

**Statement of S. L. Bessinger, PhD P.E.
Engineering Manager
BHP Billiton
San Juan Underground Mine**

**Before the Senate Subcommittee on
Employment and Workplace Safety**

**At the
May 22, 2007 Subcommittee Hearing
“Promises or Progress: The MINER Act One Year Later”**

Introduction

Good morning Madam Chair and distinguished members of the Subcommittee. My name is Steve Bessinger and I am the Engineering Manager for San Juan Coal Company, a 100% owned subsidiary of BHP Billiton. On behalf of BHP Billiton, thank you for inviting us to participate in the Subcommittee’s oversight hearing concerning the Mine Improvement and New Emergency Response Act of 2006 or the “MINER Act.”

To begin, we strongly support the goals and purposes of the MINER Act. At the heart of the new law, in our view, is the requirement for a mine-specific accident response plan. It has been no small task to meet the immediate mandates of those requirements, and we have more challenges awaiting us over the next several years as the milestone dates of the Act arise (for example the wireless communication and tracking requirements).

For us the other most important thrust of the MINER Act is a strengthening of the Federal Government’s capabilities regarding mine safety research. This reinvigorated research program should help the industry meet both MINER Act

research needs as well as other mine safety problems. Our statement addresses these two critical issues in more detail below.

An overriding commitment to the safety of our employees and contractors is fundamental to BHP Billiton's strategy and is deployed through all its operations. For many years we have worked tirelessly towards our goals and to address the challenges presented in this area. Before its enactment on June 15, 2006, our safety program already incorporated a number of the MINER Act's principles. However, although the MINER Act contains much that is familiar to us, its requirements have presented, and continue to pose significant demands. We believe that our company is on schedule with MINER Act compliance.

BHP Billiton San Juan Underground Coal Mine

By way of brief introduction, the San Juan Underground Coal Mine is part of BHP Billiton's New Mexico Coal Operations. BHP Billiton is the world's largest diversified natural resources company. We have more than 100 operations in approximately 25 countries throughout North and South America, Africa, Asia, and Australia. Around 7%, or 2,660 of our employees globally are located in North America, with the majority of these within the United States. As well as our coal operations in New Mexico, we have Petroleum activities in the Gulf of Mexico, the headquarters for our global Petroleum business is located in Houston, Texas, and part of our copper business operates in Arizona.

Our New Mexico Coal Operations are located in the Four Corners area of Northwestern New Mexico. We currently have two operating coal mines: (1) the Navajo Mine, a large surface coal mine located within the boundaries of the Navajo

Reservation; and (2) the San Juan Mine, an underground longwall operation. About 65% of our salaried and hourly workforce of 1,000 employees is comprised of Native Americans. At both mines our miners are represented by Local 953 of the International Union of Operating Engineers. The two mines produced approximately 16.5 million tons of coal in 2006. The Navajo Mine is the sole supplier of fuel to the Four Corners Generating Station operated by Arizona Public Service (“APS”); and the San Juan Mine is the sole supplier of fuel for the San Juan Generating Station operated by Public Service of New Mexico (“PNM”). These power plants furnish electricity to New Mexico, Colorado, Utah, Arizona, and California. Our New Mexico Operations had a 2006 payroll of \$77 million, and we purchased equipment, services, materials, and supplies worth \$156 million. In 2006, our New Mexico Operations paid State, local, Tribal and Federal taxes and royalties totaling almost \$118 million, plus State and Federal payroll income taxes and State Corporate Income tax.

Historically the San Juan Mine had been a surface coal mine, but as its surface mineable reserves became depleted we began to develop an underground longwall mine in 2000. Underground mining commenced in February 2001 and full production capacity was reached in early 2004. There are sufficient coal reserves to meet our contractual commitments to at least 2017. Because of a scarcity of experienced underground and surface miners, it was necessary for us to recruit and train a workforce of nearly 80% inexperienced miners for the underground workforce. For example, as you can see from the attached picture (Attachment 1),

we actually constructed a portion of the longwall machine on the surface, about one fifth of its installed size, a total of three football fields in length when complete. We trained our miners on it until they became comfortable with their tasks. As the Senators may know, the longwall method of mining is the safest and most productive method of underground coal mining techniques. Longwall mining is highly productive because of its focus on a systems approach to mining and the use of advanced technology (See the photos in Attachments 2 and 3). A unique safety aspect of our mine amongst other US mines deserves a brief explanation: that is, we use what is called a bleederless longwall ventilation system as a control to suppress the natural tendency of our coal seam to spontaneously combust. This includes the use of a nitrogen injection system to manage oxygen content to safe levels. This helps to minimize the risk of an explosion or a spontaneous combustion heating event. The spontaneous combustion characteristic of our coal is a relatively unusual circumstance, not found at most underground coal mines in the US.

BHP Billiton San Juan Coal Company's Safety and Health Program

From the outset of the Mine's development, our approach to safety and health has been grounded upon a systematic risk-based analysis program focused on the specific characteristics of our mine. This is consistent with the 2006 recommendations of the National Mining Association's Mine Safety Technology and Training Commission, chaired by Professor Larry Grayson. BHP Billiton fully supports those recommendations. More specifically, we implemented a program comprised of detailed safety process components and a safety process matrix to address identified risks. It involves all of our hourly and salaried employees, as

well as contract miners and equipment service representatives. This embraces BHP Billiton's Fatal Risk Control Protocols that are mandatory at each site around the world. Each operation within BHP Billiton has access to best practices that have been tested, modified and documented in more than 100 operations within the Group. But the key is that this common methodology also allows us to identify risks posed by each mine and manage those specifically, rather than manage every mine the same. Some of our success might also be attributed to our behavioral based safety programs amongst management, employees and contractors. One example was our Stop-Look-Assess-Manage ("SLAM") process which was recently embraced by MSHA. Our bottom line is that at any BHP Billiton site, we seek to create a mindset and an environment where people believe it is possible to work injury-free and everyone understands they are empowered to manage safe production by stopping work at any time they feel the activity is unsafe. This occurs regardless of where they are in the world, what role they undertake, or in which business they work. We call this objective Zero Harm.

Our program at the San Juan Mine is designed to ensure we comply with the requirements of the Federal Mine Safety and Health Act of 1977, as amended by the MINER Act. But rather than just targeting compliance, we bring known best practices to bear to manage our assessed risks. San Juan's personnel engage in regular dialogue with our BHP Billiton colleagues and other experts in the United States, Australia, South Africa and around the world.

When all is said and done, we are very pleased there have been no fatalities in the history of the San Juan Coal Company. While our injury rate for 2006 was 3.26 versus the national average of 4.88, we will not be satisfied with anything less than a continuation of our first quarter 2007 results which were 0.00. We recognize this is a journey and not a destination. In all of our operations it is critical that we are vigilant in identifying new, emerging or changing risks, and managing those risks in a way that is appropriate for each site. This must continue to be the case because there is always room for further improvement. Please let me take this opportunity to invite you, Madam Chair, and members of the Subcommittee to visit our mines. All 1000 members of our New Mexico Coal team are proud of our operations and we would be very pleased to provide you with a tour of our New Mexico Operations.

BHP Billiton Supports the Mine Safety and Health Activities of the National Mining Association and the Mine Safety and Health Administration

BHP Billiton is a member of the National Mining Association (“NMA”). Like NMA, we are strong supporters of the goals and intent of the MINER Act. We work closely with MSHA on the ground as a stakeholder in our safety process. Indeed, we engage in healthy debate and consultation with MSHA on various issues, many of which are above and beyond compliance issues. In this way MSHA is an important partner in our success.

The MINER Act

We support the MINER Act’s spotlight on mine emergency preparedness. In fact, because of BHP Billiton’s focused risk assessment approach to safety, we were

already carrying out a good deal of what the MINER Act now requires. Prior to the MINER Act, we had constructed three escape shelters in our underground workings. Their purpose is to facilitate the coordinated evacuation of miners or to sustain them if they become trapped underground. The shelters are supplied with fresh air from the surface by a bore hole, ventilated at a minimum rate of 90 CFM; and they are equipped with food, water, first aid supplies, and a separate communication system to the surface through the bore hole. Photos of these escape shelters are attached as Attachments 4, 5 and 6 to my statement. As for self contained self rescuers (“SCSRs”), prior to the MINER Act we had 475 one-hour devices in our system to cover a typical work shift having approximately 50 miners underground. We have been actively involved with MSHA and NIOSH in the approval of the use of Self Contained Breathing Apparatus “SCBA” as an alternative to existing approved escape breathing devices, to be delivered mid 2007. San Juan has also used the Personal Emergency Device, (PED) and three other communication systems underground for several years. Our approach to the use of escape shelters, communications systems and SCSRs provided us with a running start to compliance with the MINER Act requirements for a written accident response plan or emergency response plan (“ERP”), as we discuss below.

BHP Billiton San Juan’s Written Accident Response Plan or Emergency Response Plan (“ERP”)

To begin, the MINER Act requires that approved ERPs shall--

- Afford miners a level of safety protection at least consistent with existing law;

- Reflect the most recent credible scientific research;
- Be technologically feasible;
- Make use of current commercially available technology; and
- Account for the specific physical characteristics of the particular mine.

This last criterion especially is an endorsement of the mine specific risk assessment used by BHP Billiton.

We are proud to report to you that as of April 16, 2007, our San Juan Mine has an MSHA-approved ERP. We understand that this was the first approved ERP in the nation. The ERP approval process took about eight months from start to finish. As the Subcommittee knows, approved ERPs must be reviewed by MSHA at least every six months, and no later than mid-2009 every ERP must provide for post-accident communications between underground and surface personnel via a wireless two-way medium, as well as provide for an electronic tracking system permitting surface personnel to determine the location of any persons trapped underground. These are daunting tasks given present technology.

For now, however, our approved ERP includes: a redundant means of communication with the surface for persons underground; a tracking system that allows us to know the current or the immediately pre-accident location of all underground personnel; sufficient caches of SCSRs for the evacuation and escape of our underground workforce; emergency supplies of breathable air for individuals trapped underground sufficient to maintain them for a sustained period of time; post-accident lifelines; and the other required components of ERPs.

With particular regard to post-accident breathable air for trapped miners, we have constructed two more permanent escape shelters; and we are in the process of purchasing four pre-fabricated portable refuge chambers (one of the six varieties of chambers approved by the State of West Virginia). We appreciate the opportunity to be involved in the development of the NIOSH refuge chamber study.

MINER Act Strengthening Of Mining Research Activities

As noted at the beginning of this statement, we are very pleased that the MINER Act has strengthened the Nation's mining research capabilities through creation and funding of a permanent Office of Mine Safety and Health within NIOSH. Madam Chair, and members of the Subcommittee, in the long-term, this will be one of the most important life-saving accomplishments of the MINER Act. Recent events highlight the need for increased and sustained funding to support basic research, and development of technology that the industry needs to continue to improve the safety of our industry. The MINER Act is a start in the revival of this key component of what is now recognized to be a strategically important and economically critical industry for our country's safety, security, and well-being.

Early this month, a BHP Billiton representative was present at the meeting of the statutorily established Mine Safety and Health Research Advisory Committee (MSHRAC) in Pittsburgh, Pennsylvania. That Advisory Committee is charged pursuant to Section 102 of the Federal Mine Safety and Health Act of 1977, with advising both MSHA and NIOSH on matters involving mine safety and health research. We were pleased that MSHRAC heard and discussed excellent

presentations from NIOSH about its MINER Act research activities dealing with communications and tracking, refuge chambers, mine seals, behavioral research on escape, development of improved SCSRs, and other important projects. In short, progress is being made in mine safety research as a result of the MINER Act.

Sealing Of Abandoned Areas In Underground Coal Mines

The MINER Act Section 10 requires MSHA to raise the required strength level of materials sealing off abandoned areas in underground coal mines.

We understand that MSHA will be publishing shortly an “emergency temporary standard,” on mine seals. We support this process, but have filed a mine specific Petition for modification to the Agency’s current standards for the construction of alternative mine seals in accordance with our risk based approach.

We filed this Petition because we strongly believe that the application of the current standard presents a diminution of safety for our miners. A number of 2006 safety incidents were a direct result of materials handling. In lieu thereof, we have offered an alternative method that will at all times provide an equal or higher degree of safety as that provided by the existing standard. This alternative is an upgraded seal design and construction procedure for MSHA’s consideration, which includes a procedure for monitoring and sampling of the atmospheres behind our seals. This procedure includes an action plan which, when necessary would require evacuation of the mine. We sincerely hope that publication of the emergency temporary standard will result in MSHA approval of our proposed system of construction and monitoring of our seals.

Conclusion

In closing, we very much appreciate having been invited to participate in this hearing. An overriding commitment to the safety of our employees and contractors is fundamental to BHP Billiton's strategy and our own personal dedication to safety. Our initiatives towards Zero Harm are built upon our risk management approach, Fatal Risk Control Protocols, our adoption of best practices world-wide, and our use of behavioral based safety, all focused to our site-specific circumstances.

We support the spirit and goals of the MINER Act and the potential benefits that will be realized from increased funding into mining research and development.

Thank you again for your interest in our miners' safety. BHP Billiton stands ready and willing to advise and assist you in this critically important issue and we look forward to you visiting us in New Mexico.



Attachment 1



Attachment 2



Attachment 3



Attachment 4



Attachment 5



Attachment 6