



Mining Industry Occupational Safety & Health



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Comment

What Happened

If this was something trivial or less important, I would start with a joke that goes along the lines of “absence makes the heart grow fonder” or something to that effect as a way of sheepishly acknowledging that there has been a noticeable gap between the publication of this edition of **MOSH e-news** and the last one. That would be a lame - duck excuse which borders on trivializing something important.

We promised at the beginning that we would not publish the newsletter for its own sake and that we would do so only on occasion where there was something to share with you. We firmly believe that sending you junk mail will not serve any purpose.

Two aspects strongly mitigated against the publication of **MOSH e-news** over the last few months. The first was that the activities of the four Task Teams did not generate news that we believed would add any news to what we have already talked about in the previous newsletters. The second reason was that, when there were real news to publish, we were so engrossed in the MOSH activities that there was no opportunity to compile news and publish. That is what happened between now and then.

Where are We?

Now that we are here, what can we tell you that is exciting? We start first by indicating how we got here... to close the gap as it were. The March 2008 MOSH Adoption System workshop armed the four teams, Noise, Dust, Fall of Ground, and Leadership with their respective best practice solutions.

The process from there was to identify and get into agreement with a specific mine to “Test” the best practice and learn any lessons in the process; identify and get into agreement with a specific mine to “Demonstrate” the effectiveness of the best practice; before identifying and getting into agreement with another mine for “Adoption” of the best practice.

The level of euphoria that we left the workshop with drowned any advises that may have been given along the lines of “hurry very carefully, there are always lessons to learn and there was also that thing called unintended consequences”.

Before we get there, let me hasten to point out that the identification of the best practice was only half the solution! The next part of the solution, equally important, was the adoption aspect of this practice. The challenge was that the second half was the most difficult as it related to people. Why was this a challenge? You may wonder. The answer lies somewhere within the reasons given as to why so many sensible and obvious solutions to many of our problems are not being implemented. Therefore the adoption of the best practice depended to a very great extent to Behavioural Communications. The first lesson learned in this journey was that we did not have champions for Behavioural Communications, other than Decision Partners (see last **MOSH e-news**).

Behavioural Communications in practice

The process of ensuring that the best practice, when implemented does not become one more flavour of the month before being tossed onto the scrap hip of previously-introduced-solutions meant that strategies were to be implemented to ensure that those responsible for the adoption of the best practice maintain and sustain their enthusiasm to ensure its long term success. These strategies involved the utilization of Behavioural Communications tactics including identifying the actual and potential barriers to the adoption of best practice; where such barriers were; and establishing how to overcome them. This meant *mental models* research and analysis of results before strategies are implemented to address these challenges.



- All work and no play – Andre van Zyl, Sietse van der Woude and Jabu Maphalala discussing BC in Toronto

With Mr Gordon Butte of Decision Partners (see last **MOSH e-news**) safely in his home territory, there was no one to assist in facilitating this research process which every team had to undertake. It was time to think out of the box. Jabu Maphalala, a member of the Secretariat, was dispatched to go to Canada to learn how to put into practice the theory of Behavioural Communications. The intention was for him to drink from this well of wisdom and implement the knowledge back home. Regrettably, drinking from a well of wisdom, especially when you are in a rush, may fill your stomach but not necessarily quench your thirst.

With the challenge of the shortage of Behavioural Communications skills having been addressed, (following Jabu one week of training!!!) the three teams (see update on the Leadership Team) started with their *mental models* research. From that stage, each team focused on its own best practice. That is where we are.

Team, Team Wherefore are Thou?

The Noise Team

We start with the Noise Team. The Noise Team left the March planning workshop armed with the *LR 90 Pneumatic Rock drill* as their chosen best practice to replace conventional, noisy pneumatic rock drills prevalent in the industry. That was then and a lot has happened since.

In terms of the objectives, the LR 90 Pneumatic Rock drill fitted the bill at the time. But we are operating in a world in which things change and other factors come into play. Among those other factors was the issue of the mining industry's commitment to comply with requests to reduce electricity consumption by 10 percent. This shot of reality meant that the industry had to look for ways of improving energy efficiency.

Compressors (which provide power to the pneumatic drills), regrettably, use a lot of electrical power. Also critical is that, some of the compressed air pressure is lost on the way before it reaches its destination making pneumatic rock drills inefficient energy users compared to electric drills. Improved technology in new electric drills, which improved their performance, made them serious contenders for the position of preferred best practice technology.

I guess someone did the maths because, all things considered, and the electric drill came up tops particularly following tests done at the Test Mine. The testing of the Noise Team's best practice technology was made at Anglogold Ashanti's Tau Tona Mine.



But, the electricity crisis was not the main reason for choosing the electric rock drill as preliminary test results showed a remarkable decrease in noise levels emitted from these machines. The electric rock drill has a noise reduction of more than five times compared to the conventional pneumatic rock drill.

Following consultation and a lot of thinking, the Noise Team switched to the Hilti Electric Drill as their preferred technology best practice. It was with this technology as a basis that the Noise Team conducted their *mental models research* in preparation for the next phase of the best practice adoption process which is the launching of the demonstration stage.

In a not so distant future, the Noise Team will be implementing their full Best Practice at a demonstration mine which has been identified as Anglogold Ashanti's Moab Khotsong Mine.

The Dust Team

Like the other teams, the Dust Team went through its own learning curve. The team left the workshop armed with ***a dust suppression agent added to water and complemented by fogging units*** which was to be supported by ***a comprehensive dust management system manual*** as part of a broad dust control strategy as their best practice solution.

Circumstances, however, resulted in the scoping modification of the Dust best practice solution to emphasise "people issues". This is because while the 'best practice' for silica dust reduction is the use of a specifically designed fogger unit, this technology "solution" alone will not ensure the success and sustainability of its adoption. Nor will it set up success for the adoption system itself. It was therefore concluded that effectively addressing the "people issues" would be key to achieving the desired adoption of the technology. The dust team, therefore envisaged addressing the 'people' issues by strengthening the broad dust control strategy with a behavioural communications and leadership behaviour strategy tailored to the specific circumstances of the demonstration project mine and adoption mines.



The Dust Team at Great Nologwa

The testing of the Dust Team's best practice technology was made at Anglogold Ashanti's Great Nologwa Mine in the North West Province. There are very rare occasions where the law of unintended consequences does not apply. The success of the "testing" of the Dust Team's technology practice produced its own. It seems that a number of people were impressed by the results of the test and the

team had to fight hard to convince people that the technology was only part of the story for the attainment of the results and to sustain the adoption. In addition, the Two Full Time members, Dr Vanessa Govender and Mr Tom Rogans had their hands full trying to convince people that the fogger systems they were using as the technology solution had to adhere to certain standards. For further information on this, please feel free to contact us.

Gold Fields' South Deep Mine has been identified as the Demonstration Mine for the The Dust Team's best practice solution that will incorporate both the technology and the behavioural communication aspect.

Andre brought back were that: there were no barriers to communicating about safety; there were no reprisals to reporting unsafe conditions; No person was exposed to inadequately supported ground; and that safety was considered a prerequisite for doing the job safely the first time. This was in addition to the fact that the educational standards of employees there were a bit higher than was the norm in South Africa.

Impala Platinum Mines acted as a "test" mine for the Team's best practice solution. Following the return of the behavioural communications research results, the team has secured agreement at Driefontein Mine for the Demonstration phase.

The Fall of Ground Team

The Fall of Ground Team left the March planning workshop armed with *adequate examination and making safe* as their best practice solution. Interestingly enough, the solution seemed simple and straight forward. But as they say, "the devil is in the detail". The detail here was related to whether people knew about the need for "adequate examination and making safe"; whether they knew how; and if yes to both questions, why was this not implemented.

The FOG Team decided to seek answers to these questions by meeting with officials of mining companies which had performed well in terms of low harm to people both locally and abroad. This exercise, took Mr Andre van Zyl to Canada where he visited Vale Inco Mine (the Frood and Stobie sections) and Frazer Mine in Ontario Canada.

We mentioned earlier that the period between the planning workshop and now has been characterized by immense lessons learned. From Canada, three of the lessons

The Leadership Team

Like the other three teams, the Leadership Team left the March Planning Workshop with a best practice Solution: The identified solution incorporated a number of opportunities into one leadership process which was *to develop a leadership process containing good practices that will drive zero harm in a sustainable manner*.

While the other best practice solutions of the other teams deal with tangible issues, a good leadership process is not tangible nor is it as easily quantifiable. This was part of the challenges that the Leadership Team faced following the workshop.

Important to note is that the solution of the Leadership Team is not confined to a specific work area, nor is it aimed at addressing a specific issue. Never to be fazed by this, the Leadership Team went on a research and consulting campaign to find out what traits of leadership could be implemented to address health and safety and, once identified, how were these to be adopted. The message that came from this campaign was that addressing leadership matters included addressing corporate cultural transformation matters. Success on these was not to be attained overnight. A decision was taken to have this team operate on a separate timeline from the other three teams. The Team would, however continue to share their experiences and knowledge of the leadership aspects of the other teams' solutions.

Billy Ray Jones – A Chance of a Life Time

It is sometimes referred to as “in your face”. That is when something is just there in front of you that you simply cannot ignore it. Take the 2008 Beijing Olympics for example. Whether you are into sports or not, everyone was talking about them and you were bound to hear about them. As for us South Africans, we are talking less loudly now than was the case when we thought our Olympiads were going to bring a few gold medals home. That is the way we are, great supporters when the teams are winning!!!. We react in a totally different fashion when the team we support loses.

While we were busy putting on as much pressure as possible to the last medal hopefuls like Sifiso Nhlapo to improve the country’s Olympic fortunes, talk had already started for a “postmortem” to determine who was responsible for the dismal performance of Team SA. The process of apportioning blame had started...

It goes without saying that, except for the supporters of Natalie du Toit, who made history, and Godfrey Khotso Mokoena, who won the solitary medal for South Africa, the usual crowd of well wishers will not be seen at the airport to welcome home those who fought so gallantly for their country.

It is regrettable that our reaction to the performance of our athletes mirrors the way we conduct our affairs. This, of course, is a generous dose of generalization but the fact remains that we live in a country in which there are people who stand by on the sidelines watching and waiting for someone, sometimes engaged in a noble initiative, to trip and fall. When something does go wrong, these are the first people to apportion blame and point out the “villains” to be punished.

Lamenting the fact that we won less medals by under resourced countries or pointing fingers at who we think is to blame will not change the situation. What we should be doing is asking ourselves right now, why we performed so dismally and start establishing what our contribution to our country is going to be in preparation for the next Olympics in London in 2012. Instead of blaming the athletes or the coaches, or shifting the responsibility to someone else, how much better the situation would be if all of us stood up and played a role instead of engaging in finger pointing exercises after the games are over?

Here is a question for you, what is “in your face” right now and what is your contribution? This is not about the Olympics, it is about attitude.

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