

PUBLIC SUBMISSION

2011 JUN 14 P 12

As of: June 14, 2011
Received: June 14, 2011
Status: Pending_Post
Tracking No. 80e4f551
Comments Due: June 20, 2011
Submission Type: Web

Docket: MSHA-2010-0007

Lowering Miners' Exposure to Respirable Coal Mine Dust, Including Continuous Personal Dust Monitors

Comment On: MSHA-2010-0007-0001

Lowering Miners' Exposure to Respirable Coal Mine Dust, Including Continuous Personal Dust Monitors

Document: MSHA-2010-0007-DRAFT-0371

Comment from Anthony Bumbico, Arch Coal, Inc.

Submitter Information

Name: Anthony Bumbico

Organization: Arch Coal, Inc.

General Comment

RIN: 1219-AB64

Dear Ms. Nelson,

Attached are comments submitted on behalf of Arch Coal, Inc. in response to the Proposed Rule titled "Lowering Miners Exposure to Respirable Coal Mine Dust, Including Continuous Dust Monitors.

See attached file(s)

Attachments

Arch.RIN.1219-AB64

AB64-COMM-71



2011 JUN 14 P 12:57

April 29, 2011

Ms. Roslyn Fontaine, Acting Director
Office of Standards, Regulations & Variances
U.S. Department of Labor
Mine Safety and Health Administration
1100 Wilson Boulevard
Arlington, VA 22209-3939

RIN: 1219-AB64

Dear Ms. Nelson:

These comments are submitted by Arch Coal, Inc. (Arch). Arch is the second largest coal producer in the United States with corporate offices in St. Louis, Missouri. We have approximately 4,700 employees and operate both underground and surface mines in Colorado, Utah, Kentucky, Virginia, West Virginia and Wyoming. Our subsidiary operations produce more than 160 MT per year, which represents about 15% of US coal production.

These comments are submitted in response to the Proposed Rule issued by the Mine Safety and Health Administration (MSHA) on October 19, 2010 titled *Lowering Miners' Exposure to Respirable Coal Mine Dust, Including Continuous Dust Monitors (Proposed Rule)*. MSHA states in the announcement that the Proposed Rule is intended to lower miners' exposure to respirable coal mine dust by revising the Agency's existing standards on miners' occupational exposure to respirable coal mine dust. In summary, the Proposed Rule would:

- Reduce the existing limits for respirable coal mine dust from 2.0 milligrams per cubic meter (mg/m^3) to 1.0 (mg/m^3);
- Require sampling of every production shift and expand mandated sampling periods;
- Base compliance determinations on single shift sampling instead of the current five-shift average;
- Require the use of new technology to conduct sampling via a continuous personal dust monitor ("CPDM"); and
- Expand medical surveillance of miners.

The Proposed Rule is part of the Agency's campaign to *End Black Lung Now!* It is predicated on the Agency's belief that the current standard is not sufficiently protective to

prevent coal miners from developing Coal Workers' Pneumoconiosis (CWP). The Agency's justification for the Proposed Rule is based upon three primary sources of data:

- 1) The 1995 National Institute for Occupational Safety and Health (NIOSH) criteria document entitled "*Occupational Exposure to Respirable Coal Mine Dust.*"
- 2) A NIOSH report entitled, "*A Review of Information Published Since 1995 on Coal Mine Dust Exposures and Associated Health Outcomes.*"
- 3) Several published articles based on medical surveillance studies conducted by the NIOSH Division of Respiratory Disease Surveillance Studies (DRDS).

While we support the Agency's goal of ending CWP, Arch questions the scientific basis for the Proposed Rule. We also maintain that the Proposed Rule is not designed to achieve its stated objective.

Arch requests that MSHA withdraw the Proposed Rule in its entirety. In our view the Proposed Rule has several shortcomings. They include these areas of concern:

- The Proposed Rule is broader than necessary. It proposes a national solution for a regional problem.
- MSHA has failed to establish a causal relationship between dust exposure levels and increased incidents of CWP.
- The data sources used by MSHA to justify this regulation all have methodological weaknesses. In addition, by withholding relevant data from key stakeholders, the Agency has failed to manage this process in a transparent manner.
- MSHA has seriously underestimated the probability of the coal industry being able to comply with the proposed 1 mg/m³ standard.
- While the continuous personal dust monitor (CPDM) represents a significant technological improvement, it still has flaws. It is not ready to be used as a compliance tool.
- The Agency has grossly underestimated the cost of implementing the Proposed Rule.
- The Proposed Rule fails to consider a number of common sense strategies with the potential to lower coal miners' exposure to coal dust and reduce the incidence of CWP.

This is a Regional Issue

In our view MSHA has not looked closely at the underlying data. They have not approached this problem in a systematic problem-solving manner. The Agency has proposed a national solution in response to an alleged increase in "rapidly progressing CWP." The trends they rely upon, however, are primarily in a three-state region of Central Appalachia. These so called "hot spots" in Southern West Virginia, Eastern Kentucky, and Western Virginia should be the focus of the Proposed Rule. In addition,

we think the data MSHA is relying upon points toward silica exposure as the underlying issue, as opposed to CWP.

Arch recommends MSHA take a more targeted approach to address this important health concern. If enacted in its present form, the Proposed Rule will have a major impact on the coal industry without addressing the underlying problem.

MSHA has openly acknowledged that these “hot spots” are regional in nature. The studies relied upon also acknowledge that this problem is more pronounced at small mines. It would make more sense to drill down into the “hot spot” areas to discover why this problem is so pronounced at small mines in this region.

We see no evidence of increased CWP in other parts of the country. There does not appear to be an increase in CWP in Northern Appalachia, the Midwest, or the Western coal producing regions. Targeted problem-solving would be a more rational means of dealing with these trends. In its present form, the Proposed Rule will not help to eliminate CWP. It will only increase the level of non-compliance.

No Causal Relationship is Established

MSHA has not demonstrated a causal relationship between “dust exposure” levels and an increase in the incidence of CWP. The Agency assumes that the alleged increase in CWP is related to coal dust exposure levels. In our view, the underlying data shows that on a national level, the incidence of CWP and coal dust exposure levels have declined over time. MSHA fails to take into consideration other possible factors, such as cigarette smoking, in the causation of lung disease in coal miners. The Agency ignores this known contributing factor to lung disease and assumes that increased levels of CWP are the result of coal dust exposure.

A comparison of Designated Occupation (DO) samples by MSHA District presents data in conflict with the Agency’s hypothesis. An analysis of DO samples for the period 2004-2008 indicates that MSHA District 8 (Indiana and Illinois) had relatively high average dust sample concentrations and a high number of samples that exceeded the 2 mg/m³ standard (compared to other Districts). At the same time, they had relatively low levels of CWP. Similar trends are evident in MSHA District 9.

We encourage MSHA to consider the scientific testimony presented by the Industry Panel on February 15, 2011 at the Proposed Rule hearing held in Arlington, Virginia. In our opinion, the testimony of Robert Glenn and Dr. John Gamble was on point. Mr. Glenn and Dr. Gamble conducted an extensive review of the available CWP literature. They testified that the science points more towards silica exposure as a contributing factor to the “hot spot” issue. Their testimony encourages a more targeted analysis of the factors underlying this regional problem.

To justify the Proposed Rule, the Agency relies upon trend data from the NIOSH Coal Workers' Health Surveillance Program. This program collects and analyzes data from voluntary chest x-rays and organizes the data in 5-year periods (e.g., 1995-1999; 2000-2004; 2005-2009). The data trends relied upon by MSHA ends with 2005-2006 reported as a partial period.

The CWP trends up to this point do indicate an increasing tendency in disease prevalence starting in 1995. The Agency's analysis, however, fails to recognize that the NIOSH program rotates from MSHA District to District on an annual basis. In 2006, the NIOSH program collected x-ray results in MSHA District 5, 6, & 7. Compared to other MSHA Districts, the percentage of disease prevalence in this region trended higher during this period. This is not a surprise because these x-rays were taken in the epicenter of the "hot spot" region. These trends merely reinforce the fact that this is a regional, not a national issue.

It appears that MSHA has chosen not to consider data from the NIOSH Coal Workers' Health Surveillance Program collected for the full period 2005-2009. The NIOSH program rotated to other geographic areas in 2007, 2008, and 2009. The influence of Southern Appalachia was reduced. As a result, the percentage prevalence of the disease was decreased by results from Northern Appalachia, the Midwest, and West. CWP prevalence in later years now seems to be trending downward. We strongly recommend the Agency include data from these more recent years in their analysis. We think it reinforces the existence of a regional, not a national, issue.

An additional factor MSHA should consider is whether a change in the methodology employed to review x-rays impacted results. In 2000, a new International Labor Organization (ILO) standard was adopted to replace the 1980 standard. The 2000 standard improved the image quality in radiology through the use of advanced computer imaging techniques. NIOSH recommended that readers use the ILO 2000 standard to classify films. The CWP prevalence trends appear to begin trending upward at the same time the ILO methodology changed. MSHA needs to consider whether the implementation of the new ILO standard and advanced technology was a factor contributing to the increase of CWP prevalence when comparing the 1994-1999 period to the 2000-2004 period.

Lacks Transparency & Methodological Flaws

The primary data sources relied upon by MSHA all have methodological weaknesses. These weaknesses need to be examined in more detail before accepting them as justification for a new standard. These methodological flaws were highlighted in the testimony of Dr. Anthony Cox, Mr. Robert Glenn, Dr. John Gamble and other members of the Industry Panel at the MSHA Hearing in Arlington, Virginia, on February 15, 2011.

Specifically, the NIOSH studies suffer from selection bias as the medical surveillance upon which they are based involve miners who voluntarily choose to participate in the x-ray surveillance program. This data does not represent a cross-section of miners

working in the coal industry. In fact, only one-third of the eligible miners have participated in the examination program. As a consequence, this data does not provide a representative sample of the entire population.

Another shortcoming in the NIOSH studies is their failure to adequately consider exposure-response relationships in explaining the possible outcomes of miners' lung disease. The exposures may have been underestimated which would overestimate the disease outcomes.

The studies are also predicated on the review of radiographic films by different B-readers from round-to-round of examinations. This introduces variability in the detection of CWP. In addition, the studies focus on the results of an enhanced surveillance program conducted primarily in a three-state region of Central Appalachia. These are not representative of all coal regions, where exposures differ significantly.

We are also disappointed by the lack of transparency in the Agency's management of the rule-making process. The coal industry has made repeated requests of NIOSH and MSHA for the demographic data underlying the NIOSH health surveillance program. These requests have been ignored. In fact, MSHA has refused to provide nearly all the information requested in a FOIA submitted by the National Mining Association (NMA) on October 20, 2010.

The first step in solving this problem should be to share the underlying demographic data with all stakeholders. This can be done in a manner that maintains the confidentiality of program participants. Information related to where individuals with lung problems worked, what occupation they worked in, and whether they engaged in other activities (i.e., smoking) that may have contributed to their health problems are essential in identifying the root cause(s) and solving this problem.

To truly solve CWP (and/or silicosis), the coal industry needs a mandatory medical surveillance program. We need to establish a comprehensive baseline of the respiratory health of this country's miners. Mandatory x-rays and medical surveillance make common sense. They can help us identify lung-related health issues in miners before they progress too far. In this regard, the Proposed Rule does not go far enough.

The Probability of Non-Compliance is Underestimated

In evaluating the Proposed Rule's technical feasibility, MSHA argues that the proposed lower respirable dust standard is feasible because dust samples at "most mining operations already average less than 1 mg/m³." The Agency's use of "averages" in this context is a distortion of the facts. It portrays the feasibility of compliance as less difficult than the reality.

To assess the feasibility of complying with the 1 mg/m³ standard, Arch analyzed dust samples from our subsidiary operations for a 48-month period (11/1/2006 – 11/1/2010).

Our data source was the MSHA dust sample data base. Since the Proposed Rule calls for single-shift sampling, we looked at single samples. While the average of single samples as a whole tended to be below 1 mg/m³, we discovered that there was a high probability that a single shift sample would be above 1 mg/m³.

Our 48-month analysis found that the percentage of single samples above the 1 mg/m³ standard for an 8-hour shift was significant. Overall, our single-shift Operator samples were higher than the MSHA samples. As expected, there was a higher percentage of samples exceeding 1mg/m³ at our underground (UG) mines compared to our surface (SUR) mines. Listed below are the percentages of single samples from our subsidiary operations that exceeded 1 mg/m³ during the 48-month period.

	MSHA Samples	Operator Samples
Arch SUR Mines	0.37%	11.47%
Arch Eastern UG Mines	9.71%	26.50%
Arch Western UG Mines	20.80%	42.14%

In addition, we discovered a much higher probability of non-compliance in certain designated occupations (DO). For example:

- At our Eastern UG mines, 75% of the MSHA samples for the Longwall Tailgate occupation exceeded 1 mg/m³.
- At our Western UG mines, 59% of the MSHA samples for the Longwall Tailgate occupation exceeded 1 mg/m³.

Our analysis was based on dust samples collected over an 8-hour period. The Proposed Rule extends the sampling period to the length of an entire shift. As a result, if miners work a non-traditional shift, the probability of non-compliance based on a single-shift 1 mg/m³ standard will increase significantly. In essence, the 1 mg/m³ standard at the 8-hour mark would be 0.67 mg/m³ for miners working a 12 hour shift, and 0.80 mg/m³ for miners working a 10 hour shift.

Most miners at the Arch subsidiary operations work non-traditional work schedules. While many work 10-hour or 12-hour shifts, the hours they work over the course of a year does not vary significantly compared to the traditional 8-hour day, 40-hour work schedule. The traditional schedule requires a miner to work 2,080 hours per year. The miners at the Arch subsidiary operators work an average of 2,205 hours per year. They work longer during the course of a day. Compared to miners working a traditional work schedule, however, they have more days off work.

It is well known that CWP is related to long term exposure to respirable dust. It does not occur in response to over exposure on a single shift. A high percentage of miners work non-traditional schedules. As a result, it would make sense to adopt a weekly dose exposure concept instead of a single shift sample. We encourage MSHA to consider this factor.

Other problems we see related to the lower single-shift standard include:

- The definition of “**normal production shift**” will result in numerous samples being voided. Arch’s analysis indicates that 50% of our production shifts will NOT meet the definition of “normal production shift”.
- Single shift sampling (as opposed to a 5-sample average) is prone to measurement error. These errors will result in higher instances of non-compliance.
- The proposed rule also contains a weekly exposure limit (40 mg/week) on top of the 1 mg/m³ single-shift sample. This creates the potential for operators to be cited twice for the same sample.
- The Proposed Rule contains the concept of Equivalent Concentration Value (ECV). The ECV adjusts the 1 mg/m³ standard upward (in an attempt to address the potential of measurement error) for compliance purposes. However, the 1 mg/m³ threshold still serves as an action level requiring the operator to make adjustments.
- The proposed regulation requires DO sampling 24-hours per day/7 days per week (24/7) on all production shifts. This increases the frequency of sampling and, consequently, the potential for non-compliance.
- The proposed regulation still requires an area sample, as opposed to a personal sample. In addition, it fails to credit the use of administrative controls or personal protective equipment.

The complexity of this rule and the administrative burden it places on operators is extraordinary. Under the existing regulation, approximately 25,000 dust samples are collected each year. The Proposed Dust Rule will increase the number of samples by thirty-fold, requiring approximately 750,000 dust exposure samples per year. This will strain the Agency’s resources requiring them to review the results of the greatly expanded program. When you consider the potential for non-compliance and the numerous “plan” changes they trigger, the new administrative burden reaches nightmarish proportions. As a result of the high probability of non-compliance, Operators will be forced to adopt costly changes in the way they operate their mines in order to increase the likelihood of staying below the 1 mg/m³ single shift standard.

The CPDM is Not Compliance Ready

The Proposed Rule requires the use of the Continuous Personal Dust Monitor (“CPDM”) for compliance sampling. This technology represents a significant advance in dust

sampling technology. It enables the collection of a personal sample in a miner's breathing zone. It also creates the potential for miners to receive immediate feedback on positioning and dust generating sources. In essence, the CPDM improves the ability of miners to reduce respirable dust exposure by providing them with the information they need to take corrective action.

While the CPDM represents a significant advance in sampling technology, it is not ready to be deployed for compliance purposes. Nor is it ready for daily exposure to the rugged working conditions present in underground coal mines.

Thermo Fisher Scientific acknowledges that their device has accuracy limitations. In their literature, they state that the TEOM 3600 PDM (CPDM) has an accuracy for mass measurement of +/- 25% with 95% confidence, as compared to gravimetric reference samplers using cyclones, in the range of 0.2 mg/m³ and greater.

Arch has deployed a number of CPDM units. Our miners use them as engineering devices and training tools. We surveyed the miners at the Arch subsidiaries who have used the CPDM. To a person, those surveyed view the CPDM (in its present form) as too cumbersome. They have expressed ergonomic concerns and also feel the cord is too long. In particular, they complained about the weight of the CPDM. Our miner's concerns are accentuated by recent advances in cap light technology. The new cap lights are very light. This makes it difficult to convince miners to exchange their new light-weight cap lights for a much heavier CPDM.

We feel the CPDM needs to be upgraded and detached from the cap light to gain acceptance from miners. This would also help to reduce the associated ergonomic risks. These ergonomic risks are exacerbated for miners working in low coal seams. In its present form, the CPDM weighs 6.2 pounds. It would be one more burden added to a miners' belt already heavy with other equipment.

Some continuous miner (CM) operators have also expressed concern about being distracted by having to monitor the CPDM screen. They have suggested adding an audible alarm (or similar warning device) to notify the CM operator when respirable dust levels are trending in the wrong direction. They feel this would be safer than the CM operator trying to read the screen while he/she is operating the machine.

They have also expressed concern about the additional pressure the Proposed Rule will place on CM operators. They feel the new 1 mg/m³ single-shift standard will be very difficult to meet. They have expressed concern over the pressure created by attempting to satisfy this stringent standard. They are concerned that it may encourage some CM operators to assume unsafe positions in red zone areas in an effort to maintain lower dust levels. These potential exposures will be more pronounced for miners working in low coal seams.

The CPDM is a positive development. It will benefit miners and operators by providing real-time information that can be used to take corrective measures when exposure levels

are elevated. It is critically important, however, that we properly train miners on how to use this technology in a manner that will not diminish safety.

Arch supports the comments made by the Industry Panel at the Arlington Hearing relating to CPDM sampling and performance reliability. In particular, we credit the testimony of Mr. Craig Yanek and Mr. Heath Lovell. Their testimony pointed out several reasons why the CPDM is not ready to be used as a compliance device. Our experience with the CPDM is similar to the experience Mr. Yanek and Mr. Lovell testified to with regard to Consol Energy and Alliance Coal.

Prior to requiring implementation of the CPDM, the Agency should also consider the fact that there is only one manufacturer of this device. Without competition, the ability of operators to influence the purchase price, assure adequate supplies, and manage maintenance issues will be limited.

Arch supports the expanded use of the CPDM as an engineering tool. We also believe it can be an effective training device. More importantly, we support the need for key stakeholders to work together to develop the next generation of the CPDM. This technology needs improvement from both an ergonomic and reliability standpoint prior to adopting it as a compliance sampling device.

MSHA Grossly Underestimated the Cost of Implementing the Proposed Rule

Arch is very concerned about the feasibility of meeting the proposed 1 mg/m³ single-sample, extended-shift standard. Based on our sampling history, we will have to make major changes in our engineering and operating systems to establish a high probability of compliance. We have carefully analyzed these cost impacts and believe that MSHA has seriously underestimated the cost of implementing this regulation.

The Arch subsidiary companies produce over 160 MT per year. They operate both surface and underground mines in Central Appalachia, Utah/Colorado, and Wyoming. Our underground mines include 34 Mechanized Mining Units (MMU) (29 continuous miners and 5 longwalls). Our surface mines utilize contour, shovel/dragline, and mountain top mining methods. We operate mines in all the major coal producing basins. As a whole, the Arch subsidiaries are very representative of the US Coal Industry.

Historically, the Arch subsidiaries have performed relatively well from a respirable dust compliance standpoint. Currently, over ninety-nine percent (99%) of the respirable dust samples taken at our subsidiary operations are in compliance. Under the Proposed Rule, this would change dramatically.

Arch's analysis of the cost impact of implementing the Proposed Rule took into consideration the engineering, administrative, and operating system changes necessary to assure a high probability of compliance. The combined cost of these changes is quite significant.

We analyzed our potential compliance cost in terms of three basic categories: 1) Necessary Cost; 2) Modification Cost, and 3) Capital Costs. These categories are defined below:

- **Necessary Cost: The costs related to complying with revisions to sampling protocol. Examples include:**
 - Purchasing and maintaining CPDM units
 - Managing sampling protocol
 - Managing the “plan” process and recordkeeping

- **Modification Costs: The costs related to modifying existing equipment, systems, and structures. Examples include:**
 - Modifying dust generating sources
 - Modification to existing equipment to reduce/control dust generation (i.e., additional sprays, gauges, bites, dust collectors, etc.)
 - Modifications to existing work schedules

- **Capital Costs: The costs related to purchasing new equipment and systems. Examples include:**
 - Major ventilation changes
 - Wet head miners
 - Auxiliary fans

- **Production Costs: The costs related to decreased productivity. Examples include:**
 - Impact of modifications to mining methods
 - Impact of slowing/stopping production

The overall estimated cost of the Arch subsidiary companies complying with the Proposed Rule is \$222,723,054. This total cost consists of:

- Necessary Costs of \$14,383,479
- Modification Costs of \$42,632,949
- Capital Costs of \$49,780,550
- Production Costs of \$115,926,076

The production cost estimates reflect a net tonnage reduction of 4,221,054 tons/year. These are net lost tons after we factored in productivity gains that are expected to result from some of the engineering, equipment and systems changes we implement. These negative tonnage impacts are all projected to occur at our underground mines.

The Proposed Rule will have a much larger potential cost impact on our underground mines than our surface mines. Excluding tonnage impacts, we estimate the cost impact of implementing the Proposed Rule at our underground mines to be 66% higher than our surface mines.

	Initial 1X Costs	Annual Costs	Projected First Year Costs (Initial & Annual)
• Surface	\$12,823,325	\$14,298,195	\$27,121,520
• Underground	\$52,385,550	\$27,289,908	\$79,675,458

This is a huge price to pay for mines that have performed well from a respirable dust compliance standpoint. These mines are not contributing to increased incidence of CWP. The cost of implementing the Proposed Rule at these operations will not contribute to reducing miners' lung disease in the identified "hot spot" areas.

Common Sense Strategies for Reducing Exposure to Coal Dust

Arch supports the Agency's goal of ending lung disease in coal miners. We believe that this objective can be advanced by the adoption of a few common sense strategies. We encourage MSHA to consider:

- **Establishing a mandatory medical surveillance program for all miners.** The NIOSH X-Ray program is voluntary. Few miners participate in the program. The results do not represent coal industry trends. MSHA needs a proactive process to help identify coal miners with lung problems so that corrective action can be taken before the disease progresses too far. The Proposed Rule only requires medical surveillance for new miners. It doesn't go far enough.
- **Shifting the focus from area sampling to personal sampling.** MSHA continues to focus on environmental sampling, as opposed to sampling the dust coal miners actually breathe. This makes no sense, especially with the development of the CPDM. The Proposed Rule is titled - *Lowering Miners' Exposure to Respirable Coal Mine Dust....* Reducing the dust a miner breathes should be the primary focus of the Proposed Rule.
- **Recognizing the full hierarchy of industrial hygiene controls.** Administrative controls and personal protective equipment (i.e., air stream helmets and respirators) are proven cost-effective tools for lowering exposure to respirable dust. The Proposed Rule only recognizes them as an afterthought. It's time to modernize MSHA regulations and adopt the same hierarchy of controls as the Occupational Safety and Health Administration (OSHA).
- **Recognizing the air stream helmet as an engineering control.** The air stream helmet shields the miner wearing it from the environment. It is similar to a pressurized operator cab on a dozer or shuttle car. Similar to those devices, it should be recognized as an acceptable engineering tool. Respirable dust samples should be taken under the shield directly in the miners' breathing zone. This would represent a personal sample of the miner's actual dust exposure. It would also be similar to the manner in which a welding fume sample is collected from a welder.

- **Taking advantage of the CPDM technology.** This technology enables the adoption of a performance-based standard. The Proposed Rule simply bolts the CPDM onto the existing compliance framework. It makes the regulation more prescriptive and bureaucratic. Instead of focusing on improving performance, the Proposed Rule focuses on building a better compliance mouse trap. It also contains restrictions wholly unrelated to CWP. For example, it modifies ventilation requirements affecting safe mining methods and effective mine ventilation systems in many underground coal mines. In some respects, it appears MSHA is using the Proposed Rule as an artifice to gain more control over mine operations.
- **Requiring Part 90 miners to exercise their option to move to a less dusty area.** It simply makes no sense for coal miners who have been diagnosed with lung disease to have the option of continuing to work in an area with higher exposure to respirable dust. If the Agency is truly serious about their campaign (*End Black Lung Now!*) they should propose a rule requiring these miners to exercise their option.

MSHA Should Propose a New Rule

Arch recommends that MSHA withdraw the Proposed Rule in its' entirety. As an alternative, MSHA should consider re-proposing a new performance-based standard with the CPDM as the center piece. This should be a two-phase implementation that would accommodate additional testing and design changes to the CPDM. This alternative rule is predicated on:

- Retention of the current 2 mg/m³ dust standard; and
- No single-shift compliance determinations

Phase I would consist of two elements. Upon enactment, existing Part 70 would be revised to require:

- Implementation of a mandatory x-ray surveillance program for all miners, with initial emphasis on miners employed in the "hot spot" regions.
- Revisions to Part 90 to require actions, on the part of miners, to exercise their option to move to a less dusty area based upon their x-ray exam results.
- Implementation of a silicosis prevention program at mines with a history (to be defined) of silica samples exceeding the standard.

- Empowering mine operators to use the entire hierarchy of controls (e.g., administrative and personal protective equipment), once it is determined that all feasible engineering controls are in use to reduce exposure below permissible levels.

The second element of Phase I would begin six-months after enactment of the Final Regulation. At the time of enactment, compliance sampling for mine operators would be:

- Based on a full-shift, portal-to-portal sample;
- Conducted using the gravimetric sampler;
- Based upon the current 5-shift average; and
- Based on normal production defined as 80 percent of the prior 30-shift average.

Phase II would become effective 30 months after the effective date of the Final Regulation. At the time Phase II is enacted, MSHA would determine the Designated Occupations to be sampled, and operators would be required to conduct compliance sampling:

- Using a CPDM;
- Using a 10 mg/m³ weekly dose rather than the average of 5 samples collected on consecutive production shifts;
- Using a representative, risk-based sampling protocol for all normally scheduled production shifts; and
- Based on personal samples that measure actual respirable dust exposure.

Since sampling will be conducted on all production shifts, the need to achieve assigned production levels for valid samples is eliminated and, the program additions implemented during Phase I would remain a part of the final program.

Conclusion

Arch strongly encourages MSHA to withdraw the Proposed Rule in its entirety. While we support the Agency's goal of ending CWP, we do not believe the Proposed Rule is designed to achieve its objective. We are opposed to it because:

- MSHA has proposed a national solution for a regional problem.
- The Agency failed to establish a causal relationship between dust exposure levels and increased incidents of CWP.
- The data sources relied upon by MSHA all have methodological weaknesses.
- The Agency has failed to manage this process in a transparent manner.

- MSHA has seriously underestimated the feasibility of complying with the proposed 1 mg/m³ standard.
- The CPDM is not ready to be used as a compliance tool.
- The Agency's cost impact estimate is grossly underestimated.
- MSHA has failed to consider common sense strategies with the potential to lowering coal miners' exposure to coal dust.

Arch is fully committed to improving miners' health and safety. We do not believe, however, a 50% reduction of the respirable dust standard within two years is economically or technologically feasible. Nor can we support a rule that fails to recognize logical cost-effective strategies known to lower exposure to respirable dust. The Proposed Rule will place an extraordinary burden on the coal industry without resulting in a reduction in CWP. The data indicates that CWP is not the problem. It is trending downward. We have a different problem. We encourage MSHA to drill down and solve the problem that is limited to the identified "hot spot" areas.

Sincerely,



Anthony S. Bumbico
Vice President of Safety
Arch Coal, Inc.