

GETTING OFF THE SAFETY PLATEAU

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(based on lessons learned as HSEQ Manager Dyno Nobel Asia Pacific)

Introduction

I want to acknowledge that the achievements described in this paper are a direct result of many people working together over more than 15 years. It has been a collaborative effort on the part of Senior Management, Line Management, Operators and HSE Personnel.

Dyno Nobel has moved from a position of 'paying lip service to Safety' in 1994 to a position where safety is central to our business and employees are supported in self empowerment and self accountability regarding safety.

Most companies these days have a goal of Zero Harm or certainly something similar. Steven Covey in 'The 7 Habits of Highly Effective People' states that it is important to "*Begin with the End in Mind*". To ask the question "*What do you want to be when you grow up?*"

Dyno Nobel as a mature company had (and still has) a goal of Zero Harm. We realized very early on, that there was no one 'Silver Bullet' to move us from where we were, to where we wanted to be. In fact, we began to talk about our 'Journey' to Zero Harm, realising that we needed to go through a number of key development stages as part of our transformation and our reaching the end we had clearly in mind.

Dyno Nobel Asia Pacific went through a number of key development stages as part of its transformation. Unfortunately, as often happens, Dyno Nobel's wake up call was an explosion that occurred in PNG in 1994 resulting in 11 employees losing their lives.

The men who died were well known to many of the employees in Australia – suddenly Safety had become personal. The memory of that time, the devastation for families and workmates is still a key driver for management today – this must never happen again.

So began the journey...

The journey was in three stages:

- Focussing on establishing plants with fit for purpose plant and equipment
- Focus on management systems audits and procedures
- Changing the focus – More on People, less on paper

Development Stage 1 – Fit for Purpose Plant & Equipment

The subsequent investigation and review of our operations identified a need to address two fundamentals first if DNAP was to lay a foundation on which to move forward.

Firstly – get the engineering right, design and build plant and equipment that is fit for purpose. Facilities had to be operated and maintained with the approved design to ensure safe, secure, healthy and environmentally sound performance and that they complied with applicable laws, regulations and permit conditions. Key operating parameters were established.

Development Stage 2 – Management Systems & Standards

Management ensured structured systems were developed and implemented that would allow DNAP to manage, not just the Engineering and Operational activities, but all of the critical processes that impacted on safety and quality. Management meant standardising what is good at any moment in time and until such time that it is improved and improved again. Sustainable continuous improvement.

The development and introduction of Engineering Standards within the organisation illustrates this particular phase well. Within DNAP we applied three DN global standards - Operational, Plant Design and Equipment.

These initial steps from Plant and Equipment through to Systems and Procedures provided us with a solid foundation and the mechanism with which to move forward on the Journey to Zero Harm.

The Operational Standards focused on regulatory requirements, operating procedures and training of operators. Also, included was control of modifications, maintenance requirements and specifications for our raw materials. Needless to say, emergency response, health (including exposure limits for noise and dust) and the environment were all covered in this phase.

The Plant Design Standards provided rules for the appropriate location for our facilities, plant separation distances, both internal and external to our plants, and the segregation of incompatible materials. Additionally, design processes were covered, including concept reviews and HAZOPS. These measures ensured that the positioning, layout and integrity of our facilities met not only Engineering and Operational requirements, but also the broader requirements of the communities and mine sites on which we operated.

The Equipment Standards covered the design and construction of trucks, pumps, tanks and ancillary equipment such as agitators, augers and pin blenders; from design through to delivery.

DNAP also recognised the importance of Safety and Quality accreditation as a vehicle to systematically approach the management of the HSE and Q systems. The accreditation included the Engineering Standards and other critical processes for example, inspections, risk assessments, work permits, training, handling and transportation of dangerous goods, emergency preparedness, incident investigations, audits and corrective action.

Steps were taken to engender a culture of continuous Improvement through a rigorous program of process improvement, problem solving and customer / supplier alignment.

It quickly became evident that the training system for the operators was sadly lacking. A small group was commissioned with the task of identifying the knowledge and skills employees required to do their carry out their job and designing a training system to meet these requirements.

These initial steps – from Plant and Equipment, through to Systems and Procedures – provided us with a solid foundation and the mechanism with which to move forward on our safety journey.

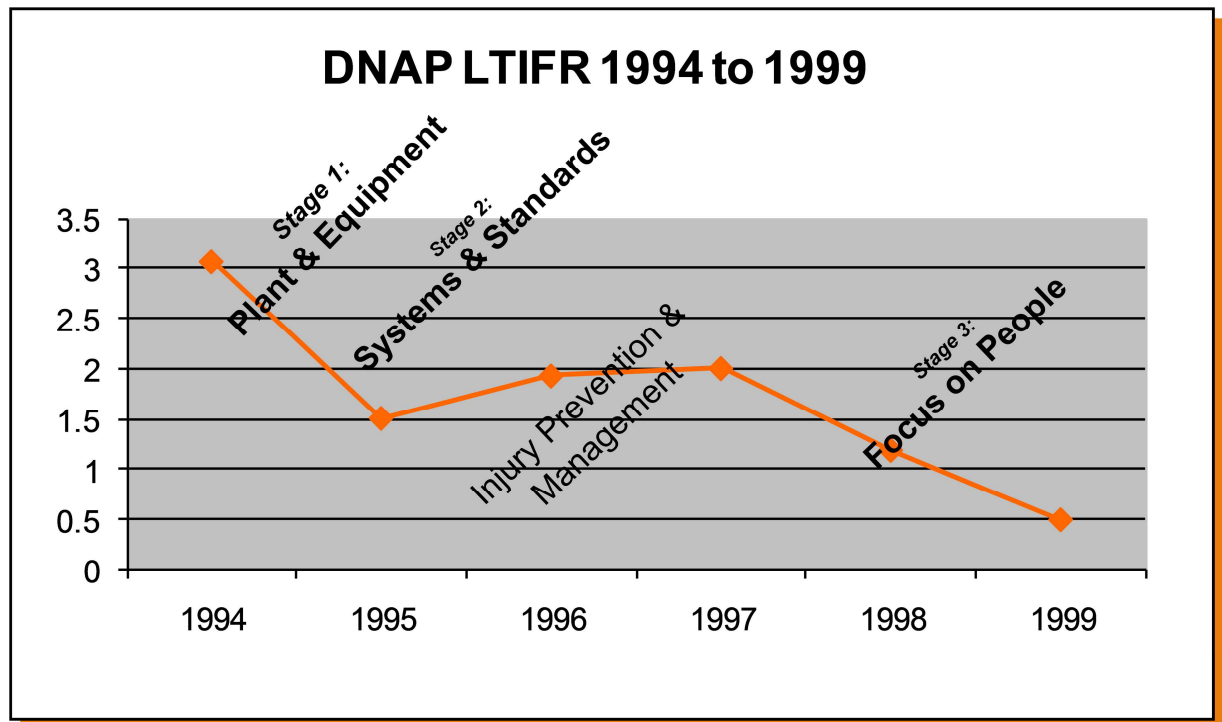
Development Stage 3 – Focus on People & HSE Tools

DNAP could not have moved into the next stage if it had not first laid the foundations with fit for purpose equipment and robust management systems.

In 1999 the Take5! Personal Rapid Hazard Assessment Tool was deployed in DNAP. This was the first step towards providing the employee with personal tools to assist them in taking control of the hazards in their workplace.

The Journey to Zero Harm never ends, constant vigilance and seeking to improve what we are doing is vital to maintaining a safe and health workplace and certainly in order to reach the goal of Zero Harm.

The effect of the first three stages can readily be seen in our LTIFR. The spike in 1996 & 1997 was due to soft tissue injuries at an assembly plant. A number of engineering changes were made to equipment and this together with pausal stretches and exercise, task rotation and a proactive rehabilitation saw the injuries decrease even further.



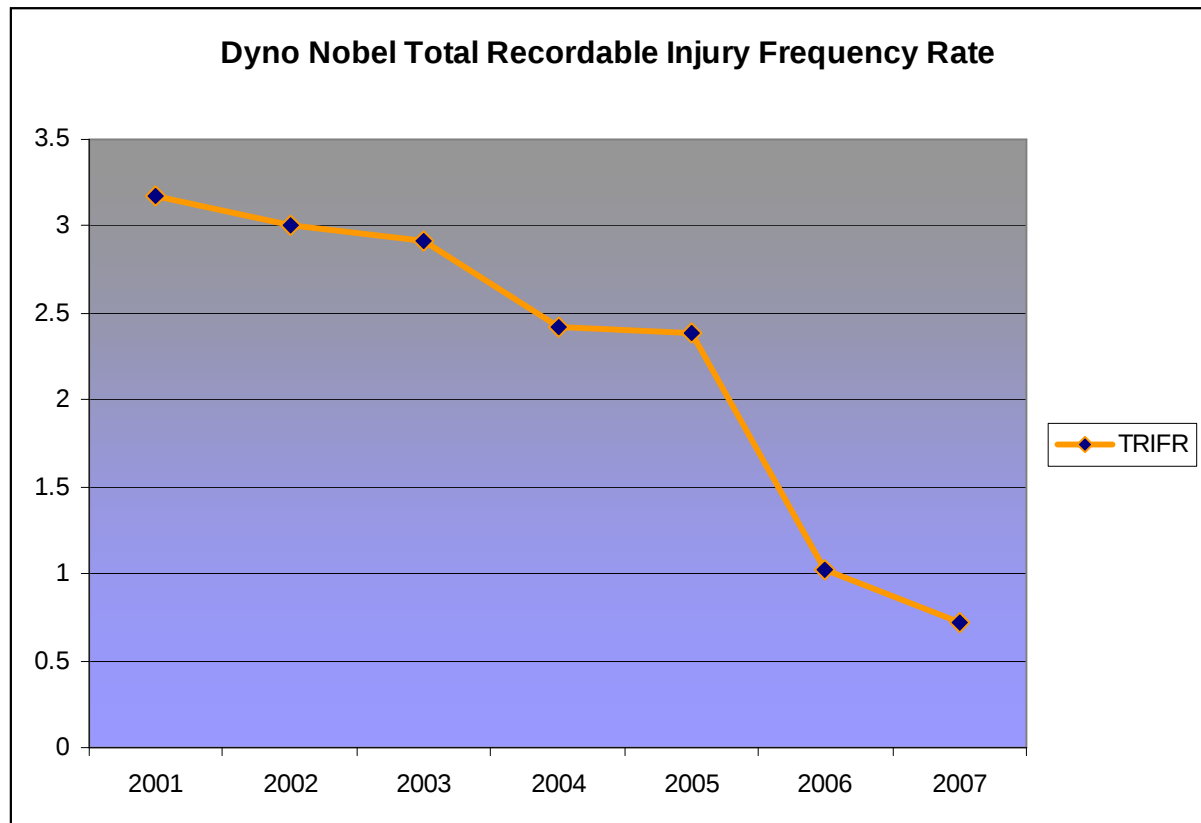
Additional tools were required by employees and site supervisors to assist them in taking control of the hazards at their sites. Job Safety Analysis was introduced as a team approach to hazard identification and to gain employee input on the controls that needed to be implemented. The permit to work system was also introduced at all sites to manage high risk activities and work conducted by contractors. This provided another proactive tool for the site to use to manage risk.

It was identified that Supervisors were spending more time at their desks managing paperwork, rather than in active management of their personnel. A Job Observation process was introduced as a means to facilitate dialogue between employees, supervisors and managers about the issues they face each day, the expectations of management and commendation and correction.

The implementation of these various systems was not all smooth sailing. Each system or tool had to be 'sold' on its merits and what was in it for employees and supervisors.

The LTIFR continued to decrease and the company made a decision to include medical treatment injuries in the frequency rate. This presented DNAP with another challenge. In response to the new challenge, more robust injury prevention and management processes were implemented, together with a comprehensive pre-employment medical and functional capacity screening process.

In 2005 a number of wellness initiatives under the banner of Fit for Life were introduced. These included monthly health and safety topics, health monitoring, screening for sun cancer, diabetes checks, drug and alcohol testing, training in bio-mechanics to name a few. Management continued to focus on Take5! and JSA completion along with compliance to general and specialised rules.



Despite all the systems that were implemented; the new trucks and technology being employed, the business was not able to reach Zero incidents. The goal of Zero Harm was still out of reach and safety performance had plateaued.

DN was striving for a Zero Harm culture – the practices and environment were in place, excellent company values – but the behaviours did not support a Zero Harm culture.

The necessary support for employees to strive beyond minimal safety efforts was absent. The employees had been provided with the knowledge and skill required to carry out their jobs, they were bringing the necessary abilities and intelligence required,

some were self motivated, but by and large the attitude was that safety was about protecting from something rather than protecting for something.

A New Direction

In order to see the right attitudes and behaviour in regard to safety, there had to be a fundamental shift in thinking. This shift was required from the Senior Vice President through to the operator at the coal face; from finance to safety. This change had to permeate through the whole business unit.

It was recognised that a change agent was required. DNAP chose to use ZIP™ (Zero Incident Process)¹ as that change agent. This program may not be right for every company, and it is important that the behavioural safety program chosen fits the culture and values of the company. It must also be recognised that implementing a program of this nature will require management to provide resources (time and dollars) and also in commitment to personal change.

In May/June 2006 the senior management team completed the Leadership Module and committed to implement the learnings in their team. There was a conscious decision made as a leadership to influence the attitudes that drive safety in the workplace. The senior managers were not afraid to speak to the wider DN community about the effect the course had on them and how it changed their approach to decision making and their attitude to safety.

Interest in the course was generated by word of mouth and people started asking when they would be doing the ZIP thing!

A Change in Mind

Each person has been taught about how their brain works and how they can use it to keep them safe; they are taught about how their belief system and attitudes are formed and how it affects their safety; they are introduced to 5 thinking patterns and given brain tools to assist with changing attitudes and increased personal safety.

Our attitudes are made up of thinking and feeling. Our attitudes direct our behaviour and this in turn determines our performance and success. For instance a hindering attitude in regard to using a mobile phone when driving would be "I will not use the phone on the mine roads where I can be seen, but it is OK to use on roads where I am unobserved". A helpful attitude would be "Not using a mobile phone when driving on any road, whether I can be seen or not, helps me keep safe. "

In order to change the behaviours and attitudes of employees to safety, it is necessary to give a good reason why the change should be made. This is where expressing Safety as a currency is very powerful. What are the important things or people in my life?

What are the reasons for me responding to the challenges of life; what give my life meaning? If I am injured what is the real cost to me?

In the past we had highlighted the costs to the company and the cost to the individual in terms of pain and suffering and loss of income. This was seen by the employees as a very negative approach and in ZIP speak – red framed. The only message received was that there was to be no cost to the company.

We now talk about viewing Safety as a currency that can be used. Good choices regarding Safety buy our personal BIG5 – those important people and things. The choices that each individual makes have the potential to affect not only them but everyone around them and in turn the whole company.

A Change in Speech

Not only needs there to be a change in mind but also in how we speak to ourselves and to others.

The old saying 'sticks and stones will break my bones, but words will never hurt me' is rubbish. The language a person uses really does have an impact not only on others but on themselves. Our minds are very sensitive to the kind of language we use. Our self talk can be destructive or constructive. Changing self talk has the potential to change how a person feels and how they think.

Comments often heard such as "Safety takes too long"; "Safety costs too much"; "We don't have time for this (following SOP's or Rules)"; "Safety gets in the way of me doing my job" is negative and destructive/hindering and not helpful in achieving the goal of Zero Harm.

Changing the language in the workplace will assist in changing how the managers and employees view safety. This change is within each person's sphere of control. We are not looking for positive people, but proactive people. For example; if someone says 'they can't do that' we would encourage them to say 'I haven't learnt to do that yet or 'Safety gets in the way of production' to Safety maintains production'. Other changes that are encouraged are: changing 'should/can't/but' to 'could/can/and'.

The negative talk, for some employees, has been going on for a lifetime – so this is not a quick process. As with the changes that need to take place in a person's thinking, changing the language will take time and perseverance at all levels of the company. There needs to be a constant reminding of each other – irrespective of the position we hold in the company – to change.

It is also important to ask the right questions. e.g., 'Why should I do that task?' to 'Why shouldn't I do that task?' 'Who stuffed up, you idiots, heads are going to roll?' to 'Let's stop and take a look at what happened here and determine the way forward.' (It does not mean there will not be consequences – there must be appropriately applied discipline when required)

There are some ZIP™ phrases that become a part of the language:

Let's get out of the stands and on the court;

How about we reframe that;

GIGO – Good in Good Out etc;

What's our/my/your 50%;

Are you being an ILOC today?

Have you switched your 7 units on;

I need to focus my 7 units on this;

How will we manage the gorillas;

What are the brutal facts?

What's important Now.

Conclusion

If we are working on how we think and what we speak to ourselves and to others the changes in behaviour will follow.

This is a new part of the journey for Dyno Nobel Asia Pacific and in the near future Dyno Nobel Americas. The changes we have seen so far have been very encouraging.

There are many examples of employees who in the past have been negative and sceptical about any programs or systems, are now looking at safety in a very different way. They have identified their personal BIG5 and are very aware that safety is not a pain in the proverbial but rather a currency. They are taking ownership of their safety.

Employees want to engage in the decision process, not just come to work and expect everything to be done for them and then go home.

Managers have realised that their team can be far more productive through applying the tools taught in the course.

The changes are not only affecting the workplace but the families as well. Parents are viewing their children in a whole new way – where teenagers were being red framed, the parents are looking for ways to green frame situations and change the way they speak to and think about their children and partners.

Thousands of dollars are spent every year on training for managers and employees – but what is the real return on that investment? The challenge is to keep the momentum going, to capitalise on the investment made in people.

The learnings must be embedded in every part of the business, from the pre-shift meetings to the Senior Management meetings; the language and concepts embedded in HSE publications, training material and on notice boards.

Finally, the success of any HSE endeavour is contingent on Leadership, from the CEO through to Line Management, being fully supportive and aligned with the goal of Zero Harm.

This support is more than platitudes on the company website or in company reports. It is demonstrated through active support, provision of needed resources, engagement with the workforce, leading by example and demonstration of HSE behaviours. A demonstrated leadership will also, measure, review and encourage continuous improvement of HSE performance.

Leadership setting the culture because it has a direct influence on employees through leading by example and an indirect influence through the authority and conviction by which they invest in the other development stages.

ⁱ ZIP is a process developed by Sentis Pty Ltd Australia