
From: Mackey, Deidre [mailto:DMackey@archcoal.com]
Sent: Monday, September 08, 2008 4:57 PM
To: zzMSHA-Standards - Comments to Fed Reg Group
Cc: Conaway, Doug; Bumbico, Tony; DiClaudio, Gene; Rezak, Ivy
Subject: RIN 1219-AB59

Attached for submittal are the comments of Arch Coal, Inc. In Response to Safety Standards Regarding the Recommendation of the Technical Study Panel on the Utilization of Belt Air and the Composition and Fire Retardant Properties of Belt Material in Underground Coal Mining. This document will also be sent via FedEx.

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AB59-COMM-13

Comments of
Arch Coal, Inc,

Submitted to
Mine Safety and Health Administration

In Response to
Safety Standards Regarding the
Recommendation of the Technical Study Panel
on the Utilization of Belt Air and the
Composition and Fire Retardant Properties of
Belt Material in Underground Coal Mining

September 8, 2008

RIN 1219-AB59

Submitted by
Gene Diclaudio, President
Arch Western Bituminous Group



September 8 2008

Patricia W. Silvey
Director, Office of Standards, Regulations & Variances
U.S. Department of Labor
Mine Safety and Health Administration
1100 Wilson Boulevard
Arlington, VA 22209-3939

Dear Ms. Silvey:

These comments are submitted by Arch Coal Western Bituminous Group (AWBG) which is a subsidiary of Arch Coal, Inc. (Arch). Arch is the second largest coal producer in the United States with corporate offices in St. Louis, Missouri. We have over 3,500 employees and operate mines in Colorado, Utah, Kentucky, Virginia, West Virginia and Wyoming.

AWBG has a corporate administrative office in Grand Junction, Colorado and is comprised of four underground mining operations, three in Utah and one in Colorado. Last year these mines produced over 20 million tons of coal while employing approximately 1,200 residents of Utah and Colorado.

These comments are submitted in response to the Proposed Rule issued by the Mine Safety and Health Administration on June 19, 2008 titled *Safety Standards Regarding the Recommendations of the Technical Study Panel on the Utilization of Belt Air and the Composition and Fire Retardant Properties of Belt Material in Underground Coal Mining*.

We appreciate the opportunity to provide comments on these very important issues and hope they will assist MSHA as they further deliberate in the rule making process. My comments will be formatted in a section by section analysis.

75.323 Actions for Excessive Methane

The proposed rule requires mine operators to take action when the methane in the belt entry is between 0.5% and 1.0% when measured 200 feet outby the loading point. This effectively reduces the allowable methane concentration in a belt entry by 50%. With the current maximum allowable concentration of 1.0% methane in the belt entry, there is already a 500% margin of safety prior to the methane concentration becoming a potential hazard outby the “mix point” where the belt air meets another intake split. To allow the belt air to continuously ventilate the working section, a point feed installation would be required to dilute the methane in the belt entry outby the loading point. This point feed would not serve any useful purpose since the same dilution would take place inby the loading point at the mix point. Reversing the belt air may also not be an option because this effectively reduces the total ventilating air reporting to the last open crosscut. This rationale is justification for the use of belt air to dilute methane on the working section and the elimination of this necessary air split could result in diminution of safety. Changes or adjustments to the belt entry ventilation should not be required for methane concentrations less than 1.0%. The current 1.0% methane limit in all intake entries, including the belt entry, already provides an adequate safety factor.

75.333(c) (4) Ventilation Controls

This section proposes to require an airlock (defined as a pair of doors in ventilation controls between two air courses) when the static pressure exceeds 125 pounds on personnel doors along the escapeway. The preamble states the operator may have alternatives such as reducing the size of the door, providing a flap, or sliding door to reduce the static pressure below 125 pounds, however, the regulation needs to clearly allow the use of alternative measures to comply with this requirement. Air locks should only be required when the alternatives such as hinged/sliding doors or flaps do not result in reducing the force required to open a personnel door to 125 or fewer pounds force.

75.350(b) Belt Air Course Ventilation

This section of the regulation would allow operators to utilize belt air only after being evaluated and approved by the District Manger. Mine operators currently utilizing belt air when the regulation becomes effective should be grandfathered and allowed to continue the use of belt air. Mine layouts and plans are projected years in advance and are formulated primarily around the MSHA requirements at the time. Prohibiting the use of belt air at a mine that has been designed to be ventilated using belt air would force significant adjustment in the mine's ventilation system and mining methods. For any mine that is currently using belt air and is unable to obtain MSHA approval for its continued use, there must be a reasonable time of transition for this dramatic change.

75.350(b) (3) Belt Air Course Ventilation

The new rule would require a reduced respirable dust standard (less than 1.0 mg/m³) in the belt entry if any of the working section is on a reduced dust standard. The reduced dust standard would be the lowest respirable dust standard applied to the working section. This is unnecessary since respirable dust samples must still be collected at the affected designated areas (DA) or designated occupations (DO). Like methane, dust concentrations in the belt entry will be reduced when that air split meets another intake air split. The working section ventilation must be treated as the combination of air provided by the one or more intake air courses and the belt air course.

75.350(b) (7) 75.350(b) (8) and 75.371(jj) Belt Air Course Ventilation

This proposal requires a minimum air velocity in the belt entry of 100 feet per minute and a maximum air velocity of 1,000 feet per minute when belt air is used to ventilate a working section. Otherwise, a minimum air velocity of 50 feet per minute is required in the belt entry. Each and every location where either the minimum or maximum air velocity may be exceeded should not be required to be listed and approved in the Ventilation Plan. Listing of such areas could be extensive and include distances of only a few feet (i.e. at an overcast). Roof conditions may dictate the use of cribs for a short distance. If a reduced air velocity results from the crib installation, an

Operator would be in violation of the regulation until an addendum to the Ventilation Plan was submitted and approved. MSHA does not have the available resources to continuously review and approve in a timely manner the numerous addendums such a regulation would require. The intent of the regulation should be to maintain an average minimum or maximum air velocity along the entire length of the belt. Spacing of the AMS sensors should be consistent with air velocity at the sensor location.

75.350(d) (1) Belt Air Course Ventilation

The proposed regulation would require a second carbon monoxide sensor approximately 1,000 feet outby point feed locations, in addition to the sensor currently required at approximately 50 feet outby the point feed location. The second sensor is redundant and unnecessary. Currently, 30 CFR 75.350(b) (4) already requires monitoring of the intake escapeway, with sensors (smoke or carbon monoxide) at the mouth of the section and adjacent to the loading point. These sensors suffice for early warning of a fire in the primary escapeway, allowing initiation of escape.

75.350(d) (7) Belt Air Course Ventilation

The proposed regulation would require the capability of closing point feed regulators from a remote (surface AMS station) location. This would apply only to point feeding air from the primary escapeway to a belt entry designated as the alternate escapeway. In mines with complex ventilation systems, it would be difficult to predict the effects of closing such a ventilation control. The effects of that change on the entire underground ventilation system must be understood to ensure that the change would not unintentionally endanger personnel working in other areas of the mine. Computer modeling is routinely utilized to aid qualified ventilation engineers in determining the effect of major changes, such as closing a point feed. Making a change to the ventilation system without the proper knowledge of modeling tools is a poor practice. Furthermore, inadvertent or purposely remotely closing a point feed regulator in the absence of an outby mine fire could disrupt the airflow to working faces in a working section, potentially creating an unintended and hazardous atmosphere while mining is in progress. The consideration of a remotely actuated opening of a point feed regulator should not be considered for the same reasons.

75.351(e) (2) Atmospheric Monitoring Systems

The proposed regulation would require smoke detectors in addition to carbon monoxide sensors at section tailpieces; within 100 feet of each belt drive, transfer point and take-up; and at intervals not to exceed 3,000 feet in the belt entry. The sensors would be required within one year of MSHA's determination that approved smoke sensors are available and reliable. The use of smoke detectors should not be required unless there are commercially available units that are not prone to false alarms caused by coal mine dust or other particulates such as, but not limited to, diesel emissions and rockdust.

75.351(q) (2) Atmospheric Monitoring Systems

AMS operators would be required to travel to all working sections at least once every six months to retain familiarity with underground mining systems, ventilation, communication, and escapeways. Where section uniformity (number of entries, ventilation, mining systems, etc.) exists, it is unnecessary to travel to all working sections. AMS operators should only be required to travel to each working section where differences in the above listed items exist.

75.351(q) (3) Atmospheric Monitoring System

Training records for AMS personnel would be required to be maintained for a two year period, rather than one year as required by all other training regulations. Additional retention of records is unnecessary since a single current record can indicate the training is current and complete. In addition, some training records may be inadvertently discarded having a different retention period. For consistency, training records should only be required to be maintained for a one year period.

75.352(f) Actions in Response to AMS Signal

A visual and audible signal would be required in the belt entry adjacent to a point feed to indicate whenever both sensors at the point feed go into alert or if one of the sensors goes into alarm. The point feed areas are not typically in manned locations. With the lack of personnel in the area, the visual and audible signal would not serve any useful purpose.

The Preamble discusses that the signals would provide notice to miners that a fire may have occurred in the primary escapeway, and that the point feed regulator could be (or has been) remotely closed. If any signal is required, it should be activated only if the point feed has been closed. In addition, the signal should only be required if the belt entry is utilized as the alternate escapeway.

75.371(jj) Mine Ventilation Plan

The locations of all airlock doors would have to be submitted for approval in the Ventilation Plan. Such submittals are unnecessary and make the Ventilation Plan a voluminous and useless document to the miners. In lieu of submittal and approval in the Ventilation Plan, airlocks could be identified by a distinguished symbol on the required mine map and/or escapeway map. The inclusion of the airlock doors in the Ventilation Plan could also lead to citations if airlock doors are installed prior to being approved in the Ventilation Plan.

75.380(f) and 75.381(e) Escapeways

The proposed regulation would require maintenance of the pressure differential between the primary escapeway and the belt entry. This requirement will be difficult to achieve and in some situations it may not be feasible to maintain the pressure differential from the intake to the belt entry at all times. Areas in the mine where the pressure differential does not exist would have to be listed and approved in the Ventilation Plan. Where a minimal pressure differential exists between the belt and primary escapeway, there is potential for the differential to shift due to equipment in one of the entries (restrictions), opening of doors, temperature, etc. This shifting would require frequent and unnecessary submittals to the Ventilation Plan. Mine operators should maintain the pressure differential to the extent possible, however, the listing of such locations in the Ventilation Plan contributes to a voluminous and useless document for the miners.

The proposed regulation does not consider the possibility of fires originating in the primary escapeway, other than when point feeds are required. According to MSHA's statistics, only 15 – 20% of all underground mine fires occurred in conveyor belt entries (Page 35028, 2nd column). This means that in 80 – 85% of all mine fires, the belt entry was unaffected and

presumably provided a safe means of egress. Requiring that a belt line be maintained at a lower relative pressure than an adjacent entry could result in the entry becoming engulfed in smoke and products of combustion due to air leakage through the ventilation controls separating this air course from the adjacent smoke-filled entry. As long as the possibility exists that a fire could originate in the primary escapeway, there should be no regulation that requires a pressure drop from the primary escapeway to the belt entry.

75.380(d) Escapeways

Proposed regulation would require uniform tactile signals on lifelines. Remembering what the multiple cones represent will be difficult at best in time of an emergency. It would be best to keep the lifeline simple for escape purposes.

75.1731(a) Maintenance of Belt Conveyors and Belt Entries

The proposed regulation requires “immediate repair or replacement” of damaged rollers. The term “damaged rollers” should include further clarification by adding “that create a hazard”. There needs to be the ability to make a determination if a belt roller poses a risk if left in operation. Rollers that sound a little different or might be developing a problem could be evaluated and replaced at a later time. For rollers that have obvious damage, the regulation should allow disengagement of the affected roller or belt conveyor component. Immediate replacement is not always feasible or practical. Disengagement removes the potential hazard.

75.1731(c) Maintenance of Belt Conveyors and Belt Entries

This section of the regulation would prohibit accumulation of NONCOMBUSTIBLE material in the belt entry, including such things as rock, trash, and discarded conveyor parts. Noncombustible material is not a potential hazard unless it is located such that it is in contact with the belt or in the designated walkway creating a tripping hazard. As long as the noncombustible material is stored away from these areas, there should be no prohibition of such items in the belt entry. Current regulations require adequate walkways to be maintained.

In conclusion, MSHA should take note that underground coal mines have been using belt air to ventilate effectively for many years. This ventilation system has enhanced safety by assisting with methane control at mines that need greater volumes of air for dilution. Also, mines with deep cover have proven that using the belt entry to provide intake air to the working faces has improved ground control and stability.

We appreciate the opportunity to share our views on this important safety issue.

Sincerely,

A handwritten signature in blue ink that reads "Gene DiClaudio". The signature is written in a cursive style with a large initial "G" and "D".

Gene DiClaudio
President – Arch Western Bituminous Group