

GEMS Newsletter - Volume 6

April 2010

GEMS Uncut

Safety That Stops Us Thinking

This article is about what some would consider skating on thin ice, or even taboo to officially talk about:

I'm interested in debating that maybe some "safety" procedures have gone too far, and that they may even be detrimental to a safety culture!

A couple of examples I'd like to sight before going on:

Whilst on one mine site I went to enter a fully lit, and large building. I was dressed in orange overalls that were donned with reflective tape as per Australian Standards regarding high-visibility clothing. I was also wearing a hard hat with reflective tape on it, as well as the usual safety glasses and steel-capped work boots.

On entry into the building called a distribution center, which back in the days of common sense was called a Store: I was asked to wear a high-vis vest over my high-vis overalls!

I immediately complied, and questioned why this was required. The answer received was the common non-thinking response of: "it's one of our safety requirements"!

In addition to this, the vest had imprinted on the back the letters "Safety Warden", or such like, which I wasn't!

How did my wearing this high-vis vest over high-vis clothing improve the safety inside the warehouse?

But this flavor of safety policies are not all new;

Almost a decade ago, I was on a site that insisted that when travelling on a bus between the camp and the mine site: high-vis clothing or vests had to be worn when inside the bus! It took me about two weeks of questioning people, constantly getting the nonthinking "it's one of our safety requirements" response, before I finally found out why the requirement was introduced;

If a bus got a flat tyre, and whilst passengers where at the side of the road, they would be more noticeable to other traffic. This traffic may not be aware of the issue at hand, which included a rather big, very visible white bus at the edge of the road!

Let me make this clear: I am not against safety.

It's not just a policy statement or such like to me; rather it's a required outcome for the family and the team.

We need all sorts of systems to control chaos, and ensure safety and efficiency.

How-ever, I believe that systems which inhibit progress and innovation are not what we should embrace.

My concern is that we are promoting policies that are conflicting in our important safety culture:

In one hand we ask people to think about the task they are about to undertake. This being reinforced with various THA's, "Take Time, Take Five", "Stop and Think", and other such initiatives.

One the other hand, we now more so than ever have various practices that instead create a robot, or sheep like behavior.





Many a practice is out there that people don't understand why it is that they are even doing it, let alone possibly agreeing with the reasoning.

Where is the trend taking

Are we soon to have flashing lights fitted to our hard hats?

Orange flag poles attached to our belts?

Or is it air-bag overalls that pop up like sumo suits whenever attached sensors activate upon some perceived danger?

Don't get me wrong, I'm not seriously advocating that we wear black instead of high-vis, so that we know we are not visable and as such think about that.

What I am advocating is that safety practices be reviewed and developed to ensure that they promote the thinking of the consequences of our actions.

Have a safe and productive day — Oliver Glockner.

Special points of interest:

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The Summer of 2010

- by Oliver Glockner



The festive season was as hectic and busy as ever for

Many a call came through requesting coverage for when their staff were on leave.

I apologize to all that we couldn't accommodate, we are still very much understaffed in comparison to the client requests.

Although expanding our team is a high priority for us, we are only going to do this with the right people.

As always, for us it's not about just filling a seat; it's about getting the right person to fill the vacant seat.

The recruitment campaign is actually an ongoing event!



Dave Bairstow

Dave has commenced working as a cross-shift to Oliver on the BHP Billiton Olympic Dam Project.

He's adding value to a team that is not only experienced

in underground and open pit production, but also have significant exposure to shaft and construction projects.



Brad Stone

Brad continues to head up the environmental survey works we have around Perth, plus other fill in roles.



Kye Chambers

Kye continues with his role as part of the Cockatoo Island team.



Tristan Mander

Tristan continues in his role as the Appointed Mine Surveyor for Cockatoo Island.

Thank you Tristan for the efforts and commitment over what has now been five years with the team!

It's continues to be an absolute pleasure to have Tristan as an integral member of the team.



Grea Valli

It would almost be easier to try and write what Greg hasn't been doing, rather than list all the work he is involved in!

Greg's has been working with St Barbara, both as an Engineer and Surveyor, at both Southern Cross and Leonora operations, and is now in a similar role for Crosslands at their Jack Hills site.

In our close liaison with Haefeli-Lysnar and the Trimble brand; he's been working with them in refining the Trimble Mines Module, doing presentations on its use and applications, and now also working on the Trimble monitoring software and systems.

Oliver Glockner

I am still at the BHP Billiton Olympic Dam Project.

Both Dave and myself have a diverse scope of works include things such as;

- ~ Developing works methodologies,
- ~ Quality assurance works including developing Inspection and Test Plans (ITP's),
- ~ Coordinating the survey aspects of the engineering works.

These works are soon to be winding up, and has us eagerly looking forward to the next big challenge.



WA HSN Link

Below is a handy link to the West Australian Mine Worker Health Surveillance web page.

It's a easy few clicks to check to find a HSN (Health Surveillance Number) for someone, and see when expiration date is.

The page also has other links to other mine-health information.

http://www.dmp.wa.gov.au/minehealth/

Only an eternal optimist believes that everything will run smoothly.

A plan can only be complete only if it recognizes it may all go wrong!



Greg stood up as a front man during the presentation and demonstration of the Haefeli-Lysnar Trimble Express in March.

We believe the presentation helped a lot to increase the interest and awareness of the Trimble Mining Module.

What's in the characteristics of a good Mine Surveyor?

What makes a good Mine Surveyor?

My response to this question may possibly upset a few people, so right up front I want to point out this is my opinion only, and is presented to encourage further thought and discussion.

In trying to keep the answer simple; a Mine Surveyor should consider themselves as both:

☑ A waiter in a six star restaurant, and

 ${\ensuremath{\,\overline{\square}}}$ As an officer, or CO of a naval ship.

Mine Surveying is very much a service profession.

These characteristics are in addition to the technical aspects of the role:

As a "Six Star Waiter" a Mine Surveyor needs to be able to;

Anticipate a customers requirements—discreetly always keep a glass toped up.

Keep a pleasant demeanor, even when antagonized by customers.

Any request is to be looked into with a pleasant smile.

Never is the response "this has nothing to do with me", or "it's not my job" to be given.

The CO of a naval ship a good Mine Surveyor shares characteristics such as;

The ability to process a lot of data, prioritize important cues, and recognize patterns-they have good situational awareness.

They look for "decision-rich" opportunities. Wanting to be challenged and to make decisions. Good Mine Surveyors are ambitious and

enthusiastic.

They need to be honest in evaluating themselves relative to the situation. They constantly look to improve their position in the scenario. Good Mine Surveyors are almost natural "assessors" and "learners,"

They put their hearts and souls into their work. They should radiate enthusiasm and spark.

They know the profession, legislation and standards that govern their work in great detail.

And just like a ships captain, Mine surveyors must clearly and concisely document all activities for future reference and scrutiny.

I look forward to hearing what others think of this!

- Oliver Glockner



The Door to Hell

The Derweze area in Turkmenistan is rich in natural gas.

While drilling in 1971 geologists accidentally found an underground cavern filled with natural gas. The ground beneath the drilling rig collapsed, leaving a large hole with a diameter of about 50 to 100 meters.

To avoid poisonous gas discharge, it was decided to burn the gas. They had hoped the fire would go out in a few days

- but it has been burning ever since.

Locals have named the Darvaza Hole as The Door to Hell

Coordinates are: 40°15′ 8″ N 58°26′ 23″ E

 ${\rm http://toolserver.org/^{\sim}geohack/}$ geohack.php? pagename=Derweze¶ms=4 0_15_8_N_58_26_23_E_scale:1 0000



http://www.youtube.com/watch? v=TEjoga1yrn0

Welcome to the team: SHELLEY HEINRICH

- by Oliver Glockner

Shelley is a very experienced WA Grade 1 Mine Surveyor with an impeccable reputation.

She filled in for us at Jack Hills and has also recently been part of the team on the BHP Billiton Olympic Dam project, helping us in a survey role with the engineering works.

Her experience as a Mine Surveyor is extensive, spanning across the country.

Shelley has a variety of interests outside of the mining and surveying industry, which greatly add to her attributes as a mine surveying consultant.

Welcome aboard Shelley.



Welcome to the team: DAMIEN STEINBACHER

Damien is a full time student studying surveying.

During the academic break he joined the team as an assistant at BHPB OD.

Damien's not new to mining though; having spent a few years as a geology technician before commencing his survey studies.



His mining knowledge and previous experience makes him more than just a survey student.

He has the right attitude and aptitude to develop a promising career with GEMS.

Welcome to the GEMS team Damien

Anything worth remembering,

Is worth writing down.

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Beware of the Scheduling Catch 22

- by Dave Bairstow

Have you worked at a site where the schedule just keeps on changing?

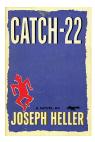
Are you fed up with not being able to achieve the plan?

Due to the 'nature of the beast' things do go wrong in operations which cannot be foreseen.

Corporate pressure forces management to make up for any delays in some way, so it is understandable that the schedule will need to be tweaked at times.

Constant changes however are a different story. Whether due to production non-compliance, conflicting opinions, initiative-based schedule re-configurations or other reasons, frequent change can result in departments having to continually re-learn priorities, re-align resources, rush plans and make pressured decisions which ultimately reduce quality of work.

If experiencing these issues, an operation may find itself in a "catch 22" situation between non-compliance and schedule changes.



In this environment an operation may be seeing the larger portion of the team's availability being dedicated to fixing non-compliance problems and working out how to save the current month instead of putting good planning into future months.

The danger being that planning becomes reactive instead of pro-active.

Outlined next are 10 components to a schedule that may be worth a moment of thought if you are currently, or have experienced difficulties in the past with schedules:

- 1. Planning is the backbone to a schedule. If good planning does not underpin the activities within the schedule, non-compliance is likely to occur.
- 2. The majority of planning should be with practical and technical team members in discussions together. If not, the plan will fail due to either technical or practical reasons.
- 3. All the risks in the schedule must be quantified, discussed and actions recorded with completion dates and pursued by management.
- 4. Its not wise to build a schedule on the foundations of 5 or 10 years mining experience when you can involve a large team and build it with over a hundred years experience behind it.
- 5. The more people that are involved in the planning and schedule building process, the more they become members of a team. By having some perception of ownership and an opportunity to contribute will make them 'part owners'. Ownership motivates people to strive for success.
- 6. The greater the team focus, the more conversant each team member will be with priorities and activities within the schedule. Team members will see more of what is coming up and bet-

ter plan and identify potential issues.

- 7. Routine invitations to group planning and scheduling are paramount, particularly during handover days for FIFO operations. Meeting size should not be too large or too small and chaired following an agenda. Meetings must be facilitated encouraging all persons to contribute i.e team members must learn to think outside their own logic bubble.
- 8. Remember that a schedule can only ever contain fewer activities than what are actually required to get the job done. If the schedule is too aggressive, then it is likely that delays will arise between critical activities.
- 9. Involve practical people in a practical way with planning and scheduling. White-board drawings, discussions and in some cases looking at 3D software to illustrate a point is invaluable. Involve technical people in a practical way also.

Don't just hand people a complex Gant chart.

10. Never assume reasons for schedule variance. Action investigations into issues and resolve them. Everybody makes mistakes but repeating them is unforgivable.

These philosophies can be applied to all scales of scheduling.

For mining operations in particular, the 3 month schedule is the key, because if any issues are found at this stage there is still time to react and plan the risks out.

Good luck.

- Dave Bairstow



SUCCESS BY PLANNING

This is the new GEMS safety slogan.

It is our version of the various safety mantras and initiatives promoted in the industry.

"Target Zero", "See, Stop, Control", "Zero Harm", "Spend a Minute", "S.T.A.R", "Take Time, Take Charge" are just a few of them.

Success By Planning

The mantra promotes that the road to success, with the destination of Safe Work, is achieved by proper planning of our journey before we commence it.

Success By Planning

Uses words promoting positivity: relating well to the positive attitudes to work and safety of our team.

Fail to Plan
and you're
Planning to Fail!





We came across and trialed the use of "track angles", as pictured above. Its proven so handy to effectively align steelworks, that we'll be developing these further, and soon have them available in our store. Stay Tuned!