A1 Risk Management at Grasstree David Carey David Carey

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Grasstree Mine, located in central Bowen Basin, operates in one of the gassiest environments of Australian coal mining. Employing surface drainage techniques, in seam drainage and high capacity ventilation along with the best of modern mining technology this and the other principle hazards of underground mining are controlled. Despite this ability to control technical hazards and having employed a workforce at least the equal of any other in the industry Grasstree had consistently failed to achieve the levels of safety performance which its peers were during 2008 and early 2009. With a persistent occurrence of lost time injuries, approximating 1 per month, and a total recordable frequency rate stuck above 50 per million man hours something else was needed for this mine to be truly a great underground coal mine.

In 2008 Anglo American commenced the development of a four tiered Safety Risk Management System to provide a common approach to risk management across the company and aimed at achieving a step change in safety performance. Within this SRM System the A1 program is the level aimed for all employees. The program provides technical information on hazard identification, probability assessment, consequence determination and the implementation of appropriate controls but in a framework relevant to the frontline workforce. This knowledge, built around the SLAM process, allows workforce at the coalface to make better decisions at the time when decisions need to be made.



Having undergone a significant structural change in March 2009 in response to the GFC the potential for further deterioration in safety performance was evident. Whilst change is disruptive and can lead people to be distracted in the performance of their work it can also provide a catalyst to discuss other necessary changes, such as the need to improve safety outcomes at work. Over quarter 2 of 2009 management activities such as accident taxonomies identified areas for focus and information to present to the workforce. Though providing a part of the jigsaw to longer term improvement in mine performance there was no impact occurring in immediate outcomes. During quarter 3 of 2009 LTI events peaked at almost 2 per month.



During quarter 2 it was clear that some different approach to safety management at the mine was required. There are a number of commercially available programs out there which have delivered varying degrees of success to other mines and these were certainly considered. The idea of seeking a solution, a silver bullet, to the mines safety performance from someone else did not sit well with the members of the mine senior leadership team. It was at this point in time that we became aware of the availability of the Anglo A1 training package.

In August 2009 training of presenters for A1 was conducted at Grasstree. The trainer volunteers included the mine Production Manager, the Development Superintendent, 2 members of Capcoal Training department and the GM/SSE for Capcoal undergrounds. From October 09 a weekly A1 training session commenced for 15 to 20 mine employees and continued through to March 10 such that by that time more than 90% had completed this course. At that point the mine was moving into its longwall move for 2010 and further training at Grasstree was put on hold. In May, following an 18 day longwall move during which in excess of 1000 SLAMs were completed, training recommenced to complete the remaining mine employees and to also cover the mine 'permanent' contactors. By the end of July this goal has essentially been completed with infrequent training now required for new employees and contractors employees.



Overview

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Section 1: Introduction to Safety Risk Management

Section 2: Why we Manage Risk

Section 3: SRM at Anglo Coal

Section 4: The SRM Process - Hazard Identification

Section 5: The SRM Process - Risk Assessment

Section 6: The SRM Process - Risk Management

Section 7: The SRM Process - Recording & Reporting

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Each session takes some 6 – 7 hours to complete followed by the submission of 3 SLAMs conducted within the field which are also assessed for quality. The sessions have been facilitated by 2 of the management team, with one of these generally being either the Production Manager or myself, and deal with real examples of mine safety to build on the knowledge contained within the course. The level of exchange of ideas and experience has been motivational, particularly for the management personnel conducting the training, and no session has failed to remain fully engaged for the full duration of the course. Of particular note was a session late last year when site bushfires lead to a total site blackout just at the commencement of the written assessment for the course. Of their own motivation the blokes went to the lamp room and returned to complete the assessment by cap lamp.



Since the commencement of the course Grasstree employees have incurred 1 LTI for the period from October 09 to July 10 whilst a second LTI occurred in April 10 to a contract employee prior to us rolling this training out to them. The current LTIFR for 2010 ytd of 3.1 compares to a 2009 figure of 13.6. Similarly TRC frequency rates for employees have dropped to 19 per million man hours ytd to the end of July 10 down from 55 in 2009 and 84 in 2008. Grasstree currently employs some 280 Anglo employees and approx 50 contractors.

In previous times risk management knowledge tended to reside with senior mine management or at best the frontline supervisor. Our workforce needs to make decisions every day that affect their safety. When people are given the knowledge necessary to make the right decisions, all of the time, then their safety outcomes will significantly improve. The experience gained over quarter 4 of 2009 and the first half of 2010 has supported this logic.



3. SRM at Anglo Coal

The purpose of the Anglo Coal SRM Process

Purpose

" To establish and embed a world class "One Anglo" safety risk management process that delivers radical improvement in safety for all our people "

Vision

" All our people make the right decisions affecting safety "

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Engage > Learn > Perform

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Whilst training and knowledge are the basis of competence the powerful impact of mine management presenting this information and interacting with their workforce cannot be underestimated. During these sessions a common belief in safety achievement can be developed and the use of local examples helps develop a passion to apply this new knowledge. Today when discussing safety underground with employees it is common to identify energy sources, outline the principle hazards that are to be dealt with and what controls will make a difference. It is these Simple Conversations that reinforces the Solution to what was previously believed to be Complex Problems and they are very satisfying discussions.