May 30, 2013

Board of Coal Mine Safety
P.O. Box 8477
Harrisburg, PA 17105-8477

Dear Sirs:

Attached are the comments of the United Mine Workers of America on the Proposed Rulemaking for Maintenance of Incombustible Content of Rock Dust [25 PA. CODE CH. 208]. The UMWA supports the Board of Coal Mine Safety’s actions in this proposed rulemaking and submits the attached comments in support of that action.

Should you have any questions concerning this matter, please feel free to contact me.

Sincerely,

[Signature]

Dennis O’Dell, Administrator
UMWA Department of Occupational Health & Safety
Comments of the United Mine Workers of America
On The
Proposed Rulemakings for the Pennsylvania Board of Coal Mine Safety
Maintenance of Incombustible Content of Rock Dust
[25 PA. CODE CH. 208]

The United Mine Workers of America has reviewed the Pennsylvania Board of Coal Mine Safety Proposed Rule for Maintenance of incombustible content of rock dust and offer our wholehearted, absolute support for this new standard. As the proposal commentary points out the proposed rulemaking conforms Pennsylvania regulations to Federal regulations, thereby establishing that the incombustible content of coal dust, rock dust and other dust will not be less than 80% in bituminous coal mines. The UMWA believes that the recent tragic mine disaster at the Massey Energy, Upper Big Branch Mine provides sufficient reason for the both MSHA and the State of Pennsylvania to issue this regulation. Evidence in the investigation of this disaster clearly points to the involvement of coal dust in the propagation and severity of this explosion, costing twenty-nine lives. Further, MSHA’s research found that during the period from 1976 through 2001 (26 years) there were 6 explosions that resulted in 46 fatalities in which rock dusting conditions and practices in intake air courses contributed to the severity of the explosions. If further research were conducted, certainly the mine explosions occurring since the 1920’s would reveal that most of those mine explosions have involved coal dust. The evidence is clear and supports the Agencies action to protect miners from any further such tragedies. The UMWA endorses this standard and regrets that neither MSHA nor the state of Pennsylvania acted after the results of the NIOSH survey addressing this issue were published in 2009. Doing so could have possibly saved lives.

Mining technology, equipment and methods have changed significantly since the original coal dust particle survey was conducted by the U.S. Bureau of Mines in the 1920’s. NIOSH and MSHA conducted a new survey to update information about existing coal dust particle size distribution in underground bituminous coal mines. As a part of this survey NIOSH conducted a series of large-scale dust explosion tests using the dust survey results to determine the incombustible content necessary to prevent explosion propagation. Those tests basically revealed that with the advent of current mining methods, coal mining has become highly mechanized, creating coal dust particles that are much finer and more explosive than those in the 1920’s survey. NIOSH’s report published in 2009 revealed that the coal dust particle size in the intake entries of the majority of mines in this country warranted increasing the incombustible content of rock dust in the intake entries to 80%, the same as required for return air courses. Although we support this effort, the biggest tragedy of all is the fact that it took ninety years for the Agency to come to this conclusion. Mining methods have changed significantly since the Bureau of Mines study was conducted in the 1920’s. The industry has evolved from hand-loading and mules to longwall mining during this period of time. Underground coal mining
technology has become highly mechanized, creating coal dust particles that are much finer and more explosive. Despite this change in technology, coal dust particle size surveys from the 1920’s were still being used as the basis for current rock dusting regulations. Upon researching the mine explosions that have occurred since 1970, coal dust was involved in a number of those. Those mine explosions that were propagated by involvement of coal dust include:

<table>
<thead>
<tr>
<th>DATE</th>
<th>COMPANY/MINE</th>
<th>LOCATION</th>
<th>DEATHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/30/70</td>
<td>Finley Coal Co. Nos. 15 &amp; 16 Mines</td>
<td>Hyden, KY</td>
<td>38</td>
</tr>
<tr>
<td>3/09 &amp; 3/11/76</td>
<td>Blue Diamond Coal Co. Scotia Mine</td>
<td>Oven Fork, KY</td>
<td>26</td>
</tr>
<tr>
<td>12/07/81</td>
<td>Adkins Coal Co. No. 11 Mine</td>
<td>Kite, KY</td>
<td>8</td>
</tr>
<tr>
<td>12/08/81</td>
<td>Grundy Mining Co. No. 21 Mine</td>
<td>Whitwell, TN</td>
<td>13</td>
</tr>
<tr>
<td>01/20/82</td>
<td>RFH Coal Co., No. 1 Mine</td>
<td>Craynor, KY</td>
<td>7</td>
</tr>
<tr>
<td>12/07/92</td>
<td>Southmountain Coal Co., No. 3 Mine</td>
<td>Norton, VA</td>
<td>8</td>
</tr>
<tr>
<td>09/23/01</td>
<td>Jim Walter Resources, Inc., No. 5 Mine</td>
<td>Brookwood, AL</td>
<td>13</td>
</tr>
<tr>
<td>4/5/10</td>
<td>Performance Coal Company Upper Big Branch Mine South</td>
<td>Montcoal, WV</td>
<td>29</td>
</tr>
</tbody>
</table>

These tragedies may not have been prevented by this standard, but the severity of these disasters may have been diminished had the mines been rock dusted properly, with an 80% incombustible content throughout. Consequently, the United Mine Workers agrees that this standard is a necessary one and supports the Agency’s actions in enacting this measure. When NIOSH first released the results of its coal dust particle survey, the United Mine Workers submitted comments commending the agency for undertaking this effort. The UMWA agreed with NIOSH that the results of these test necessitated rulemaking to update the standards and encouraged this. A copy of those comments is attached for reference.

The United Mine Workers is in complete agreement with the Board of Coal Mine Safety’s actions. We agree that the evidence is substantial to justify this action and will offer our support completely in this endeavor.
September 15, 2009

NIOSH Docket Office
Robert A. Taft Laboratories
4676 Columbia Parkway, MS-C34
Cincinnati, Ohio 45226

Re: Docket Number NIOSH-174

Dear Sir/Madam,

Attached are the comments of the United Mine Workers of America on the draft publication available for public comment entitled "Recent Coal Dust Particle Size Surveys and the Implications for Mine Explosions." I ask that you forward our comments to the appropriate person(s) in your agency for review.

Thank you in advance for your cooperation in this matter.

Sincerely,

Linda Raisovich-Parsons
Deputy Administrator
Department of Occupational Health and Safety
The UMWA has reviewed the NIOSH publication entitled "Recent Coal Dust Particle Size Surveys and the Implications of Mine Explosions." In this publication, NIOSH examines the relative proportion of rock dust that needs to be present in intake and return airways to prevent explosion propagation. The Agency examined the history of the previous studies and test conducted by the U.S. Bureau of Mines with regard to this issue and describes the evolution of regulations affecting the requirements for rock dusting of intake and return entries. In NIOSH’s survey, dust samples were collected from the intake and return airways of 61 U.S. coal mines from ten of the eleven MSHA Districts for examination. Following the mine dust size survey, a series of large-scale dust explosion test were conducted to determine the incombustible necessary to prevent explosion propagation. The last such survey and tests were conducted in the 1920's by the U.S. Bureau of Mines. Mining technology and practices have changed considerably since that time resulting in the coal dust found in today’s mines to be much finer than in mines of the 1920’s. Such a review of the coal dust particle sizes of current mining practices was long overdue and we thank the Agency for expending the resources and time to re-examine this issue.

Current regulations require an incombustible content of 65% in the intake entry and 80% incombustible content in the return entries. The survey and test conducted by NIOSH found that the present size of coal particles in intake airways requires more incombustible content to be rendered inert than the current 65% regulation requirement. With the advent of current mining methods, coal mining has become highly mechanized, creating coal dust particles that are much finer (thus more explosive) than those of the 1920’s. Consequently, NIOSH recommends a new standard of 80% TIC (total incombustible content) be required in the intake airways of bituminous coal mines. The survey did indicate that the current requirement of 80% TIC in return airways is sufficient. NIOSH also agreed and endorsed the earlier research recommendations of Mr. Nagy [1981] that new rock dusting standards should be based on a worst-case scenario (using high volatile coal) with no relaxation for lower volatile coals. The United Mine Workers agrees with NIOSH that this issue should be addressed though MSHA rulemaking to update the total incombustible content in intake entries to a new standard of 80%. We further agree that the standard should not provide relaxation for lower volatile coals. Considering the many mine disasters in recent years, we would urge MSHA to act expeditiously to correct this serious shortcoming in the regulations and will provide full support to NIOSH in such an endeavor. As pointed out in the UMWA report on the September 23, 2001 explosion at Jim Walter Resources #5 Mine, whether float coal dust increased the violence of the explosion forces was a primary area of concern to the UMWA, especially in light of the troubled compliance history of the JWR #5 Mine prior to the explosion. Attached is an excerpt from the UMWA’s report on the JWR #5 explosion concerning float coal dust and rock dusting.

This document was very thorough and presented a clear case for improvement needed in this area of the regulations. The presentation of this material was very professional with test results to substantiate the Agency’s recommendations. The paper provided the history of regulation and research on dust particle size and made a very clear and concise case for the need to update the regulations to address the advance in mining methods and technology’s affects on the size of dust particles in coal mines. The United Mine Workers thanks NIOSH for its professional and thorough research and presentation of this material. The UMWA will endorse NIOSH in any effort to update the regulations to reflect the shortcomings in the current regulations as proven by this research.