From: Hales, David DC [mailto:David.DC.Hales@bhpbilliton.com]
Sent: Friday, December 17, 2010 5:41 PM
To: zzMSHA-Standards - Comments to Fed Reg Group; Silvey, Patricia - MSHA
Cc: TForeback@admin.nmt.edu; egreen@crowell.com; bwatzman@nma.org; Ortega, Josh
Subject: Comments: RIN 1219-AB71 - Health & Safety Management Plans

2010 DEC 17 P 5:50

Attached are the comments submitted on behalf of San Juan Coal Company regarding RIN 1219–AB71. Health & Safety Management Plans.

Regards,
David Hales

AB71-COMM-15

San Juan Coal Company

bhpbilliton
resourcing the future

BHP Billiton Limited
County Road 6800
Waterflow, New Mexico 87421-0561 USA
P O Box 561
Waterflow New Mexico 87421-0561 USA
Tel 1 505 598 2153 Fax 1 505 598 2246
bhpbilliton.com

December 17, 2010

Patricia Silvey
Director
Office of Standards, Regulations, and Variances
Mine Safety and Health Administration
1100 Wilson Boulevard, Room 2350
Arlington, Virginia 22209

Dear Ms. Silvey

RE: RIN 1219–AB71 – Comments Submitted on behalf of San Juan Coal Company

I am currently the Health and Safety Superintendent for San Juan Coal Company. I have over 37 years of experience in the mining industry. Over 35 years of that has been in the underground coal mining industry and over 20 of those years have been spent working in the area of safety and health management.

I have had the good fortune to have spent my career working for companies with a very strong safety culture. Through acquisitions, mergers, sales and job changes I have worked for such companies as Coastal Corporation, Canyon Fuel Company, Arco Coal Company, and Arch Coal Company. I currently am employed by BHPBilliton, the world's largest natural resources company.

I remember standing in front of a crowded room some 21 years ago at a previous job and introduced the concept that we could and should consider that all injuries can be prevented. I remember the looks on the faces of the miners in that room and realized that of the 50 people in the room, I was likely the only one who really believed that was possible. The idea that all were preventable was really about driving an attitude that if all injuries weren't preventable, some number of them must be acceptable and the only acceptable number was zero.

As part of that attitude, we wanted to be sure we understood why each injury occurred and committed to make the changes to the system so that they did not occur again. We implemented a practice of looking for root causes to help us prevent these events from occurring again. That multiple causation thinking eventually found its way into the planning of various tasks such that preventive measures were implemented before injuries occurred, rather than after the fact. Today those same miners are routinely working without injury year after year. It's become a very unusual occurrence for someone to be injured. This is

because those miners are making safety happen, every day. That culture evolved over a 21 year history. We are well on our way to developing a similar culture here at San Juan Coal Company. At each of these operations, injury rates are a fraction of the National average for mines of the same type.

BHPBilliton operations around the world are guided by an overriding commitment to health, safety, environment and community. That is further defined in our Sustainable Development Policy. This policy is expected to drive every decision we make and every action we take. We aspire to achieve Zero Harm at each of our operations.

San Juan Coal Company is pleased to have the opportunity to provide some detailied comments regarding the subject of **RIN 1219–AB71.**

The first comment has to do with the title used for this subject. Safety and Health management should not be a program; if it is to be successful it must be a process. Behavioral psychologists such as E. Scott Geller teach that programs have a beginning and an end and foster that old adage of "flavor of the month". Rather it should be a process, something that doesn't ever end. It may evolve and improve but doesn't end. Miners/adults can see through the concept of "programs" and all too often don't become involved. When this topic is managed as a process, something that continues and evolves, miners/adults are more willing to become involved.

A second comment is also rooted in the things we have learned by studying the works of Dr. Geller. Achieving a culture of safety means that workers do the right things the right way, even when they think no one is watching. Dr. Geller recently taught a webinar titled; 'When No One's Watching: The Psychology of Self-Motivation'. During this webinar Dr. Geller discussed the ways that an organization can drive or increase that type of behavior. Ironically the methods that were identified as the least effective are those involving negative consequences such as penalties and punishments. These are the classic tools used by the Mine Safety and Health Administration and according to behavioral experts such as Dr. Geller, these are the least effective. Others such as Thomas Krause and Dan Petersen share in these views. This raises an important question. Are the current approaches that MSHA uses with regard to its activities at the mines actually fostering the wrong culture? It may very well be.

In this same webinar Dr. Geller discussed that the use of positive feedback or positive consequences are far more effective in developing that culture of safety, where workers do the right thing for themselves, not because it's a rule or that someone is watching. This prompts another question. What positive feedback or consequences does the Mine Safety and Health provide to those operators who they recognize have developed a "culture of safety"? The answer to that one is easy. The agency does not provide such positive consequences. In fact my experience is that when a mine operator goes above and beyond what is called for in the standards they can actually receive punitive treatment for doing so. The current practices of the Agency serve to influence a culture of doing exactly what is in the standard and no more.

We believe that our operations should be driven by a risk based approach and that we must do whatever it takes to drive that risk to the as low as reasonably practical, even if

that is more than the regulatory requirement. The original San Juan Underground project was completely planned and implemented using this risk-based approach. Some of the systems deployed in this project were the first of their kind in the United States. Some of them were the first of their kind in the world. During the last 5 years, many of those systems have become regulatory requirements for other mines here in the U.S.

We have continued to use this approach in all that we do including implementation of an informal risk assessment process that can be applied to everyday activities. This SLAM process was even adopted by MSHA. This risk based approach results in applying additional risk management actions and often times these actions go above and beyond the MSHA requirement.

My third comment has to do with the idea that safety culture can be legislated. These same safety and human behavior experts, Geller, Krause, Petersen and others clearly teach that this is a fallacy. It is true that you can write a list of requirements and standards. All too often this drives a culture where the standards are what get managed. In my career I've seen operations where there was a formal written standard for every little job on the property. It consumed the time of 3 people just to manage the room full of documents. When I went out in the field and interviewed miners. No one knew the standards existed. I had the opportunity to participate in a fatality investigation at one such operation. The investigation team identified seven different standards associated with the task that was being performed. Had any one of the seven been followed, the accident wouldn't have happened. That's a similar problem that MSHA has identified here in the U.S. What our industry needs to further develop is that culture where miners do the right things, whether or not someone is watching them. That will not be accomplished by regulation.

Another method that MSHA has used in regards to various other mine plans is to develop a checklist and attempt to use a cookie cutter approach to the plan development. This is another area where behavioral psychologists teach something completely different. They actually encourage us to allow individual workers to help develop the processes. This drives a sense of ownership and far more commitment to following what is being developed thereby making them far more effective and lasting. It really contributes to the development of safety as a value.

More standards are not the answer today. What the Mine Safety and Health Administration should do is become more involved with those things that will drive a culture of safety and help to influence workers to do the right things, all the time, even when no one's watching. The enforcement hammer is not the right tool for this task and one of the most basic of safety principles is that the tool must be right for the job you need to do.

I have reviewed the information that has been posted in the Federal Register and will address some specific statements that are published there. Specifically the following:

"The Guidelines reveal that the components of effective safety and health management programs generally include:
1. Management Commitment.
Comment: Regarding Management Commitment, a statement of support by management members isn't sufficient. What is needed to produce this culture of safety is for Mangers to

demonstrate their commitment to the process. Being involved in safe work observations and coaching against at-risk behavior. They can also demonstrate this through participation in near miss and other safety incident reviews.

2. Worker Involvement.

Comment: Worker involvement is only one piece of the puzzle. These workers must be committed to the process. This means that they actively care about their co-workers. They must be willing to correct a co-worker's at-risk behavior. They must be willing to offer honest feedback regarding work practices, equipment use and safety procedures. To be successful these workers need to "own the process" with regard to their work activities.

3. Hazard Identification, including workplace inspections for violations of mandatory health and safety standards.

Comment: Inspection for hazards and violations is important however it is only one piece of workplace inspection. Far too many fatalities, injuries and property damage events are related to choices the involved workers make. Prior to starting work the task and the area must go through at least some form of risk assessment and more importantly, risk management. For example, simply recognizing that the work area contains a loose rib isn't enough. That risk must be controlled, preferably eliminated. This is another area where committed employees are an important element, if not the most important element.

4. Hazard Prevention and Control.

Comment: Engineering design and control needs to be part of the safety process however due to the dynamic environment that a mine presents, it is not fool proof. Workers must maintain a continual situational awareness so that they respond appropriately to changes that occur in their work environment during the shift or even during a specific task.

5. Safety and Health Training.

Comment: I fully agree with the importance of providing health and safety training. I believe that far too much of the required components in today's training plans are more of an educational nature rather than providing real training. Scott Geller provides a very good analogy of why this is wrong. He asks if you want your 14 year old daughter to receive sex education or sex training. I think this clearly illustrates the difference.

A change that needs to be made is to trade off the bulk of the education pieces in current training plans and practices and develop more actual training packages. This should be things that can include competency based evaluations and especially those that require a demonstrated skill by using a hands-on approach.

Today our training plans have a number of requirements that evolved from various directives out of MSHA Headquarters. These initiatives serve to consume class time. Many of the topics are not related to our mine yet we are still required to cover them. The Agency doesn't seem to understand the challenges associated with teaching adults. If miners feel the material isn't relevant, important or interesting, they quickly shut off their attention and just endure to the end of the session. The information is provided without benefit to anyone other than ticking the box that it was covered.

This has occurred as the Agency has tried to standardize these plans. It is true that if all the plans are required to look the same, it makes them easier for the Agency to review. The trouble is that it has a negative impact on the effectiveness at a given mine. That is something I fear will occur should this rule progress. The Agency will develop a template for what each mine is required to do, regardless of whether it is something that mine needs. All the plans will look the same and all the libraries will be filled to capacity. What will be missing is management out in the field measuring whether the plan is effective and being followed and miners will look at that room full of books and shake their heads. The procedures/rules will not be known and understood and the risks will not be managed. Managing how a rule is applied is far more important than managing what is written in the document.

6. Program Evaluation.
Year after year, many companies experience low injury and illness rates and low violation rates. For these companies, preventing harm to their workers is more than compliance with safety and health requirements; it reflects the embodiment of a culture of safety from the CEO to the worker to the contractor. This culture of safety derives from a commitment to a systematic, effective, comprehensive safety and health management program, implemented with the full participation of all workers. MSHA understands that many companies have developed and implemented effective safety and health management programs."

Comment: Similar to what we commented previously. The word program is the wrong terminology. Successful safety processes are the ones that aren't separate from other activities at the mine. Safety must be part of everything that is done. It must be one of the core values of the organization so that it drives or is part of everything. You shouldn't want safety first anymore than you want it last. You just want it part of every decision and action.

Management Commitment and Worker Involvement.

Comment: Statements of support by management members are not sufficient. What is needed to produce this culture of safety is for Managers to demonstrate their commitment to the process. This can be accomplished by being involved in safe work observations and coaching against at-risk behavior. They can also demonstrate this through participation in near miss and other safety incident reviews.

Worker involvement is only part of the picture. Workers must also be committed to the process. They also need to be actively involved in things like task risk assessments of SLAMs. They need to be involved in development of safety policies and practices. They need to participate in reviews of procedures and investigations of incidents. They need to be willing to coach a co-worker when they observe them in an at-risk situation. They need to be unwilling to tolerate unsafe behavior.

Similar to the values posted at the Air Force Academy and other military institutions. Miners need to take the stance that they will not perform their tasks unsafely nor will they tolerate among them, those who do. The practice of keeping silent to "protect their brothers" has to come to an end. This type of behavior simply enables miners to put themselves and others at-risk.

They also need to be accountable for their actions. In Australia it is not uncommon for an hourly worker who is found to be culpable in a fatal accident investigation, to receive criminal charges and possibly a jail sentence.

The Mine Safety and Health Administration does not have similar accountabilities for hourly workers, with the exception of smoker's articles. I believe this lack of accountability can drive or enable a miner to make the wrong choices. They may know better, they just didn't do better. This occurred recently at our mine when we found an equipment operator not wearing the required seatbelt. That miner had received training regarding the requirement and the expectations for compliance on 3 separate occasions during the 3 months prior to this incident. In spite of that, because it was a weekend shift and he thought no one was watching, he had unbuckled that seatbelt. He knew better, he didn't do better. The mine operator received the violation though. This is a problem that MSHA could help solve by enacting standards that establish accountability requirements for miners as there are for agents of the operator.

The list of components published in the Federal Register covers some important Safety Process Components; the following is a more comprehensive listing of many of elements in the Safety Process in place at San Juan Coal Company.

Some elements are driven by regulatory compliance issues although not all regulatory requirements are listed here. Many were identified as risk mitigation measures that came up through the risk assessment process.

1. Employee Selection
2. Quality Education and Training
3. Equipment Selection.
4. Process Design
    a. Quantitative and Qualitative Risk Assessment
    b. Standard Operating Procedures
    c. Safe Work Procedures
    d. MSHA Mine Plans
5. Risk Based Safety Management Plans
6. Develop and Maintain a Participatory Process
7. Management Participation
    a. NMC Safety Council
    b. San Juan Coal Company Surface Joint Safety Committee
    c. San Juan Underground Joint Safety Committee
    d. Safety Leadership Training
    e. Participation in incident reviews.
    f. Risk Assessment
    g. Underground Visits by Management Members.
        i. Targeted compliance audits.
        ii. Targeted Safe Work Observation Teams.
8. Line Management Accountability
    a. Supervisors responsible for safety of their work group.
    b. Supervisory training.

c. Supervisor Safety Improvement Action Plans.

9. Individual Accountability
    a. Accident reporting procedures.
    b. MAPP (My Accident Prevention Plan) Employee Process
    c. Repeat Violation Reduction Program (RVRP)
10. Health Components
    a. Hydrogen sulfide monitoring program.
    b. Bi-monthly dust sampling from high risk occupations.
    c. Noise surveys.
    d. Bi-monthly dust sampling from designated areas along conveyors.
    e. Diesel particulate sampling during longwall moves.
    f. Inhouse Industrial Hygiene sampling program based on RA Matrix for a variety of Similar Exposure Groups (SEG) and a variety of substances.
    g. Sampling in response to employee concerns/complaints.
    h. Stress study in partnership with NIOSH.
    i. Noise Studies in partnership with NIOSH
    j. Health Effects of hydrogen sulfide study in partnership with NIOSH.
11. Incident Reporting/Safety Concern/Near Miss Reporting
    a. Accident Reporting Procedure
    b. Foreman's Responsibility for Injured Persons Procedure
    c. Incident Review Policy.
    d. Use of Multiple Causation in investigation and reporting.
    e. Utilize Significant Incident Reporting process (SIR)
    f. Zero Energy SIR.process
    g. Share learnings across BHPBilliton
    h. Daily event report automatically generated from safety database. Communicate incidents across the organization ASAP.
12. HSEC Corporate Audits
    a. Internal and External Audit Teams.
13. Repeat Violation Reduction Program
        i. Root Cause Analysis of Violations
14. Emergency Preparedness
    a. Emergency Response Plan
    b. Emergency Manual
    c. Mine Rescue Team
    d. EMT Policy
    e. Fire Brigades
    f. First Responders
    g. First Aid Training for Employees
    h. Mine Emergency Response Drills (MERD)
15. Management of Change
    a. Formal process to assess, understand and plan for the impacts of changes in our system.
    b. All new equipment and rebuilt equipment must be inspected prior to being put into service. This includes surface coal handling facilities and underground conveyor drive systems.
    c. This equipment will require the following inspections prior to being put into operation:

i. General safety inspection by Safety Department
ii. Electrical examination by a qualified person
iii. Emissions testing on permissible or heavy-duty diesel equipment.
iv. Compliance inspection on permissible or heavy-duty diesel equipment.

16. Fitness for Duty
    a. Pre-employment Drug and Alcohol screening.
    b. Random D&A screening
    c. Post accident D&A screening
    d. D&A screening for cause.
    e. Fatigue Management & Fatigue Monitoring

San Juan Coal Company doesn't prescribe this list for anyone else. We simply provide this list as an example of the scope of the elements that we believe contribute to this organization's safety performance. The list for another mine may be vastly different.

This list is the one we have developed thus far for our mine, for our risks. The safety management tools used at another mine must be developed at that mine. The list should be based on the needs identified at that mine, based on the risks that must be managed at that mine.

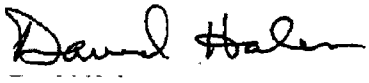
Because of this requirement that such plans must be of a company/mine specific nature, we encourage MSHA to decide not to issue specific rulemaking about such processes.

A better approach would be to use the information obtained through this overall collection process and utilize the Educational Field Services group to provide information to organizations that may need further assistance. EFS should help them to develop and implement processes for them and thereby really have a chance to improve safety in the industry.

San Juan Coal Company appreciates the opportunity to provide these comments regarding this topic and hope they will be considered in the next steps the Agency takes.

If you have questions or need additional information, please contact me at (505) 598-2153.

Yours sincerely,



David C. Hales CMSP
Health & Safety Superintendent