

CHANGE MANAGEMENT

From Prescriptive to Participate Safety Management at GEGM A Case Study

SUMMARY

This paper is not intended as the definitive answer to everyone's safety problems but simply the true story of how we at GEGM turned around our safety outcome.

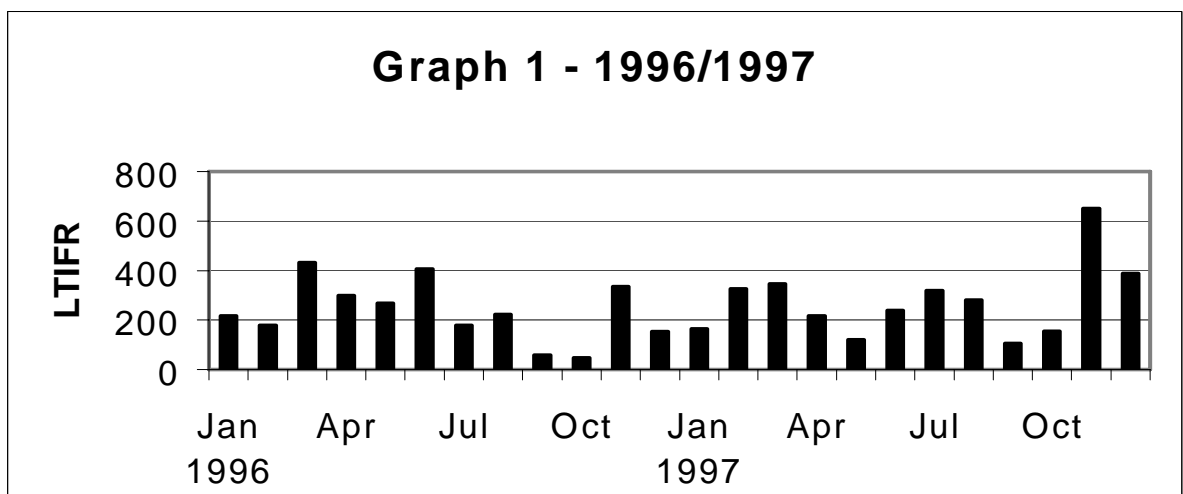
Poor safety outcomes are generally blamed on poor workplace or safety culture. So what is safety culture? If you want a long answer to this question you should refer to '*Improving Your Mine's Safety Culture- The Ultimate Objective of the Safety Management System*' by Shane Stephan however my answer is simply '*How we do things around here*'. To improve your mine's safety outcome you generally need to change, or in some way modify, your mine's safety culture and this is not something that can be done overnight. Our experience has been that improving the safety culture has had a major influence on improving our safety outcome.

The first step in changing our mine's safety culture was the establishment of a feeling of ownership for the safety management plan. This feeling of ownership only developed when the workforce truly owned the plan and the workforce only truly owned the plan after meaningful and honest input to the plan. We at Gympie Eldorado Gold Mines found that as well as meaningful input from all employees, front-line managers had to be seen to be fully behind the plan with full backing by senior management. We do not accept nor are we saying that our safety outcome is anywhere near good enough but we believe the huge gains made over the past 18 months will continue as we implement our continuous improvement program.

INTRODUCTION

Gympie Eldorado Gold Mine is a small underground, to 1000 metres vertical depth, narrow vein hand held gold mine. We have 137 company employees and around 20 contractors but the contractor number varies on a daily basis. We have our own ore treatment operation and regional exploration group. Ore haulage is by light weight battery electric rail system and hoisting is up small 100 year old timber lined shafts currently targeting 180,000 tonnes a year.

At Gympie Eldorado Gold Mines (GEGM) we found when we introduced our first Occupational Safety Management Plan in October 1997, after many years without any safety management plan, that instead of our safety outcome improving the opposite was in fact the case. Our safety outcome went from very bad to horrendous. With 20/20 hindsight it is clear that there were four basic faults in our expensive safety management plan:

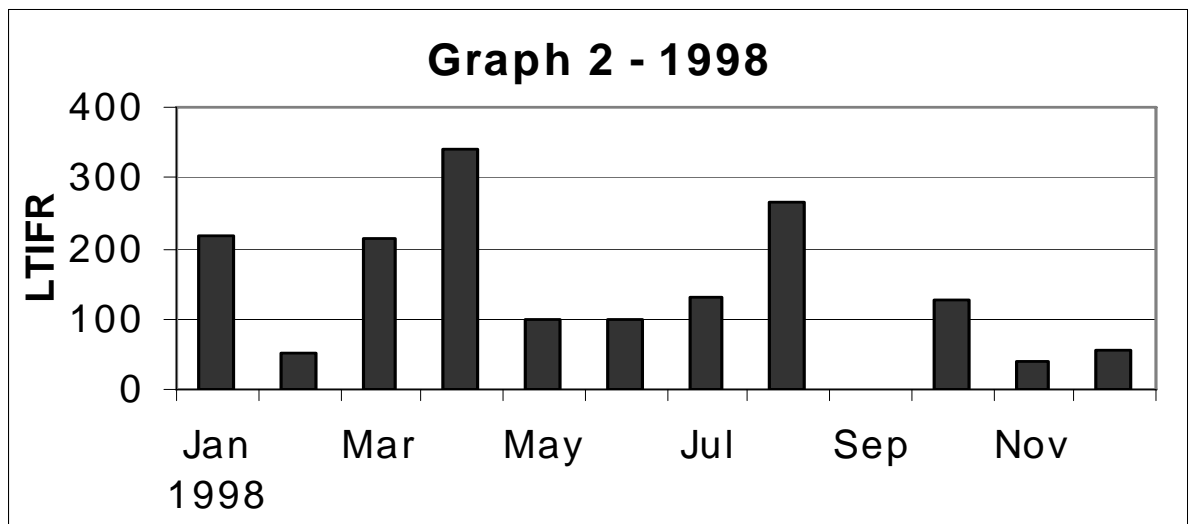


1. The plan titled '*GEGM Operations Manual*' (not a good title for a safety plan) was developed by a consultant who had no experience in mining, let alone narrow-vein hand-held mining. This lack of experience was all too clear in the product.
2. There was no process of consultation and so no input by anyone in the GEGM workforce apart from maybe the safety officer.
3. Management (all levels) were not seen to be committed to the plan - most likely because there was obviously no sense of ownership.
4. This plan lacked objectives, benchmarks, policy statements and much more.

At the time of introduction of this Operations Manual we had a LTIFR of around 200, within 8 months it had risen to 247.

A CASE FOR CHANGE

It was not at all difficult to demonstrate that change was needed, as we could not continue to hurt ourselves at the rate of injury persisting in 97/98. The difficulty was in convincing the workforce that we



could in fact 'turn it around'. We had determined that:

- The situation was urgent
- We should opt for rapid change
- Change needed to be immediate but long term.

To achieve rapid change the involvement of middle management and the grassroots is critical. As mentioned earlier, middle management commitment took some time to develop and this slowed the program by some months.

IT WAS TRULY TIME FOR CHANGE.

Better late than never - in August 1998 the contract with the consultant was terminated as there was no trust or faith in the Operations Manual and our safety performance was attracting close attention from the regional inspectorate.

We set about developing a new GEGM Occupational Health, Safety and Environment Management Plan. This plan was to have its foundation in the DME's Safeguard and ISO 9001. We looked at the 18 applicable elements and accepted that we should base our safety management plan on them. As may be imagined there was pressure from all quarters to improve our safety outcome and to do it by

the end of the shift. It took more than to the end of the shift to determine where to start - the problem was overpowering. Lost for a starting point we went to the workforce, lack of direction then ceased to be a problem. Every person consulted had the answer. At about the time we determined that our new safety management plan would be ready for implementation on 1 March 1999 the DME advised us that our Safety Management Plan would be audited late March/early April 1999. At this point we must admit that the DME audit resulted in some 21 corrective action requirements. However as our new plan had been implemented only 4 weeks prior to the audit we were more than happy with this result as it was to us some evidence that we were on the right track. As a result of the value we got from this audit, we have implemented self-auditing as a tool for assisting in ensuring ongoing improvement. After all the hours of consultation we were still meeting resistance from some middle management and the old guard. Foremen and shift bosses did not seem to be fully committed to the plan. This lack of commitment aside our LTIFR fell to annual 92 within one year. This is not to say that a management plan or system will solve all your safety or any other problems, a management system is only around 30% of the total package. The workplace culture must be changed or new culture imported.

In August 1999 we went through a management shuffle, in the course of which a well-respected shift boss was promoted to underground foreman. From the safety point of view this was the most significant change made at this time. To say that, until his promotion, this particular person was not very safety aware could result in litigation, so I will just say that with his promotion seemed to come a new interest in safety and safety procedures. By being seen to conduct risk assessments, job safety analysis, meaningful safety inspections and insisting on well-run and honest team safety meetings, he set an example that other middle managers have been forced in most part to follow. This foreman became the change agent, a position until this time unfilled. In many cases resistance to change can be generated by the change agent however in our case much of the resistance was overcome simply by this person leading the change. We have not heard the quote '*this is a hand-held mine and we will have accidents*' for more than nine months now.

We have set 'Nil Lost Time Injuries' as a corporate goal but this may in fact be a negative move. British organisation psychologist James Reason suggests that this approach may be counter-productive as it suggests that safety may be equated with avoiding injuries and that it also acts as a powerful deterrent to anyone reporting an injury. Safety is not about just avoiding lost time injuries, it is about not performing 'at risk' acts or in fact, only performing safe acts.

We do not have a reward system that rewards for time without lost time injury as we believe that this type of system does not reward pro-active safety, but merely that no at risk acts which may be taking place have resulted in an LTI.

LEADERSHIP

'A key function of leadership is to articulate the meaning and purpose of what an organisation or group is doing'. Jaffe, Scott and Orioli (1986). Along with the introduction of our new safety management plan we introduced site meetings where the Managing Director and the General Manager addressed the workforce. The purpose of these meetings, held monthly, is to keep our people informed as to our current position regards production and safety, as well as to keep all up to date with planning. These meetings cultivate a feeling of belonging and worth. Changing from prescriptive to participative management style requires 'Champions', as few who have spent their working life in the prescriptive style know what is expected under the participative system. The need to carefully define duties and responsibilities became clear early in the process.

The development of individual position statements which include health and safety duties and responsibilities, as well as KPIs demand careful consideration, and adequate time and resources must be allowed for this process. When making major management changes these job statements are "a must" do early in the process.

CREATING READINESS FOR CHANGE

We published notices advising the impending changes to the site safety management plan and the date of the change (1 March 1999). In hindsight it is plain that this major change was beyond the capacity of the organisation. It would have been much more suitable to introduce the new procedures one element at a time over a period of months. The major problem caused by implementing the

system in one piece was that system training lagged, resulting in non-conformance due to lack of knowledge. In Machiavelli's 'The Prince' it is said that change represents a threat to a sense of security. With this in mind we must allow time for old habits to be broken and new habits to be developed.

INITIATING CHANGE

When we first entered into the consultation process, we found that our people were generally not very trusting nor did they believe that there was anything to gain by giving their view on safety management ("...Nobody listens anyway..."). The first-up response confirmed Dr Dennis Else's (1999) observation that 'Australians are not noted for their reticence to criticise, especially those above them in any hierarchy.' However as more and more of our workforce's collective thoughts appeared in print and became 'law', the more these collective and not so collective thoughts were forthcoming. We found that terms like 'safety is the first priority' did not engender trust but generated cynicism. Once the concept of safety management being a full partner of production management was understood and accepted more meaningful consultation was forthcoming. 'The behavioural approach to safety is based on the principle that people seek consistency between values and behaviour' Wells (1999) was only too well demonstrated during this consultation process as any failure to 'walk the talk' was very soon brought to the attention of the person concerned.

Another major step was moving from a piece-work system to an annualised wage. This change was designed to allow employees time to think about safety without affecting their income, in other words to eliminate hazardous shortcuts. We were and still are of the belief that piecework leads to selfishness and more seriously to shortcuts being taken at the expense of safety standards.

RESISTANCE

As mentioned in the introduction there was resistance to the change particularly in the ranks of the front-line/middle managers. This resistance, we believe, resulted from a history of inconsistencies including talking about safety and innovation while evaluating performance on production figures alone. Another concern was a history of selective enforcement of safety rules. These problems were not overcome until the promotion (referred to earlier), a fact that demonstrates that personal respect should not be overlooked. There is still some resistance, which we believe is based more on a fear of loss of face than anything else. This fear is very real and must not be treated lightly.

A major rallying point for resistance was the plan to drop the piece-work pay system and introduce an annualised wage. There is still, 2 years on, resistance to this change, however I believe this is the result of a fear of loss of face in that there is no longer a basis for 'bragging rights'. The annualised wage system had to ensure that no one was disadvantaged, and in fact all of our employees are better off under the new system.

FEEDBACK

A critical process in ensuring ongoing ownership of the system is the provision of feedback both down the line and up the line. Down the line are such things as planned changes to processes, plant or work procedures as well as the results of and corrective/preventive action proposed as the result of accident/incident investigation.

Feedback up the line must include such things as reaction to plans for change to processes, plant or work procedures - after all, those at the 'coal face' really do know the job best. The most critical aspect of feedback is the supervisors' ability to give and to receive feedback. This requires competency in communications skills. As well as empowering our people to take responsibility for their safety we had established clear guidelines for reporting their mistakes as near-misses.

We believe that if we wish to prevent injury in our mine, and we certainly do wish to prevent injury, we must catch system breakdowns before they reach the critical point. This can only happen if all employees freely and openly report near-miss incidents without fear of being beaten about the head and body by those same reports.

TRAINING

Central to the safety outcome is safety training and not least of this training is the training of front-line managers. Front-line managers must be good communicators, and good communication is just as much about listening as it is about speaking. To quote *Shane Stephan* 'all supervisors need to develop their coaching skills' This requires training in the five areas represented by the word COACH (Geller)

- C - Communication
- O - Observation
- A - Analysis
- C - Change
- H - Help

We are addressing this area by providing leadership and management training for all our supervisors. It was at no time considered feasible that a reform of the middle management alone would have the desired long-term beneficial safety effect that was required. A long-term training program has been put in place to ensure we have the skilled and motivated workforce required to meet both safety and production targets. Between 80% and 90% of accidents (Reason) include some degree of human error, so any safety management plan must make allowance for this human factor. As it is not possible to eliminate the human factor and therefore human error from our mine we must ensure that our training gives our operators the knowledge necessary to take corrective action before reaching the system break down event.

To ensure an acceptable level of competency we have employed a full-time training officer and adopted the National Mining ITAB Metalliferous Training package. This training package will form the basis of all our mining training. This training and the ongoing upgrade of equipment will be of great assistance in the continuing improvement process. As well as the NMITAB training package we have introduced the requirement for all new employees to hold Queensland Mining ITAB Generic Induction Passport or to successfully complete the induction training program before commencing employment with GEGM. This generic induction training is provided free of cost to all new and current employees.

SAFETY - NOT SAFETY FAILURE

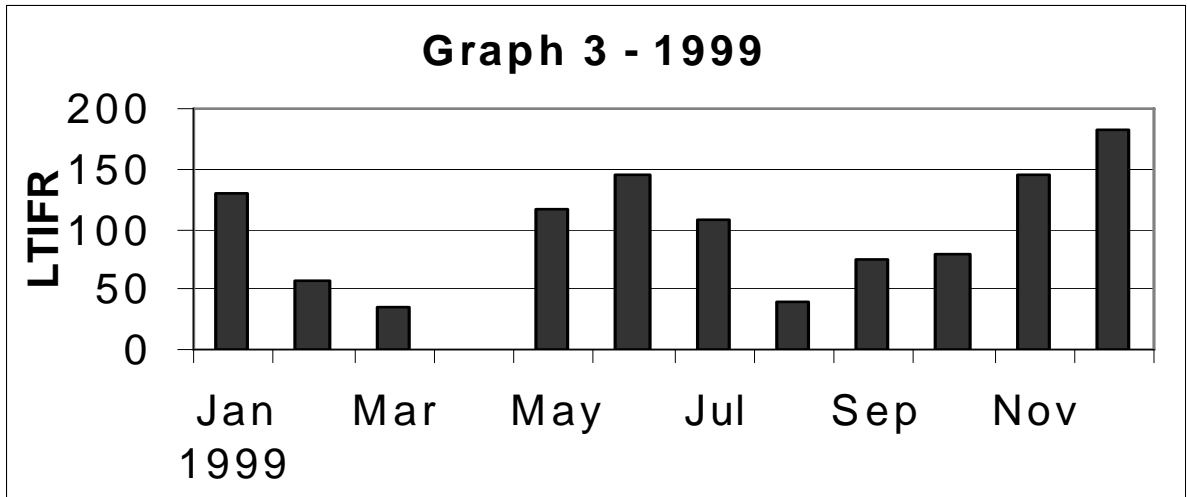
We at GEGM no longer start a safety meeting with 'this team had x many reported incidents during the period' but with 'this team had no (or, this team had only x many reported incidents) during the period'. This seems to encourage more openness and a willingness to discuss safety. Our aim is talk up safety not talk it down -'walk the talk' seems to fit here. No one ever performs well while being continually told how bad they are. We are all aware of the 'carrot and the stick' method of getting the job done - more carrot and less stick goes a long way. The carrot need, in most cases be praise and nothing else. We have kept the stick but it is generally out of sight.

We have a very complete accident/incident/near-miss reporting, investigation and corrective/preventive action program that seeks to discover the underlying cause but does not aim to lay blame while endeavouring to ensure all action is taken to prevent a recurrence. All persons involved in the investigation process are trained and competent with a program of continuing refresher training.

TEAMS

We developed a team system where the mine is divided into nine work areas and each area is the responsibility of a team leader and his permanent team. This is not new to Australian workplaces but is new to Monkland Mine. The teams have been made responsible for meeting their production and safety targets. It was a 'large leap' for miners who for many years worked a piece work system to change to an annual wage and become part of a team.

To reinforce team bonding, team meetings are held at periods not exceeding fortnightly. These team meetings are held at the start of the shift and have no time limit. To ensure the 'right man for the job' is put in the job we recently took 9 months to fill a senior management position and this was not due to a lack of contenders for the position but rather to a very controlled selection process. This defined selection process is used not only for management selection but for selection of people at all levels of the organisation.



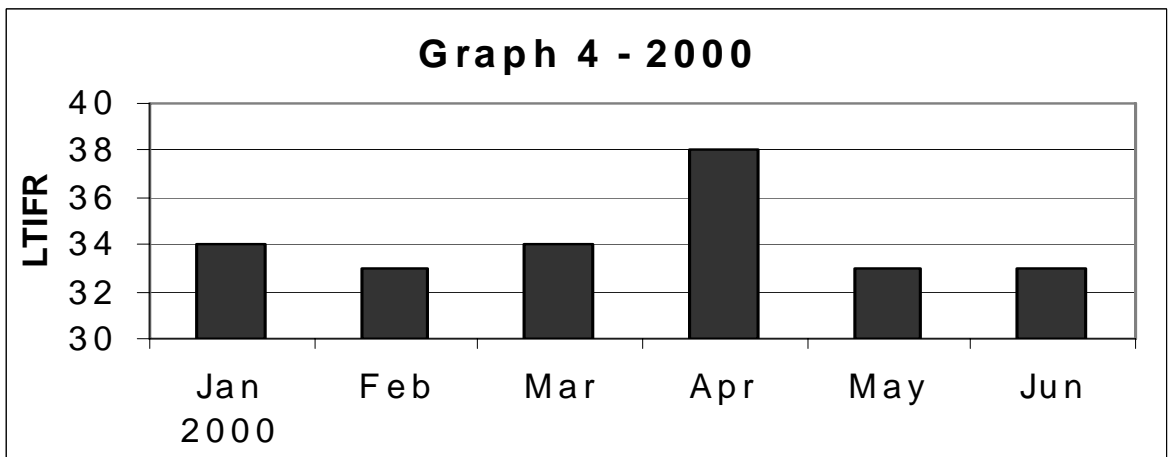
CONCLUSION

We believe we have empowered our people by not only giving them a say but by listening to what they have to say. We are also finding that what our people have to say mostly makes sense.

For years we at Monkland Mine heard the catch cry 'we have to do it, it's in the regs' which was generally answered by 'bulls... the regs are older than me' a clearer cry for ownership one could not wish to hear. Now we hear of industry deregulation, this is not deregulation but self regulation which is a far better system provided it is not just regulation from the top down but is regulation from within the organisation.

We at GEGM believe that due to commitment from all levels of management and from middle management in particular we have turned our safety culture around. Before we can manage change we must have some change to manage. We are not saying that spending on safety consultants is wasting money however we are saying that without some experience and consultation with those at the coal face the chance of success is very much reduced. Change must come from within the organisation and without ownership there will be no change.

This is the path we at GEGM have taken and thus far it seems to be the right path, it has not been easy and we have not found any short cuts. We know we have a long way to go but can now see a light at the end of the tunnel we just wish that who ever has the light in hand would stop moving it. We have done the easy yards - now comes the hard part. Our LTIFR was 66 for the year 99/00 and is 33 so far for the calendar year 2000.



I believe we at GEGM have the five key principles of a quality OH&S system as defined by Professor Michael Quinlan, namely;

Demonstrated senior management commitment to OH&S.

OH&S management is integrated into core management and work activities,

OH&S management uses a system approach.

The OH&S management system addresses change, and

The management system values worker input.

The improvement in our safety outcome started long before the introduction of OUR safety management plan, it started the day we began asking for input and became unstoppable when it was accepted by the front-line managers.

We would like to take this opportunity to thank Peter Garland and the Southern Regional Office for their direction during this process and we look forward to their ongoing support and assistance.

I would also at this point like to take my future in my hands and refer our "new" General Manager to the Holy Bible, the Second Book of Moses, called "Exodus".

REFERENCES

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