or sketches of the plan need to be submitted. When required in writing by the district manager, the operator shall submit a fully revised plan by consolidating the plan and all revisions in an orderly manner and by deleting all outdated material.
- (3)(i) The mine operator shall notify the representative of miners at least 5 days prior to submission of a mine ventilation plan and any revision to a mine ventilation plan. If requested, the mine operator shall provide a copy to the representative of miners at the time of notification. In the event of a situation requiring immediate action on a plan revision, notification of the revision shall be given, and if requested, a copy of the revision shall be provided, to the representative of miners by the operator at the time of submittal;
- (ii) A copy of the proposed ventilation plan, and a copy of any proposed revision, submitted for approval shall be made available for inspection by the representative of miners; and
- (iii) A copy of the proposed ventilation plan, and a copy of any proposed revision, submitted for approval shall be posted on the mine bulletin board at the time of submittal. The proposed plan or proposed revision shall remain posted until it is approved, withdrawn or denied.
- (b) Following receipt of the proposed plan or proposed revision, the representative of miners may submit timely comments to the district manager, in writing, for consideration during the review process. A copy of these comments shall also be provided to the operator by the district manager upon request.
- (c)(1) The district manager will notify the operator in writing of the approval or denial of approval of a proposed ventilation plan or proposed revision. A copy of this notification will be sent to the representative of miners by the district manager.
- (2) If the district manager denies approval of a proposed plan or revision, the deficiencies of the plan or revision shall be specified in writing and the operator will be provided an opportunity to discuss the deficiencies with the district manager.
- (d) No proposed ventilation plan shall be implemented before it is approved by the district

manager. Any intentional change to the ventilation system that alters the main air current or any split of the main air current in a manner that could materially affect the safety and health of the miners, or any change to the information required in §75.371 shall be submitted to and approved by the district manager before implementation.

- (e) Before implementing an approved ventilation plan or a revision to a ventilation plan, persons affected by the revision shall be instructed by the operator in its provisions.
- (f) The approved ventilation plan and any revisions shall be-
- (1) Provided upon request to the representative of miners by the operator following notification of approval;
- (2) Made available for inspection by the representative of miners; and
- (3) Posted on the mine bulletin board within 1 working day following notification of approval. The approved plan and revisions shall remain posted on the bulletin board for the period that they are in effect.
- (g) The ventilation plan for each mine shall be reviewed every 6 months by an authorized representative of the Secretary to assure that it is suitable to current conditions in the mine.

Comment- This proposal questions the requirement for recording requirements of Mine ventilation plan; submission and approval. We maintain that these records are vital to the safety of the mine; are necessary for the functions of the agency and do have practical utility. The UMWA recommends no change to this requirement. These records have historically been kept at a central location at the mine where any inspection agency, safety committee or interested party can examine them. These records are usually kept in written form in a ledger or book. The UMWA recommends no change to this requirement. These records are necessary for the proper performance of the agency and does have practical utility.

# 30 CFR $\S$ 75.371 Mine ventilation plan; contents.

The mine ventilation plan shall contain the information described below and any additional provisions required by the district manager:

- (a) The mine name, company name, mine identification number, and the name of the individual submitting the plan information.
- (b) Planned main mine fan stoppages, other than those scheduled for testing, maintenance or adjustment, including procedures to be followed during these stoppages and subsequent restarts (see §75.311(a)) and the type of device to be used for monitoring main mine fan pressure, if other than a pressure recording device (see 75.310(a)(4)).
- (c) Methods of protecting main mine fans and associated components from the forces of an

underground explosion if a 15-foot offset from the nearest side of the mine opening is not provided (see §75.310(a)(6)); and the methods of protecting main mine fans and intake air openings if combustible material will be within 100 feet of the area surrounding the fan or these openings (see §75.311(f)).

- (d) Persons that will be permitted to enter the mine, the work these persons will do while in the mine, and electric power circuits that will be energized when a back-up fan system is used that does not provide the ventilating quantity provided by the main mine fan (see §75.311(c)).
- (e) The locations and operating conditions of booster fans installed in anthracite mines (see §75.302).
- (f) Section and face ventilation systems used, including drawings illustrating how each system is used, and a description of each different dust suppression system used on equipment on working sections.
- (g) Locations where the air quantities must be greater than 3,000 cubic feet per minute (see (h) In anthracite mines, locations where the air quantities must be greater than 1,500 cubic feet per minute (see §75.325(e)(1)).
- (i) Working places and working faces other than those where coal is being cut, mined, drilled for blasting or loaded, where a minimum air quantity will be maintained, and the air quantity at those locations (see §75.325(a)(1)).
- (j) The operating volume of machine mounted dust collectors or diffuser fans, if used (see §75.325(a)(3)).
- (k) The minimum mean entry air velocity in exhausting face ventilation systems where coal is being cut, mined, drilled for blasting, or loaded, if the velocity will be less than 60 feet per minute. Other working places where coal is not being cut, mined, drilled for blasting or loaded, where at least 60 feet per minute or some other minimum mean entry air velocity will be maintained (see §75.326).
- (1) The maximum distance if greater than 10 feet from each working face at which face ventilation control devices will be installed (see §75.330(b)(2)). The working places other than those where coal is being cut, mined, drilled for blasting or loaded, where face ventilation control devices will be used (see §75.330(b)(1)(ii).
- (m) The volume of air required in the last open crosscut or the quantity of air reaching the pillar line if greater than 9,000 cubic feet per minute (see §75.325(b)).
- (n) In anthracite mines, the volume of air required in the last open crosscut or the quantity of air reaching the pillar line if greater than 5,000 cubic feet per minute (see §75.325(e)(2)).
- (o) Locations where separations of intake and return air courses will be built and maintained to other than the third connecting crosscut outby each working face (see §75.333(b)(1)).

- (p) The volume of air required at the intake to the longwall sections, if different than 30,000 cubic feet per minute (see §75.325(c)).
- (q) The velocities of air on a longwall or shortwall face, and the locations where the velocities must be measured (see §75.325(c)(2)).
- (r) The minimum quantity of air that will be provided during the installation and removal of mechanized mining equipment, the location where this quantity will be provided, and the ventilation controls that will be used (see § 75.325(d), (g), and (i)).
- (s) The locations and frequency of the methane tests if required more often by §75.362(d)(1)(iii) (see §75.362(d)(1)(iii).
- (t) The locations where samples for "designated areas" will be collected, including the specific location of each sampling device, and the respirable dust control measures used at the dust generating sources for these locations (see §70.208 of this chapter).
- (u) The methane and dust control systems at underground dumps, crushers, transfer points, and haulageways.
- (v) Areas in trolley haulage entries where the air velocity will be greater than 250 feet per minute and the velocity in these areas (see §75.327(b)).
- (w) Locations where entries will be advanced less than 20 feet from the inby rib without a crosscut being provided where a line brattice will be required. (see §75.333(g)).
- (x) A description of the bleeder system to be used, including its design (see §75.334).
- (y) The means for determining the effectiveness of bleeder systems (see §75.334(c)(2)).
- (z) The locations where measurements of methane and oxygen concentrations and air quantities and tests to determine whether the air is moving in the proper direction will be made to evaluate the ventilation of nonpillared worked-out areas (see §75.364(a)(1)) and the effectiveness of bleeder systems (see §75.364(a)(2)(iii). Alternative methods of evaluation of the effectiveness of bleeder systems (§75.364(a)(2)(iv)).
- (aa) The means for adequately maintaining bleeder entries free of obstructions such as roof falls and standing water (see §75.334(c)(3)).
- (bb) The location of ventilation devices such as regulators, stoppings and bleeder connectors used to control air movement through worked-out areas (see §75.334(c)(4)). The location and sequence of construction of proposed seals for each worked-out area. (see §75.334(e)).
- (cc) In mines with a demonstrated history of spontaneous combustion: a description of the measures that will be used to detect methane, carbon monoxide, and oxygen concentration during and after pillar recovery and in worked-out areas where no pillars have been recovered (see §75.334(f)(1); and, the actions which will be taken to protect miners from the hazards associated

- with spontaneous combustion (see §75.334(f)(2). If a bleeder system will not be used, the methods that will be used to control spontaneous combustion, accumulations of methane-air mixtures, and other gases, dusts, and furnes in the worked-out area (see §75.334(f)(3)).
- (dd) The location of all horizontal degasification holes that are longer than 1,000 feet and the location of all vertical degasification holes.
- (ee) If methane drainage systems are used, a detailed sketch of each system, including a description of safety precautions used with the systems.
- (ff) Seal installation requirements provided by § 75.335 and the sampling provisions provided by § 75.336.
- (gg) The alternative location for the additional sensing device if the device will not be installed on the longwall shearing machine (see §75.342(a)(2)).
- (hh) The ambient level in parts per million of carbon monoxide, and the method for determining the ambient level, in all areas where carbon monoxide sensors are installed.
- (ii) The locations (designated areas) where dust measurements would be made in the belt entry when belt air is used to ventilate working sections or areas where mechanized mining equipment is being installed or removed, in accordance with § 75.350(b)(3).
- (jj) The locations and approved velocities at those locations where air velocities in the belt entry are above or below the limits set forth in Sec. 75.350(a)(2) or Sec. Sec. 75.350(b)(7) and 75.350(b)(8).
- (kk) The locations where air quantities are measured as set forth in § 75.350(b)(6).
- (11) The locations and use of point-feed regulators, in accordance with § § 75.350(c) and 75.350(d)(5).
- (mm) The location of any diesel-discriminating sensor, and additional carbon monoxide or smoke sensors installed in the belt air course.
- (nn) The length of the time delay or any other method used to reduce the number of non-fire related alert and alarm signals from carbon monoxide sensors.
- (00) The reduced alert and alarm settings for carbon monoxide sensors, in accordance with § 75.351(i)(2).
- (pp) The alternate detector and the alert and alarm levels associated with the detector, in accordance with § 75.352(e)(7).
- (qq) The distance that separation between the primary escapeway and the belt or track haulage entries will be maintained if other than to the first connecting crosscut outby the section loading point (see §75.380(g)).

- (rr) In anthracite mines, the dimensions of escapeways where the pitch of the coal seam does not permit escapeways to be maintained 4 feet by 5 feet and the locations where these dimensions must be maintained (see §75.381(c)(4)).
- (ss) Areas designated by the district manager where measurements of CO and NO<sup>2</sup> concentrations will be made (see § 70.1900(a)(4)).
- (tt) Location where the air quantity will be maintained at the section loading point (see § 75.325(f)(2)).
- (uu) Any additional location(s) required by the district manager where a minimum air quantity must be maintained for an individual unit of diesel-powered equipment. (see § 75.325(f)(5)).
- (vv) The minimum air quantities that will be provided where multiple units of diesel-powered equipment are operated (see § 75.325(g) (1)-(3) and (i)).
- (ww) The diesel-powered mining equipment excluded from the calculation under § 75.325(g). (see § 75.325(h)).
- (xx) Action levels higher than the 50 percent level specified by § 70.1900(c). (see § 75.325(j)).
- (yy) The locations where the pressure differential cannot be maintained from the primary escapeway to the belt entry.

Comment- These records have historically been kept at a central location at the mine and on each working section where any interested party can examine them. These records are kept in written form and used as a daily reference used to eliminate miners exposure to high concentrations of dust as well as other information vital to the miners safety during his day to day duties. The UMWA recommends no change to this requirement. These records are also necessary for the proper performance of the agency and have practical utility.

### 30 CFR § 75.382 Mechanical escape facilities.

- (a) Mechanical escape facilities shall be provided with overspeed, overwind, and automatic stop controls.
- (b) Every mechanical escape facility with a platform, cage, or other device shall be equipped with brakes that can stop the fully loaded platform, cage, or other device.
- (c) Mechanical escape facilities, including automatic elevators, shall be examined weekly. The weekly examination of this equipment may be conducted at the same time as a daily examination required by §75.1400-3.
- (1) The weekly examination shall include an examination of the headgear, connections, links and

chains, overspeed and overwind controls, automatic stop controls, and other facilities.

- (2) At least once each week, the hoist shall be run through one complete cycle of operation to determine that it is operating properly.
- (d) A person trained to operate the mechanical escape facility always shall be available while anyone is underground to provide the mechanical escape facilities, if required, to the bottom of each shaft and slope opening that is part of an escapeway within 30 minutes after personnel on the surface have been notified of an emergency requiring evacuation. However, no operator is required for automatically operated cages, platforms, or elevators.
- (e) Mechanical escape facilities shall have rated capacities consistent with the loads handled.
- (f) Manually-operated mechanical escape facilities shall be equipped with indicators that accurately and reliably show the position of the facility.
- (g) Certification. The person making the examination as required by paragraph (c) of this section shall certify by initials, date, and the time that the examination was made. Certifications shall be made at or near the facility examined.

Comment - This section requires that the mechanical escape facilities be examined weekly to examine the headgear, connections, links and chains, overspeed and overwind controls, automatic stop controls, and other facilities. This examination includes one complete cycle of operation of the hoist. These examinations are necessary to assure the proper maintenance and operation of the escape facilities. The person making the examination is required to certify by initials, date and time the examination was made. These records have historically been kept at a central location at the mine where the examiner can record their findings and any inspection agency, safety committee or interested party can examine them. These records are usually kept in written form in a ledger or book. The UMWA recommends no change to this requirement. These records are necessary for the proper performance of the agency and does have practical utility