Effective Safety Management Systems

By George Robotham

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I would like to sit down over a beer and a feed and explore your thoughts on safety management systems.

Safety management systems appear to be the centrepiece of many organisations' OHS approach. Some I have seen have been lousy, a small number very good and the majority barely adequate

The following paper What Makes a Safety Management System Fly was published by the American Society of Safety Engineers in an International safety best-practice publication. The paper has been a work in progress from the time approximately 20 years ago when the C.E.O. of an organisation asked me to give him 10 things he had to do to have an effective safety management system.

What Makes a Safety Management System Fly?

Original published by the American Society of Safety Engineers, International Safety Best-Practice Specialty Newsletter

The most important thing in managing OHS is to have a robust Safety Management System. The following gives some advice on how to achieve this important objective.

Guiding Principles

- Use real world approaches not theory

- All paperwork must be succinct
- Whatever is done in OHS must be based on a needs analysis
- Need to get some runs on the board quickly
- Concentrate on the things that give you the biggest bang for your buck
- Aim for simplicity not complexity
- Minimise the bureaucracy and bull-dust
- Face to face communications should be used wherever possible
- Be guided in what you do by taxonomies of Class 1 damage in your industry (Class 1 personal damage is that which permanently alters the future of the individual)

SAFETY BENCHMARKING

Over a 14 month period in 1994-5 BHP Minerals carried out an extensive international safety benchmarking exercise with "best in safety class" companies throughout the world which cost many millions.

25 locations throughout the world participated in the study. An approximate 100 page report on findings has been published. The following were recurring themes in the world's best safety performers.

1. Executive management provides the impetus for safety performance. This means that senior management is not only committed to and supports safety, but that it insists on safety performance in a manner that is clearly understood and echoed at all levels.

2. Management focus is a key to quality safety performance.

*1 & 2 above were seen as key factors

3. Existence of a company-wide framework or systematic, standardised approach to safety. The approach has performance standards that receive regular internal and external audits.

4. Objectives are set and organisations work towards set targets for implementation of the objectives.

5. Safety personnel report in at the highest level in the organisations. They have mainly an advisory function. Management and supervision drives the safety program not the safety personnel.

6. Effective safety training targeted to identify needs at all levels. Induction training and detailed safety training for supervisors and managers was high on the priority list. Regular safety meetings were seen as important.

7. Active personal involvement of senior management personnel in the safety program.

8. Safety is considered in performance evaluations of all staff.

9. Regular, detailed audits of the safety management system.

10. Formal approaches to hazard identification and risk analysis, employees were fully involved in this.

11. Formal emergency response procedures that were practiced and audited.

12. The best in class addressed contractor safety before contractors were allowed on site, they pre-qualified them based on safety and made safety performance a contract condition. Contractors were expected to perform at the same safety level as permanent employees.

13. High on the list of the ways the best in class built safety awareness were management participation and leadership, dissemination of information, safety meetings and rewards or recognition of performance.

14. Safety is a condition of employment and dismissals occur for non-performance.

15. Well-managed rehabilitation programs are in place.

16. The best in class use medical examinations and testing to ensure fitness for duty.

17. There were E.A.P's in place.

18. There were off the job safety programs.

19. There was an emphasis on vehicle / plant maintenance and driver / operator training programs.
20. There were extensive PPE training, maintenance and audit programs.

21. Lock-out procedures were used instead of tag-out.

22. Best in class managers and supervisors respond positively to safety issues that are raised.

23. Best in class supervisors are responsible for safety auditing, investigating personal damage occurrences (accidents), planned job observations and training.

24. All levels in the organisation make decisions that reflect the philosophy "Safety first-Production will follow".

It is suggested Safety Management Systems be built around the above benchmarking findings.

Suggested COULD HAVES for a successful Safety Management System (some of the following interventions will work better in your organisation than others. The skill is in recognising and applying the best interventions for your particular organisation).

1. Compliance with the Statute law

In Queensland a number of advisory standards are incorporated under Qld. Workplace Health and Safety legislation. These standards provide worthwhile basic guidance for introduction of a successful Safety Management System.

2. The Compliance with Common Law (in states where applicable)

There are four basic duties under common law :

A) To provide and maintain competent staff.

B) To provide and maintain a safe place of work.

C) To provide and maintain safe plant and appliances.

D) To provide and maintain a safe system of work * (a system means generally the way things are done)

The above duties contain few words but the meaning is quite significant. The employer really has to do everything reasonably and practically that he can do. Many would suggest he then has to go a few extra steps. Managers and supervisors really need to be trained in common law duties to fully realise the impact of this important area on how they manage safety. (Refer to the paper Common Law Liability by this author)

3. Highly Visible Demonstrated Commitment to Health and Safety on Behalf of Senior Management

It is not unusual in companies with high profile safety management systems for senior and middle management personnel to spend over 30% of their time directly on OHS issues. Key personnel conduct safety meetings, they personally participate in safety inspections in their area of responsibility, they have safety as a first high-profile agenda item of every meeting they conduct and they make it clear that they expect those below them to place a high priority on safety. It is not enough for top management to be committed to safety; it must be a clear and high profile demonstration of commitment - you get the performance you demonstrate you expect. This is one area where positive action by management can have an overwhelming influence on the culture of the organisation. (Refer to the paper "Safety culture & how to improve it" by this author) A detailed Safety Responsibilities / Accountabilities matrix for management and supervision is appropriate.

4. Safety Committee

There should be a senior management safety committee to develop policy and an employee safety committee to recommend safety policy to the management committee and to implement policy agreed to by the management committee. Safety committees are much maligned. Safety committee members must be trained for their role and well supported by management. Giving the committee a substantial job to do helps to stop the whinging.

5. Safety Meetings

Regular safety meetings coordinated by the supervisor are an ideal medium to transfer safety messages (studies have shown the significant effect supervisor communications can have on the workgroup).Refer to the Tool-box meetings paper by this author.

6. Safety as Part of Performance Appraisal

During the performance appraisal of supervisory and management personnel an initial and high emphasis must be placed on safety. The focus should not be on what personal damage occurrences(accidents), have occurred in the supervisor's workgroup, rather it should be on what he/she has done to introduce excellent safety programs.

7. Supervisors and Employees Must be Trained and Held Accountable for Safety

Subjects such as compliance with statute law, compliance with common law principles, hazard identification, risk management, hazard control, personal damage occurrences(accidents) investigation, and job safety analysis should be regarded as the basic skills and the knowledge for supervisors (their "tool-kit" of safety skills).

8. Risk Assessment

Notwithstanding the popularity of risk assessment techniques there are some limitations to the techniques that need to be realised. I have always been of the view that what you do to control risk as a result of a risk assessment exercise is more important than the risk rating. Placing too much emphasis on comparison of risk ratings will lead to inappropriate priorities. Risk assessment exercises are often subjective.

9. Incident Investigation

Formal incident investigation models e.g. "Analysis Reference Tree Trunk", "Tripod" should be used to guide observations. Once personal damage occurrence investigations are carried out there must be formal methods of auditing the success of implementing recommendations. After detailed accident investigations it is surprising how many organizations never actually get around to implementing the recommendations.

10. Safety Inspections

Safety checklists tailored to the hazards of the area being inspected must be developed. Involvement of the workforce in actually carrying out the inspections is suggested.

11. Good Housekeeping

Good housekeeping encourages better housekeeping, improves morale and generally makes for a better work environment. Good housekeeping is a place for everything and everything in its place.

12. Comprehensive Induction Program

Induction training must be tailored to the risks of the work environment. Essential subjects in the induction program e.g. isolation procedures can be revised on an annual basis through the

safety meeting program. Refresher training on induction subjects must be tailored to employee needs not conducted because of stipulations for regular re-training.

13. Goals

Peter Drucker is reported to have said "What gets measured gets done" Zero permanently life-altering personal damage is a worthwhile annual goal.

14. Auditing

Organisations that are successful at Occupational Health and Safety have regular comprehensive internal and external audits. Standards must be developed for the safety management system e.g. Visitor safety, contractor safety, compliance with statute law, use of personal protective equipment, management commitment, hazard identification/risk assessment, safe working procedures, loss prevention &control, employee involvement, emergency procedures, accident investigation, education/communication, inspections, health & fitness, injury management, etc and compliance with these standards must be audited. A quality assurance approach where NCR (Non-compliance reports) are issued is recommended.

Auditors must receive training by authoritative training professionals, comprehensive auditing guidelines must be developed and formal processes introduced to follow-up on audit recommendations. A criticism of safety audits is that they are usually not based on an examination of serious personal damage occurrences (accidents) experience. After detailed audits it is surprising how many organizations never actually get around to implementing the recommendations.

Whatever paperwork you produce, be succinct. Auditing documentation tends to get unwieldy and difficult to use in practice. Only the very dedicated or very bored are going to wade through pages and pages of auditing documentation.

Need to audit against a standard, maybe A.S. / N.Z.S 4801, Tri-Safe, internal standards of OHS excellence, Zero Harm principles or a commercial Safety Management System or a combination of the foregoing. There should be guidance on the requirements of implementing whatever standard is used for the audit. (Refer to the paper Auditing OHS Management Systems by this author)

15. Critical Incident Recall

Critical incidents (near misses) occur regularly in organisations but are not routinely reported for a number of quite valid reasons. Critical incidents must be surfaced through an organised process. Critical incident interviewers and observers must be trained and they should spend some time in the organisation identifying critical incidents. Exploring why critical incidents occur will provide significant insight to guide the safety management system (Refer to the paper "Practical Application of the Critical Incident Recall Process" by this author

16. Emergency Response Plans

Despite our best efforts it is possible that personal damage occurrences (accidents/incidents) will occur. It is essential to have plans to manage specific incidents. Incidents that require emergency response plans include

- Injury
- Fire
- Explosion
- Bomb threat
- Electrical outage
- Oil/fuel/chemical spill
- Gas leak
- Earth wall failure
- Radiation emergency
- Natural disaster
- Missing person

Emergency response plans should include provisions for Critical Incident Stress Debriefing. The plans should be regularly practiced and audited.

17. Safety Learning

Every task that needs to be done by people must be done

- Safely
- Effectively
- At the right cost
- At the right quality
- In the right quantity

With appropriate consideration for people, for the community and for the Environment (Competency-Based Learning)

Detailed task analysis must take place to recognise the safety competencies required to perform all tasks (including supervisory) where gaps exist between required competencies and current competencies appropriate training may be the most appropriate solution. After people attend learning exercises the supervisor should develop a plan, in association with the trainee to implement the lessons learnt.

18. Quality Assurance

Utilise the advantages of a Quality Assurance approach to OHS without succumbing to the blind unthinking devotion to the Quality movement that is evident with some Quality Assurance practitioners. Quality Assurance can add some rigor to a safety management system provided it is not over-done

19. Behavior-Based Safety Programs

This is a relatively new technique in Australia, but may be a useful addition to the range of OHS "tools". Caution is urged with the use of these techniques in isolation; they are but one

tool and cannot be seen as the one and only answer to an organisations safety problems. Behaviour based programs are most effective when used in conjunction with engineering solutions. Colleagues in BHP report considerable success with Dupont behavior-based programs.

20. Group Approaches

There are ranges of group approaches that can successfully be used in improving safety. Well led, motivated and well researched groups can have tremendous synergy that will enhance your safety management system. The force-field analysis technique is particularly appropriate to use when commencing an OHS change project. Refer to the paper by this author.

21. Safety Procedures

The commonest mistake the author has seen with safety management systems is the development of extensive safety procedures that the workers do not know about, care about or use. The procedures sit on the supervisor's bookcase or a computer program and are rarely referred to. The job safety analysis technique must be used to develop safe working procedures and involvement of the workforce is crucial. If your safe working procedures are over 2 pages in length worry about whether they will ever be used. Use flow-charts, pictures and diagrams in your safe working procedures and base them on a very basic level of English. The K.I.S.S. principle applies.

22. Commercial Safety Management Systems

There are a number of home-grown and international safety management systems commercially available in Australia and these can have an impact on your safety management system BUT you must be conscious of the need to specifically tailor these programs to your organisation's specific identified needs

23. Communications

From the author's studies of Management of Organisational Change he adopts a communications and management philosophy that "People Support What They Create"

While with B.H.P. the author worked with Professor T.J. Larkin of Harvard University analysing safety communications in the company. There were 3 main messages to come out of this research-

1. Use face-to-face communications,
2. Use the supervisor to communicate and
3. Frame messages relevant to the immediate work area.

With written communications the author aims to be succinct, have an appropriate structure and utilise management summaries with major reports. He uses photographs, diagrams, flow-

charts etc. to illustrate main points. Important written communications must always be followed up by a face-to-face meeting. The BHP guideline for general correspondence was that if it takes more than 2 pages to write it is too much for busy people to write and read. The world of safety is famous for well-meaning, ponderous, glossy publications that no one really knows about, cares about or uses. Safety communications are also famous for the use of "weasel-words". "Weasel-words" promise a lot but deliver little.

Action and Experiential learning models must be used for communicating learning as opposed to lecture style presentations.

Professor T.J. Larkin says "If it is not face-to-face it is not communication".

24. Building Trust

Introducing OHS change inevitably upsets the established order in organizations and forces people to question their existing role in the organization. Often people will be asked to do something that is different from the norm and to do that which they do not agree with. Persons introducing and leading OHS change must ensure they are trusted by those they are seeking to join them in the OHS change journey. Appropriate self-disclosure is an excellent technique for building relationships.

25. Fleet Safety Programs

Organisations such as Qld University of Technology are developing state of the art fleet safety programs that may be of interest to fleet owners.

26. Well-Being Programs

With an increasing realization of the importance of employee health to productivity many organisations are introducing Employee Wellness Programs. Many aspects of these programs have an excellent return from investment for the employer. The employer has to be careful where he invests his resources eg subsidized gym membership may be very popular with those who already go to a gym but may not encourage many new people to attend a gym. Lifestyle education programs appear to be beneficial.

27. Contractor Safety Programs

Australian business is out-sourcing more and more work. Contractors must develop and submit detailed Safety Management Plans including details on how they are going to carry out their work safely as part of the tendering process. This information must be pre-qualified as part of letting tenders. A contractor's safety handbook and induction training program may be required.

28. OHS Policy

A dynamic policy statement that is freely distributed throughout the organisation, actually known by employees and actually referred to when making decisions about safety is required.

What the policy says will happen, must happen in the real world or cynicism will reign supreme. Traditional safety policies may be better replaced with statements of beliefs or values about safety that can be used as a basis of decision-making.

29. Role of the Safety Professional

Shortsighted companies think they employ safety people and these people will look after safety. The more progressive companies often do not have many dedicated OHS personnel, management and supervisors are so well trained and effective in safety that few dedicated safety personnel are required. Safety personnel should report to the senior officer so the function has some chance of being perceived as being of importance. The danger when you have too many safety people is that line management gets the safety people to manage safety not themselves. Safety is a line management function and safety personnel should be seen as specialist adviser

30. Focus on Class 1 Damage

A method of classifying personal damage that seems appropriate is the following-

CLASS 1   Damage that permanently alters a person's life e.g. death, paraplegia, amputation of a leg, severe psychological damage.

CLASS 2   Damage that temporarily alters a person's life e.g. fractured leg that repairs with no lasting impediment, deep laceration that has no underlying tissue damage and repairs without significant scarring

CLASS 3   inconveniences a person's life (Geoff McDonald)

The report of the Industry Commission 1995 indicates that safety in Australia is fundamentally a class 1 problem (87% of occurrences were class 2 with18% of cost, 13% of occurrences were class 1 with 82% of cost. Most safety management systems in Australian industry focus on lost time accidents within the organisation. Better returns for effort will be gained by focusing on Class 1 damage in the companies industry or Australia-wide. We must lobby for government to improve methods of collecting, disseminating and analysing personal damage occurrence (accident) data. Collection of personal damage occurrence (accident) data on an industry-wide basis is essential. Taxonomies of industry personal damage occurrences will be of value in managing Class 1 personal damage.

31. Benchmarking

In a previous position the author was involved in implementing the findings of an international benchmarking exercise with 25 "best in safety class" companies throughout the world. Such studies, well organised and researched, can provide significant insight into how to improve your safety management system. In Australia it is suggested benchmarking with major chemical, petro-chemical, mining and aviation companies will receive the best return. The BHP Benchmarking study mentioned previously illustrates the important role of senior

management in the safety management system. The National Occupational Health & Safety Commission has an interesting paper on Safety Benchmarking on their web-site.

32. Leadership

Excellent safety management systems demand excellent safety leadership. (Refer to the "Safety Leadership" paper by this author)

Safety management often requires unpopular decisions by leaders, do not shrink from demanding high safety standards from all those around you, take positive action with those who do not meet expectations.

33. Claims Management

Speedy and efficient claims processing and review of claims experience is important as is timely injury management. Rehabilitation programs can significantly reduce the period employees are on workers compensation. Early intervention, good communications between relevant parties, accurate functional capacity assessment, sensitive case management and a willingness to identify meaningful alternate duties seem to be the keys to success with rehabilitation**.**

34. Employee Assistance Programs (EAP)

Employees bring a whole range of problems to work that impact significantly on their ability to work safely & efficiently. EAP's have proven their worth in many companies. It is suggested safety personnel and human resource management personnel have basic skills in counseling; in particular the skills of reflective listening are very appropriate.

35. Engineering Change

The author's experience in Occupational Health and Safety has lead him to believe the engineering approach was not used enough in the companies he worked for, there are so many cases where making positive engineering changes (putting a non-slip coating on a smooth steel-trowelled concrete walkway) are so much more reliable than truck loads of exhorting people to be careful (walk slowly on that concrete when it is wet from rain) The good thing about engineering controls is they do not come to work tired, sick, hungover, drunk, stoned, physically and mentally unsuited to their work, unmotivated, distracted by personal problems, untrained or for some other reason not really thinking.

Both the engineering and behavioural approaches have their strengths and weaknesses; the wise manager uses the strengths of each without succumbing to the weaknesses. Keep in your mind the aim of our safety efforts is positive change for the future.

36. Management of Low Probability/High Consequence Risk

How often have we heard in regard to a high consequence risk "We have been doing it that way for 20 years and not had a problem" Disasters like the Moura explosion and the Longford disaster prove that plans must be put in place to manage low probability/high consequence risks. Focus groups experienced in operation of these risks will provide significant insight into management of these risks. Formal risk management approaches as outlined in the paper "The Hazard Management Process" by this author are essential. The December 2001 issue of "Safety in Australia" contains useful advice on managing this type of risk.

9 BOX MODEL	Prevention	Monitoring	Contingency
Equipment/Engineering			
Procedures			
Skills/Competencies			

The 9 box model says for the control of major hazards you must have equipment/engineering controls, safe working procedures and the appropriate skills / competencies. There must be prevention controls, controls to monitor the effectiveness of the prevention controls and contingency controls if the main controls are not effective. The aim is to fill the whole 9 boxes with as many controls as possible.

Organisations with Major Hazard Facilities bring a new dimension to management of OHS.

37. Zero Harm

Zero Harm is best introduced by a set of principles designed to achieve this objective eg.

- The safety of our people is a value that is not compromised
- Safety excellence is recognized as good business
- Leaders at all levels are safety role models
- Effective safety leadership is a pre-requisite for promotion
- People are aware of the hazards and risks of their employment and act accordingly
- Compliance with safety standards and procedures is absolute

- At risk behaviors are not acceptable and are addressed when observed (Source-BHP Billiton)

There is a growing tide of concern questioning the zero harm philosophy and practices.

38. Safety Incentives

Heresy and rumor says safety incentive schemes based on accident experience work. Despite wide reading on this topic the author has identified no robust empirical studies that prove this assertion (there is no shortage of emotional reports, with a poor statistical basis that indicate incentives work.)Public recognition from the boss for a job well done will always be appropriate. A recognition scheme that involves the good safety things that are being done is more appropriate than basing safety awards on accident statistics.

39. Terminology

Probably the best example of a lack of scientific discipline in OHS lies in the terminology "accident"

The term "accident" implies carelessness (whatever that means), lack of ability to control its causation, an inability to foresee and prevent and a personal failure. How can we make meaningful progress on a major cost to Australian industry if we persist with such, sloppy, unscientific terminology? The term "accident" affects how the general population perceives damaging occurrences and the people who suffer the personal damage, inferring the event is "an act of god" or similar event beyond the control and understanding of mere mortals.(Geoff McDonald)

The term "accident" is best replaced by the term "personal damage occurrence". Instead of talking about "permanent disability" we should be talking about "life-altering personal damage"

There is a poor understanding in the community of the reasons why personal damage occurs. We are quick to make the assumption that the worker was careless; when one examines personal damage carefully one will also identify a range of work system factors that contributed to the personal damage as well. Most of these work system factors are the responsibility of the employer at both common and statute law. Blaming workers for their careless behaviour is an emotionally appealing approach that is usually not all that productive in the bigger picture of preventing personal damage at work

People talk about "accident" "causes" (another emotionally laden term) Investigating personal damage occurrences thoroughly will reveal at least 30 "essential factors" (an essential factor is one without which the final personal damage could not have occurred)

40. Complexity

Many organizations have safety standards, special emphasis programs, policy and safe working procedures that are very thorough and detailed. Unfortunately in the quest for thoroughness the number of words becomes immense and difficult to decipher. It ends up

being an immense task for even the most dedicated to wade their way through the paperwork There is room for succinct summaries of major approaches.OHS professionals should not be judged by the number of words they create.

41. Lost Time Injury Frequency Rate

The Lost Time Injury Frequency Rate impedes progress in safety

The Lost Time Injury Frequency Rate is the principal measure of safety performance in many companies in Australia. The definition of L.T.I.F.R. is the number of Lost Time Injuries multiplied by 1 million divided by the number of manhours worked in the reporting period

A Lost Time Injury is a work injury or disease where the injured party has at least 1 complete day or shift off work. Note that a fatality and a cut where a person has 1 complete day off work count the same in Lost Time Injury terms.

The L.T.I.F.R. is subject to manipulation

Some safety people cheat like hell with their L.T.I.F.R. statistics encouraged by managers with an eye to keep their key performance indicators looking good. The more the pressure to keep K.P.I.'s looking good the more creative the accounting. If the same ingenuity was displayed in preventing incidents as is displayed in cooking the books we would be in great shape. All this makes inter-company comparisons of L.T.I.F.R. statistics less in value. (Refer to the paper the Lost Time Injury Frequency Rate by this author)

The Lost Time Injury Frequency Rate dominates discussions about safety performance. How can a company be proud of a decrease of L.T.I.F.R. from 60 to 10 if there have been 2 fatalities and 1 case of paraplegia amongst the lost time injuries? The L.T.I.F.R. trivialises serious personal damage and is a totally inappropriate measure of safety performance.

42. Accident Ratio Studies Mis-direct Efforts

My grandmother used to say "Look after the pence and the pounds will look after themselves" In the world of traditional safety there seems to be similar thinking that if you prevent minor damage you will automatically prevent major damage. Accident ratio studies (insisting on set ratios between near misses, minor accidents and serious accidents) are prominent and accepted unthinkingly. The much-quoted "Iceberg Theory" in relation to safety does not stand up to scrutiny in the real world! The "Iceberg Theory" is fine if used for statistical description but it cannot be relied upon for statistical inference. (Geoff McDonald)

The result of the "Iceberg Theory" focus is a furious effort to eliminate lost time injuries in the belief that all major incidents will be eliminated in the process. Certainly there are minor incidents that have the potential to result in more extensive damage (and we should learn from them), but personal experience tells me the majority of minor damage incidents do not have this potential. It is a matter of looking at the energy that was available to be exchanged

in the incident. The common cold cannot develop into cancer; similarly many minor injuries will never develop into serious personal damage.

The concept that preventing the minor incidents will automatically prevent the major ones seems to me to be fundamentally flawed.

All organisations have limited resources to devote to safety, it seems more efficient to prevent one incident resulting in paraplegia than to prevent 20 incidents where people have a couple of days off work (some will say this comment is **heresy**)

Somewhere in the push to reduce L.T.I's, reduce the L.T.I.F.R. and consequently achieve good ratings in safety programme audits the focus on serious personal damage tends to be lost. Reducing the L.T.I.F.R. is as much about introducing rehabilitation programmes and making the place an enjoyable place to work as it is about reduction of personal damage

In my view a concentration on the Lost Time Injury Frequency Rate has hijacked the Australian safety profession for far too long.

43. Hazard Control Model

When developing controls for hazards the common wisdom is to apply the hierarchy of controls. It is the author's experience that applying Haddon's 10 countermeasures will yield improved results.

Various hazard control strategies and models have been developed by safety professionals over the years. One of the most effective but still easiest to apply is that devised by American researcher Bill Haddon.

Haddon's model for hazard control is as follows:

Countermeasure 1	Prevent the marshalling of the form of energy in the first place. Eg. Ripping seams - instead of blasting, substitution of radiation bin level sources with ultra-sonic level detectors, using water based cleaners rather than flammable solvents.
Countermeasure 2	Reduce the amount of energy marshalled. Eg. Radiation – gauge source strength, explosive store licence requirements, control number of gas cylinders in an area

Countermeasure 3	Prevent the release of the energy. Eg. handrails on work stations, isolating procedures, most interlock systems
Countermeasure 4	Modifying the rate or distribution of energy when it is released. Eg. Slope of ramps, frangible plugs in gas bottles, seat belts.
Countermeasure 5	Separate in space or time the energy being released from the susceptible person or structure. Eg. Minimum heights for powerlines, divided roads, blasting fuse.
Countermeasure 6	Interpose a material barrier to stop energy or to attenuate to acceptable levels. Eg. electrical insulation, personal protective equipment, machinery guards, crash barriers
Countermeasure 7	Modify the contact surface by rounding or softening to minimise damage when energy contacts susceptible body. Eg. Round edges on furniture, building bumper bars, padded dashboards in cars.
Countermeasure 8	Strengthen the structure living or non-living that would otherwise be damaged by the energy exchange. Eg. Earthquake and fire resistant buildings, weightlifting.
Countermeasure 9	To move rapidly to detect and evaluate damage and to counter its continuation and extension. Eg. Sprinkler systems, emergency medical care, alarm systems of many types.
Countermeasure 10	Stabilisation of damage – long term rehabilitative and repair measure. Eg. clean-up procedures, spill disposal, physiotherapy

Note

Generally the larger the amounts of energy involved in relation to the resistance of the structures at risk, the earlier in the countermeasure sequence must the strategy be selected. In many situations where preventative measures are being considered the application of more than one countermeasure may be appropriate.

Countermeasures may be 'passive' in that they require no action on the part of persons, or 'active in the sense that they require some action or co-operation on the part of the persons, perhaps in association with a design related countermeasure (eg. seatbelts).

Passive' countermeasures tend to be more reliable in the long term. A short term solution to an immediate problem may require the adoption of an 'active' countermeasure eg. Toolbox sessions on replacing guards over a mechanical hazard, the long term or 'passive' countermeasure might be the fitting of interlocks to the guard so that power is off when the guard is off.

Further reading

Haddon, W 'On the escape of tigers an ecologic note – strategy options in reducing losses in energy damaged people and property' <u>Technology Review</u> Massachusetts Institute of Technology, 72; 7, 44-53, 1970.

44. Management Systems

I am impressed by the I.S.O. Quality and Environment Management System Standards but would suggest A.S. 4801 Safety Management Systems is an inferior standard. Many corporate OHS Managers and operational managers have told me they have a robust Safety Management System because it complies with A.S. 4801.As far as I am concerned A.S.4801 is a minimalist approach to safety and I would hope a Safety Management System I have responsibility for far exceeds the requirements of A.S. 4801.

45. Gut-feel Instead of Solid Research

Much of the approaches to safety rely on gut-feel as to what seems good, rather than solid research. The extraordinary claims about the success of safety posters, safety newsletters, incentive schemes and behavior-based safety programs are prime examples. Solid research is necessary to establish the facts.

46. Force-field Analysis

This technique is particularly useful when seeking to review a Safety Management System. Force-field analysis (similar to S.W.O.T. analysis) is a simple, yet powerful technique, useful at the beginning of a project to define the nature of the beast you are dealing with. It is particularly useful when seeking to develop new Safety Management Systems. (Refer to the paper Force-Field Analysis by this author)

47. Get the Right People

As with any aspect of management, OHS demands you have the right people. Motivated, caring and intelligent people, well led, can transform any organization. This will probably appear arrogant but I have to say many so-called OHS professionals I have worked with were idiots. Detailed procedures must be put in place to select, recruit and retain quality OHS people.

Special note –Most of the work in this paper is the result of the author critically reflecting on a number of years of safety practice, some of the concepts expressed in this paper reflect the work of the author's long-term adviser / mentor / coach on OHS matters, Geoff McDonald. A number of the topics briefly covered are explained in more detail on the web site

Conclusion

The above is quite a simple approach to OHS but detailed implementation of the above will achieve significant improvements. Listen to your people, make significant efforts to seek out their ideas on OHS, reduce the bull-dust that surrounds the safety effort, keep the lines of communication open, act upon good ideas, maintain a good sense of humor, show the troops you are fair-dinkum about safety, use the powerful influence front-line supervisors have on their employees and do not take yourself too seriously! Do not make the mistake of talking to workers about the company safety goals and mission, instead talk about the effects of safety in their immediate work environment. Do not think your safety efforts end when you have written a safe working procedure, procedural controls in isolation are notoriously ineffective.

Focus on "What is in it for me"

As a manager and a supervisor you need a personal action plan on how to manage safety and you need to regularly review progress on the action plan with a process and content expert.

Use Class 1 personal damage occurrences to guide your actions.

You cannot underestimate the power of excellent leadership in OHS.

30 Ways to Stuff up a Safety Management System

1. Lack of management commitment, leadership and drive from the top of the organisation.
2. Lack of understanding and implementation of sensible safety legislation.
3. Lack of understanding and implementation of common law principles.
4. Too much concentration on lag indicators such as the Lost Time Injury Frequency Rate at the expense of leading indicators. Thinking minor personal damage is a good predictor of life-altering personal damage.
5. Not using the continuous improvement philosophy and other facets of Quality Management in your safety approach.
6. Lack of succinct paperwork. There is not much point in having detailed paperwork that is too much like hard work to read.
7. Using theory instead of real world approaches-Whatever you do reality test it with the workforce first.
8. Ignoring "When implementing change-Remember, people support what they create"
9. Not using face to face communications whenever possible. Research by Harvard professor T.J. Larkin suggests when communicating change with the workforce use the supervisor not senior management, use face to face communications and frame communications relevant to the immediate work area and processes.
10. Not using a needs analysis to guide all your actions.
11. Ignoring the simplicity not complexity rule.
12. Not creating an expectation for people at all levels to perform in safety.
13. Not developing goals, objectives, targets etc. for the Safety Management System.
14. Not using Learning Needs Analysis to guide conduct of learning. Not using Adult Learning Principles & Process to guide facilitation. Using lecture style presentations and Death by Power-Point.
15. Not training formal and informal leaders in Safety Leadership.
16. Not having regular audits of the Safety Management System.
17. Not practicing Emergency Response Plans.
18. Not having simple, succinct Safe Working Procedures, aim for 2 pages at the most, use pictures, diagrams, flow-charts etc.
19. Not using team-building principles in your safety approach.
20. Taking yourself too seriously and not celebrating success.
21. Using enterprise "accident" experience to guide action rather than industry taxonomies of permanently life-altering personal damage.

22. Putting too much emphasis on the risk ratings from risk assessments, the reality is that a lot of risk assessment is very subjective.
23. Not having formal approaches to follow up on investigations.
24. Not having formal approaches to follow up on audits.
25. Spending too much time in the office instead of the field where the action is happening.
26. Using unscientific terminology. Probably the best example of a lack of scientific terminology lies in the terminology "accident"

    The term "accident" implies carelessness (whatever that means), lack of ability to control its causation, an inability to foresee and prevent and a personal failure. How can we make meaningful progress on a major cost to Australian industry if we persist with such, sloppy, unscientific terminology? The term "accident" affects how the general population perceives damaging occurrences and the people who suffer the personal damage. It infers the event is "an act of god" or similar event beyond the control and understanding of mere mortals.

    The term "accident" is best replaced by the term "personal damage occurrence". Instead of talking about "permanent disability" we should be talking about "life-altering personal damage"
27. Relying on tertiary OHS education as the panacea for the safety business.
28. Not developing a thorough, well defined body of OHS knowledge guided by the personal damage occurrence phenomenon and having an equal focus on practice as theory.
29. Employing OHS people based on technical skills alone. Effective OHS people need many skills over and above the technical skills, eg. Communications, interpersonal, leadership, project management, learning, change management etc.
30. Looking for a small number of root causes in personal damage occurrence ("Accident") investigations. Instead concentrate on multi factor analysis through essential factors methodology and the Analysis Reference Tree-Trunk method of investigation (Geoff McDonald).

Note

There is increasing discussion that reveals weaknesses in Zero Harm approaches to safety. Some say they tend to drive reporting down and one ends up spending inordinate amounts of time on very minor issues. Instead of a blanket Zero Harm approach it is suggested a Zero Class 1 personal damage occurrence approach is used, this can be regarded as a targeted rifle approach compared to a shotgun approach.

What Is Right With the Way OHS Is Managed In Australia

Quotable Quote

"A health & safety problem can be described by statistics but cannot be understood by statistics. It can only be understood by knowing and feeling the pain, anguish, and depression and shattered hopes of the victim and of wives, husbands, parents, children, grandparents and friends, and the hope, struggle and triumph of recovery and rehabilitation in a world often unsympathetic, ignorant, unfriendly and unsupportive, only those with close experience of life altering personal damage have this understanding"

Introduction

The following is written from approximately 38 years experience in senior field, corporate, project and consultant OHS roles. I have attempted to come at this paper from a practical as opposed to a theoretical perspective.

OHS is about **Change for the Future NOT Blame for the Past**. Most OHS people realise this as do many in management.

In approximately 38 years involvement in OHS I have had to help my employers cope with the aftermath of 13 fatalities, one case of paraplegia and a case of significant burns with massive scarring and severe psychological damage. A major harassment / bullying case revealed some very nasty behaviour and an organisation supposedly committed to high standards of OHS, manage the situation badly.

I must admit to a certain level of cynicism about the way OHS is managed in Australia.

Moura Disaster

When I was working in the corporate safety department of a major mining company I was focused on the 7 open-cut mines and had no responsibilities for the 2 company underground mines. My view was and still is that some of the safety work being done in the open-cut mines was very good.

On the 7th August 1994 Moura underground coal mine suffered an underground explosion that saw 11 men entombed in the mine and the mine closed. If my memory serves me correctly the head of the Mining Wardens enquiry into the disaster said "What happened at Moura represents a passage of management neglect that must never be repeated in the mining industry" The people who said what happened at Moura was an enormous stuff-up are understating the situation. Professor Andrew Hopkins wrote a book called "Managing Major Hazards" on the Moura disaster that I think should be compulsory reading for every manager, supervisor and OHS people.

Those who complain about the effort and cost of implementing safety measures should have been around to see the slump in the company share price, shareholder dissatisfaction, pain and suffering, cost, effort, media crucifixion, ruined reputations, wrecked careers, psychological trauma, union backlash, enormous investigation effort, massive counseling effort, threat of regulator action, legal action against the company and company officials and strained relationships I saw.

A massive effort went into investigating the Moura disaster and developing recommendations for prevention. There was an incident in an underground coal mine in New Zealand where a number of men were killed. Whilst I am only going by media reports, not necessarily the most accurate source of information, this incident said to me that some of the lessons from Moura had not been put in place. Sometimes we just do not learn from personal damage occurrences.

Class 1 Personal Damage Occurrence

Australian safety researcher Geoff McDonald has been my advisor/coach/mentor /guide in my safety career. Geoff McDonald has a system of classifying personal damage occurrences ("Accidents ") that goes something like this-

Class 1-Permanently alters the future of the individual (Fatal and non-fatal)

Class 2-Temporarily alters the future of the individual

Class 3–Inconveniences the individual

Geoff has investigated many thousand Class 1 damage occurrences in his career and maintains the most effective way to make meaningful progress in safety is by focusing on the class 1 phenomenon. Whilst we hear about some of the fatal occurrences, Geoff's research indicates that in terms of financial cost and personal hardship the non-fatal class 1 category has the most significant impact (That is not to downplay the devastating impact of fatalities)

There is a minor realisation in Australian industry that the focus must be on Class 1 personal damage. There is a myth that preventing minor personal damage (Heinrich accident ratios) will automatically prevent major personal damage. This remains ingrained in many people's minds.

The need for industry based personal damage occurrence data systems escapes the majority.

Risk Assessment

Many organisations carry out risk assessment processes and place great importance on it. In recent years my critical reflection on practice has led me to question the validity and reliability of typical risk assessment approaches. I have some faith in the risk management processes as outlined in the paper The Hazard Management Process as described under articles on ohschange.com.au

Performance Appraisal

Many organisations have safety incorporated in the regular performance appraisal of staff. The focus must be on what has been done to introduce excellent approaches to safety and not what personal damage has occurred.

Audits

Many organisations have regular internal and external OHS audits. My concern is that 4801 audits often do not drill down to the core of how safety is managed.

Emergency Response Plans

Many organisations have highly developed emergency response plans; the cynic in me says that sometimes the effort put into these would have been better spent on preventative aspects.

E.A.P.

Many organisations have an E.A.P. approach and in my experience these work well.

Standard of OHS People

The vast majority of OHS people I have met have been dedicated people who try very hard, unfortunately I have also worked with a few incompetent idiots. There have been a few who were technically weak and some who were arrogant and thought they were God's gift to safety, mainly new graduates. Some were weak in interpersonal skills and communications skills. A few buried their incompetence through playing political games and some lacked independent action through sucking up to their boss.

OHS people have a difficult job and often their training does not prepare them well for the requirements of the job. I enjoy networking with OHS people and believe we have a lot to be proud of. My experience is that the majority of OHS people have a thirst to learn and improve; I hope my contributions to various forums and my web site ohschange.com.au help in this.

OHS is yet to emerge as a profession; I put this down to the lack of a robust body of knowledge. OHS professional associations need to me doing more to elevate the status of the OHS business.

Human Resource Management Processes

There is a raft of human resource management processes in Australia that support OHS, unfortunately they sometimes get overly complex and difficult to apply.

OHS Conferences

There are regular, major OHS conferences in various states that attract many delegates. A number of people will tell you attendance at these conferences is beneficial. The posturing

and self-promotion by politicians, professional associations, regulators and consultants are a turn off for me. Lecture style presentations and the lack of interactivity in the presentations are a frequent problem. Having attended a Canadian Safety Engineering Society safety conference I can tell you the Canadians can teach Australians a few things about running safety conferences. I am to attend the American Society of Safety Engineers conference in 2013; the Americans appear to have a very practical focus to their conferences that is sadly lacking in Australia.

Traditional Approaches

My understanding is that there has been some improvement in Australia in the occurrence of fatal permanently life altering personal damage but little improvement in non-fatal permanently life altering personal damage. Traditional approaches to OHS have a less than satisfactory record and many are looking for alternate approaches. There is a greater realisation that doing different things is necessary to get different results. Questioning the status quo is becoming more prominent.

Media

The media emphasises personal fault in news releases about incidents and does not consider design and system issues that contribute to personal damage. The media loves juicy stories about safety and often the truth becomes a casualty. Many in the community are realising that there is more to safety than is portrayed in the media.

Complexity

Much of safety is made out to be quite complex and simply hard work, we would not want to be simplistic but there is room for less hard work. Many organisations are seeking to make their OHS approaches less complex.

Caring

In my experience most employers have a caring attitude towards their employees and have a genuine desire not to see them injured. It is just that some are not particularly skilled at achieving this objective. I did however work briefly with one organisation that displayed what I regarded as a callous disregard for the safety of the employees, for the only time in my professional life I liaised with the regulator on the more life threatening issues.

LinkedIn OHS Forums

The advent of the LinkedIn OHS discussion forums has done a great deal for OHS debate in Australia.

The Riskex associated safety blog has many worthwhile safety articles.

Body of OHS Knowledge

A fundamental requirement of a profession is to have a robust body of knowledge; we do not yet have this in OHS in Australia. A major challenge for the OHS industry is to advance the initial efforts in this area. Whilst S.I.A. is to be commended for its initial efforts in this area, many have come to the realisation that more work is required.

OHS Learning

Universities continue to offer new and revised graduate and post-graduate OHS learning. Much of the learning OHS people facilitate lacks guidance from modern adult learning principles and process. Cert IV T.A.E. continues to improve. It is difficult for learning organisations to provide focused learning without a robust body of knowledge.

Interpersonal and Communications Skills

OHS personnel are gradually coming to a realisation of the importance of these. You can be technically great but if you cannot get your message across you will not be effective. Often it is the relationships you build not your technical expertise that determines success.

L.T.I.F.R.

Many OHS people now understand the deficiencies of The Lost Time Injury Frequency Rate.

AS 4801

Many OHS people and some in management realise 4801 is but a basic starting point in developing a safety management system.

Zero Harm

There has been considerable discussion, led by Dr. Robert Long, on the various OHS forums, about the dangers of zero harm approaches. A number of people appear to be saying zero harm is neither an achievable nor realistic goal. A number of people have said zero harm approaches shift the focus on major events to minor events and great amounts of resources are wasted on the inconsequential. For my money it is time we stopped wasting resources on zero harm and moved onto more productive pursuits.

OHS Leadership

The importance of leadership is vastly underrated in Australian industry; leadership is the forgotten key to excellence in business. Many larger organisations are conducting leadership learning and refining their leadership approaches. Senior leaders of many organisations are making public statements about the importance of safety; one hopes the gloss is backed up by action.

Need for Psychological Approaches to OHS

As an OHS person I have come to the conclusion that all this safety stuff would work well if only we were not working with the unreliable buggers we are, i.e. the fallible human being. The biggest challenge in any profession is dealing with the people issues.

Looking to the future I see the time when OHS people should have a basic understanding of how psychological theory relates to safety and an ability to use psychological techniques in safety. Dr. Robert Long has written valuable material on this topic and raised its profile.

In my experience a small number of organisations have engaged organisational psychologists to deal with cultural and behavioural issues. Surveys have been carried out and results analysed for improvements.

Ponderous Paperwork

The safety industry revels in the production of long, ponderous, detailed paperwork that no one reads, cares about or uses. Many have realised the problems associated with this approach.

Justification

Funds for capital expenditure are more likely to be spent if it has a safety justification. Unfortunately we sometimes see the safety justification inappropriately applied.

Questioning

If you follow the LinkedIn OHS forums you will see healthy questioning of the state of safety play in industry.

Contractor Safety

Many organisations have come to the realisation that contractors need the same safety emphasis as ordinary employees. Developing best practice in contractor safety inductions appears to be an issue.

Rehabilitation Programs

Many organisations have well developed rehabilitation programs. . I have found early intervention, extensive communications and consultation, identification of appropriate, meaningful alternative duties; preferably prior to when needed, accurate functional capacity assessment and a determination to succeed are essential. What sometimes seems to be forgotten in the rehabilitation debate is the fact that preventing the incident is the best sort of rehabilitation management.

Accident Investigation

An industry has developed around accident investigation with commercial models, licensed systems and designated training. For my money the Analysis Reference Tree Trunk model from Brisbane based Intersafe is the best.

Safe Working Procedures

Many organisations have extensive safe working procedures. Keeping them short and simple, developing them using job safety analysis and involving the users seems essential. Despite many years in OHS and discussing the matter with many people I have difficulty establishing the distinction between when you rely on procedural controls and when you rely on the competency of the people performing the task.

Enforcement

My experience in Qld. is that, with the exception of the mining industry, the regulator is not very active in enforcing safety legislation. This has been a disappointment to me. At least we do not suffer from what appears to be the excesses of O.S.H.A. in America.

Wellbeing Programs

More organisations are introducing wellbeing programs. Sensible approaches need to be adopted eg. Subsidised gym membership will be loved by those already going to a gym but may not necessarily increase the numbers of people going to a gym.

Haddon's 10 Countermeasures

The traditional wisdom in the safety world is to apply the hierarchy of controls. More people are realising the advantages of Haddon's 10 countermeasures.

Customer Service

Sam Walton of Wal-Mart said you must treat your customer like a King or a Queen, because if you do not, your competitors will. There is a slow realisation that provision of OHS services is all about customer service. Separating customer needs from wants is vital and customers often need help with this. There are a small number of really smart OHS people who incorporate broader marketing principles into their work.

Involving the Workforce

Based on my study of Management of Organisational Change I have adopted the motto "When initiating change, remember, People support what they create" for my OHS work. Generally I think involving the stakeholders in discussions and decisions about OHS is a good idea.

My mentor, Geoff McDonald, says "Consignorance" is alive and well in OHS in Australia. "Consignorance" is what you get when you combine consensus with ignorance.

Many realise the importance of involving those affected by OHS change processes in the change process.

OHS Standards

A small number of organisations have developed OHS standards describing the essential elements of how the safety management system is implemented. Audits of these standards replace 4801 audits.

Project Teams

I have found an effective way of driving OHS change is through project teams. Well led, well researched project teams with carefully chosen members and using project management and change management methodologies can have a significant impact. Development of a detailed project plan is essential. A number of companies are now using OHS project teams.

Professional versus Practitioner

I do not routinely refer to people who work in OHS as professionals. This is because I do not believe OHS can be referred to as a profession when there is not a well developed, specific body of OHS knowledge. The professional versus practitioner debate has been done to death a number of times, it would be ideal if the OHS professional bodies could work together to finalise the issue.

Field Focus

There is a strong realisation among OHS people that there is a need to spend time in the field instead of the office if one is to be effective.

Conclusion

The greatest strength I see in OHS in Australia is in the many dedicated, hard working people who work in the function. Ours is a difficult job, often without much in the way of rewards. OHS is not the job for the faint-hearted and you have to be tough to survive. Many, at all levels, are not backward in explaining their beliefs about where we are going wrong.

There are many things wrong with the way safety is managed in Australia and driving change can place a significant emotional and psychological burden on the OHS person. It is essential to be flexible, maintain a sense of humour and within limits, not take things too seriously. If you do not do these 3 things, situations will get on top of you and you will be of little use to yourself, your family or the OHS business.

Ours is an inherently caring occupation, unfortunately, sometimes, we do not show sufficient care for ourselves.

Where Is OHS In Australia Going Wrong?

Introduction

There are many areas where OHS is going wrong in Australia. I have chosen to comment on 4 areas, Class 1 personal damage occurrence data systems, complexity, lack of focus on the people and harmonised legislation.

Quotable Quotes

"A health & safety problem can be described by statistics but cannot be understood by statistics. It can only be understood by knowing and feeling the pain, anguish, and depression and shattered hopes of the victim and of wives, husbands, parents, children, grandparents and friends, and the hope, struggle and triumph of recovery and rehabilitation in a world often unsympathetic, ignorant, unfriendly and unsupportive, only those with close experience of life altering personal damage have this understanding"

OHS is about "Change for the Future NOT Blame for the Past"

An ex-manager of mine used to say "Bring me solutions, not problems" The best way to influence management is to provide solutions and not bury them in problems. Another ex-manager said "If you cannot manage safety, you cannot manage"

Class 1 Personal Damage Occurrence Data Systems

Australian safety researcher Geoff McDonald has been my advisor/coach/mentor /guide in my safety career. Geoff McDonald has a system of classifying personal damage occurrences ("Accidents ") that goes something like this-

> Class 1-Permanently alters the future of the individual (Fatal and non-fatal)
>
> Class 2-Temporarily alters the future of the individual
>
> Class 3–Inconveniences the individual

Geoff has investigated many thousand Class 1 damage occurrences in his career and maintains the most effective way to make meaningful progress in safety is by focusing on the class 1 phenomenon. Whilst we hear about some of the fatal occurrences, Geoff's research indicates that in terms of financial cost and personal hardship the non-fatal class 1 category has the most significant impact. Of course this does not diminish the devastating nature of fatalities.

One of the things people do in organisations is analyse their "accident" experience with the view to gaining insight into ways to prevent the problem, this analysis is predicated on the belief that stopping minor events will stop the major ones. In his extensive writings Geoff explains many reasons why Class 3 and Class 2 events are usually not good predictors of Class 1 personal damage, it is a bit like saying the common cold will develop into cancer.

My interpretation of Professor Andrew Hopkins work says he supports Geoff's views on this.

Unless organisations are quite large and frequently experience Class 1 personal damage they will not have a solid predictive data base for Class 1 damage.

A number of years ago the Qld mining industry introduced a standardised "accident" reporting system in the industry which allowed meaningful interpretation of data, it seems to me that standardised industry reporting systems can have many benefits. I might mention this did not happen without a bit of pain and resistance to change.

From the above it seems pretty obvious to me that we need to be encouraging standardised industry personal damage occurrence data systems and Australia needs a National Class 1 personal damage system that is easily accessible, consistent and able to be interrogated easily. The lack of such a system is a serious impediment to progress.

Complexity and Safety

Early in my safety career it became obvious to me that safety is about the people and not about the things and artefacts. It is not about the safety management systems, safety management plans, risk assessments, audits etc. but what the people do with them.

Generally speaking the human being will do things by the least time / least effort way. Much in safety management is simply hard work; we should not be surprised when it does not happen!

Call me slack if you will but I find so much that is written about safety requires me to invest far too much of my time and effort to understand it, I just give up and do not bother. Simple English is the way to go!

Introducing excellent safety managements systems is quite easy, eliminate complexity and focus on your people.

Recently I had the opportunity to comment on two organisations attempts to develop job safety analysis and work method statements or safe working procedures. This stuff is as simple and basic as it gets but both organisations had clouded it in layer of complexity that they were obviously not coping well with. There were procedures for the procedures and extensive signoffs and checks, no wonder things were not working. Safety personnel had put extensive work into overly formalising inherently simple approaches.

A lot of safety represents a just in case or cover your arse approach, great in theory but not realistic when you inflict it on the workers. The Australian worker knows bullshit when he sees it, it is no wonder much of safety has low credibility in the worker's eyes.

I started a contract with one organisation and they said I should read about their approach to safety. About 200 pages of detailed information, I got to page 50 and gave up. I wondered about how much impact this documentation would be making up the sharp end.

There is one individual, with a military background, on one OHS forum I participate in who talks about the safety approaches he has introduced in his organisation. Full of detailed policy and procedure, very disciplined, very regimented, full of signoffs for various things, full of complexity, full of all knowing management dictating what the workers will do and so on. I would not be surprised if he got the workers to salute him at the beginning of every shift.

Such approaches were never particularly successful in my time in the Australian Army and seem to have little place in modern industry with a more enlightened workforce.

Focus on the People

Early in my safety career I experienced 3 defining events.

At one organisation the production manager and I reported to the location manager. I had a lot of support from the location manager whereas the production manager and the location manager frequently clashed. There was a safety issue that I could have handled better by involving more people in my decision making process. The technical basis of what I did was sound but I did not explain it to some of the stakeholders. The production manager blew the issue out of all proportion, tempers got flared and there was a lot of noise. When the fuss had died down I quickly and easily resolved the issue by working with one of the production manager's direct reports.

I could not understand why the production manager got so excited over such a minor matter. One of the other managers told me what was really happening was the production manager was taking an opportunity to get back at the company manager by pointing out my mistakes.

At another location I used to run a 2 day accident investigation course with the central theme that personal damage occurrences (Accidents) were the result of People, Machine and Environment essential factors. I emphasised there was a lot more to safety than blaming the people.

A new manager started whose focus was finding out who was to blame for accidents and kicking their rear end. My training, while technically sound did not go over very well with him and he complained very loudly to senior management. There was a great deal of excitement. He displayed considerable inflexibility in his approach and was eventually told by senior management to pull his head in. My manager made it clear to me that he expected me to keep doing what I was doing.

At another location the manager the site OHS person reported to contacted me because he was concerned about the technical basis of how the site safety person was conducting a particular aspect of his job. The manager had researched the issue to a certain extent, had his concerns justified but had no luck in getting change. I researched the issue very thoroughly and forwarded the results to the manager. The manager then requested I visit the site and influence the site safety person.

I had a large pile of well researched information to prove my case but the site safety person would not shift his approach. I later discovered he spent a fair bit of time piling crap on me to anyone who would listen. He amused people at a meeting of all company safety people by saying my definition of a reasonable man was one who agreed with me.

As a relatively young OHS person I came to the realisation that no matter how technically sound your approaches, the people issues can bring you undone.

Some in OHS management forget that they are dealing with unreliable human beings and treat people like they are machines, they then wonder why their approaches do not work.

Example

You can have the most complex safety management system but the reality is the example you set will be a determining factor in how it is implemented. People judge you by what they see you doing not by what you say you are doing. Treating people with the upmost respect at all times is essential.

Quotable Quote

"The people are fashioned according to the example of their king and edicts are less powerful than the life (example) of the king" *Claudian, c. 365, Egyptian epic poet*

Safety Change

It is rare for organisational change to be effective if those affected by the change process are not fully involved in the change process. "When initiating change remember, People support what they create." The 6 P rule is very important in change - Prior Preparation and Planning Prevents Poor Performance.

Attempting too big a change and / or changing things too quickly can create an adverse reaction and alienate the very people you want to make allies. Learn the context, culture and past before trying to make changes. Unless a crisis situation is apparent realise effective change requires a lot of effort and time.

High Technology

Some people think complexity is the solution. We live in times of high technology solutions to many problems; these are fine if the essential interpersonal and communications issues are not overlooked.

Communications

"Nothing is more central to an organisation's effectiveness than its ability to transmit accurate, relevant and understandable information among its members." Keep written communications focussed and succinct. Busy people do not have time to read lengthy documents and busy people do not have time to write them. Always check for understanding. Produce and create an expectation of receiving succinct written communication.

Where ever possible use face to face communication, it is a big mistake to rely on e-mails for communicating major issues. Frame communications relevant to the receivers work environment. Safety people seem to engage in competitions to make simple communications overly complex

Safety Leadership

Leadership is the often forgotten key to excellence in most facets of life. Great leaders are always great simplifiers.

The Top 10 Things that are Essential for Safety Leadership

1. Leaders must visibly demonstrate commitment and focus on safety. Good leaders lead, great leaders develop other leaders.
2. Leaders must set the safety example.
3. Leaders must create high safety expectations.
4. High values and detailed standards of performance must be used
5. Leaders must listen to and involve the workforce
6. Leaders must do what they say they will do.
7. Leaders must value safety goals.
8. Employees must be made to feel they are part of something important and satisfying.
9. Leaders must reinforce, reward and celebrate success.
10. Everyone must be held accountable for safety performance.

The great leaders I have worked with have had an uncomplicated approach to the safety function and a great focus on the people. During leadership training in the Australian Army I was told the most important thing in leadership is to look after your private soldiers, because you are stuffed without them. Many in management could learn from this.

Simple Things

Do the simplest thing that will work. Effective systems are a trade off between simplicity and complexity. Systems have to be complex enough that they have identified and meet needs yet simple enough that they are not a big ask to implement.

Harmonised Safety Legislation

The cynic in me says the harmonised safety legislation was never really about improvements in health and safety; rather it was about reducing the costs of doing business for companies that operated across various states. The lack of Australia wide implementation of the harmonised legislation has been a joke.

I am reminded of discussion on a Canadian OHS forum where the conclusion was that if all you did in safety was comply with legislation you would be lucky to prevent 20% of your accidents

I am also reminded of an organisation that had 18 internal standards of OHS excellence. Compliance with safety legislation was but one of the many standards. Compliance with safety legislation is important but I find some get overly focused on it being an answer to a maidens safety prayers.

Conclusion

There are many areas where OHS is going wrong in Australia. I have chosen to comment on 4 areas, Class 1 personal damage occurrence data systems, complexity, lack of focus on the people and harmonised legislation. Major changes are required to manage these areas well.

George can be contacted on fgrobotham@gmail.com; he welcomes debate on the above (it would be indeed a boring world if everybody agreed with George)

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