STRATEGIES FOR IMPLEMENTING OH&S IN A QUALITY MANAGEMENT ENVIRONMENT

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INTRODUCTION

Almost every book on safety I open, refers extensively to safety regulations, standards, measures, guidelines, policies etc. as though safe working can be regulated and somehow accidents prevented by those regulations, or somehow made non-permissible.

The various forms of safety legislation which require compliance and acceptance of due care by employers (and employees), essentially take this same approach.

If a work group is careless about safety or has a poor safety record, the management of that work group must be held accountable for not establishing the right work climate - a climate based on "putting people first"' a climate based on eliminating the waste of time, money, productivity associated with lost time accidents. The safety of our people must supersede productivity, performance and profits.

Safety is, first of all, a people issue. How is such a climate created? By making safety high profile at CEO, senior management, supervisor, every level in the organisation, by incorporating safety goals in the company business plans and holding managers accountable for improved safety performance.

Safety is secondly a productivity issue. A poor safety performance involving significant lost time and indirect costs of accident investigation, reporting, etc. impacts adversely on productivity.

Finally safety is a morale issue. Few organisations today do not provide reasonable equipment, regulatory training as required, and say the right things about safe working practices.

When will we learn that bosses cannot MAKE people work safely - people must WANT to work safely - they must WANT to establish a good safety record and a good reputation for their work place.

KEY ELEMENTS IN SUCCESSFUL OH&S MANAGEMENT

Figure 1 indicates the need for three fundamental objectives in OH&S management.

1. The development of policies and procedures leading (hopefully) through adequate training and auditing, to - compliance with Policies and Regulations and acceptance of "due care" responsibilities.

2. Self Regulation by staff (all employees) at the workplace. Since adults cannot be made to work safely, a culture must be developed through true empowerment and support where people are intrinsically motivated to -

    • Adopt good (and safe) practices
    • Look after themselves
    • Look after their mates
    • Ensure that the workplace environment is made and kept safe.

    Appropriate employee recognition schemes and VISIBLE management support are necessary to develop the self regulation concept.

3. Developing "proper" not just traditional OH&S performance measures to assess the impact of OH&S on business performance (as well as people) and accepting as an overall business philosophy the need to seek "Best Practice" in OH&S and other important performance measures, to remain competitive and profitable.

COMPLIANCE WITH POLICIES AND REGULATIONS, DUE CARE

Safety departments in many organisations concentrate their activities heavily on the development of safety policies, procedures, manuals, audits and reporting safety performance based on traditional measures such as -

•   Lost Time Injury Frequency Rate
•   Severity Rate
•   Duration Rate

These terms are seldom well understood by management, supervisors and the work force. The likelihood that "safety manuals" will be read, understood and practised is inversely proportional to their size - the bigger they are, the less likely they are to be read and understood.

And too often, "safety training" is based on class room rather than "on the job" activities. Too often, that training is based on reading, listening and examining policies and procedures, rather than insisting that the people undergoing the training **demonstrate** by doing, that they understand the procedures, practices, and their implicit risks.

A new approach to training is required, because people implement only what they remember or what they understand -

•   I hear and I forget
•   I see and I remember (if I see it regularly)
•   I do and I understand

The challenge for safety professionals and managers then is to present policies and procedures simply and to conduct as much training as possible "on the job".

The further challenge for safety professionals is to get managers and supervisors clearly understanding their legislative obligations in compliance and due care. Again, large manuals and long training courses are not appropriate.

The secret to developing appropriate managerial and supervisory interest in OH& is "measurement". People behave as they are measured.

SELF REGULATION AT THE WORKPLACE

Most organisations have established safety committees which work with varying effectiveness. Often, if safety committees are the only real avenue employees have to express their concerns, they will endeavour to have all kinds of issues bent to be considered as OH&S concerns.

Employees must have access to true consultation processes, where they can express their concerns about ANY workplace issue.

Management must accept that the staff often know more about the potential work hazards than management does. Listening to employees' concerns and taking action is essential. How is this done?

Good and safe working practices are all about good employee attitudes. How are such attitudes developed?

INVOLVE staff in improving their work environment without excessive management constraint. The staff who do the work often know better than managers how to improve efficiency, eliminate hazards or improve methods - but they must be motivated to want to do so.

Safe working is all about self discipline and self regulation. Safe working then is all about encouraging staff to identify hazards, methods or equipment deficiencies and management action in resolving those problems. Safe working is all about healthy attitudes. To create those attitudes, involve staff in helping to create a better work environment. Establish processes to show staff that management and employees can work together to improve the work environment.

How to induce self discipline, self regulation and willingness of staff to participate with management in tackling the whole safety issue and potential safety hazards is the question which concerns most organisations.

Such concepts lead to the establishment of problem solving teams, and process improvement teams, at the workplace. These voluntary teams can look for and implement continuous improvement in OH&S and other workplace issues, with appropriate management support.

BEST PRACTICE (INCLUDING OH&S)

One of the fundamental objectives of business success is to maintain a competitive position.

It is often too late to find that competitiveness has been lost, when market share declines or external comparative reports on business performance produce somewhat embarrassing results.

Many Australian organisations are today seeking to adopt some pro-active business philosophy which will enable them to survive in an increasingly competitive world.

Implementing Best OH&S Practice requires firstly the establishment of a modern set of OH&S performance measures. The traditional safety measures (LTIFR, Severity Rate, Duration Rate) are no longer adequate.

Once an appropriate set of business performance measures (including OH&S measures) are adopted, the performance of an organisation can be benchmarked against top class performers, so that best practice in a particular area can be determined and (hopefully) emulated.

A typical set of modern OH&S performance measures is shown in Appendix 1.

PRODUCTIVITY AND QUALITY

The link between quality and productivity is seldom well understood. Many believe that high quality means high cost. But in practical quality management terms - quality means two things:

UNEQUIVOCAL CUSTOMER SATISFACTION

Understanding the customers' (internal as well as external) needs and expectations. Satisfying the needs and striving to meet expectations. Delivering products or services which fall well inside the threshold of complaint

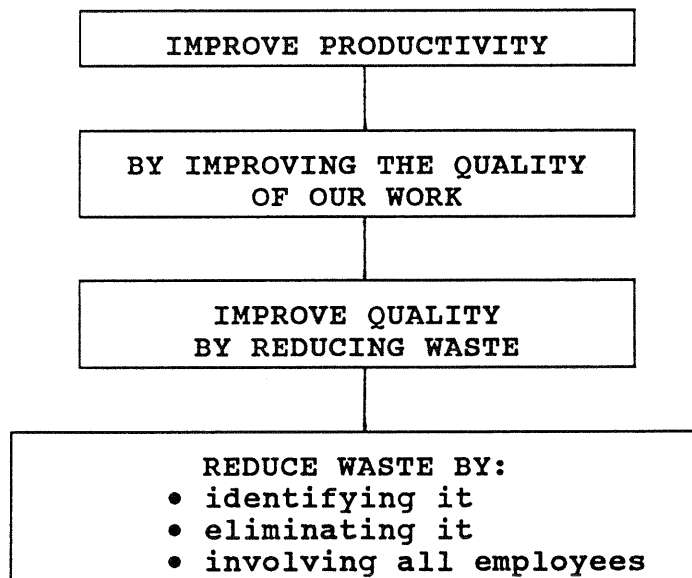### Improving Productivity/Efficiency

Improving productivity/efficiency of all processes, programs, activities -

- Identifying processes/activities, measuring their effectiveness and improving them to match the level of best practice relevant to remaining competitive and profitable.

Figure 2 shows that improving productivity begins with improving the quality of all work processes. Quality improvement begins with the elimination of waste - re-work, errors, failures, accidents, non-value adding activities, unnecessary checking, failing to meet customers requirements and having to handle complaints or repeat work, etc.

In most organisations which have not yet embraced the management of quality - as much as 40% of all work involves "waste". Accidents cause waste - lost time, accident investigation, reporting, changing practices, re-training, etc. Such work adds no value to the external customers and impacts adversely on productivity and profitability.

FIGURE 2 - TO IMPROVE PRODUCTIVITY

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┌─────────────────────────────────┐
│       IMPROVE PRODUCTIVITY      │
└─────────────────────────────────┘
                 │
┌─────────────────────────────────┐
│    BY IMPROVING THE QUALITY     │
│         OF OUR WORK             │
└─────────────────────────────────┘
                 │
┌─────────────────────────────────┐
│        IMPROVE QUALITY          │
│       BY REDUCING WASTE         │
└─────────────────────────────────┘
                 │
┌─────────────────────────────────┐
│        REDUCE WASTE BY:         │
│      • identifying it           │
│      • eliminating it           │
│      • involving all employees  │
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INTEGRATION OF OH&S MANAGEMENT INTO A MODERN BUSINESS MANAGEMENT APPROACH

OH&S is but one of many issues managers have to address. And many organisations work quite diligently (and often successfully) at a range of management and business activities without having a commonly understood management approach or management philosophy.

Today, Total Quality Management (by whatever name it is called) is being adopted as that common philosophy - to put together various activities into a commonly understood direction - a direction understood by and involving ALL employees, not just management, providing that direction can be simply presented.

The OH&S objectives discussed above can be integrated into business planning and operational performance, through the adoption of a Total Quality Management framework.

What does Total Quality Management involve? How do we establish quality initiatives or quality goals that will lead to Best Practice, in OH&S or any other practice sought.

The Australian Quality Awards are amongst Australia's most prestigious business awards. Organisations submitting for these awards are evaluated under seven criteria (including operational results) as shown in Figure 3.

FIGURE 3 - AQA CRITERIA
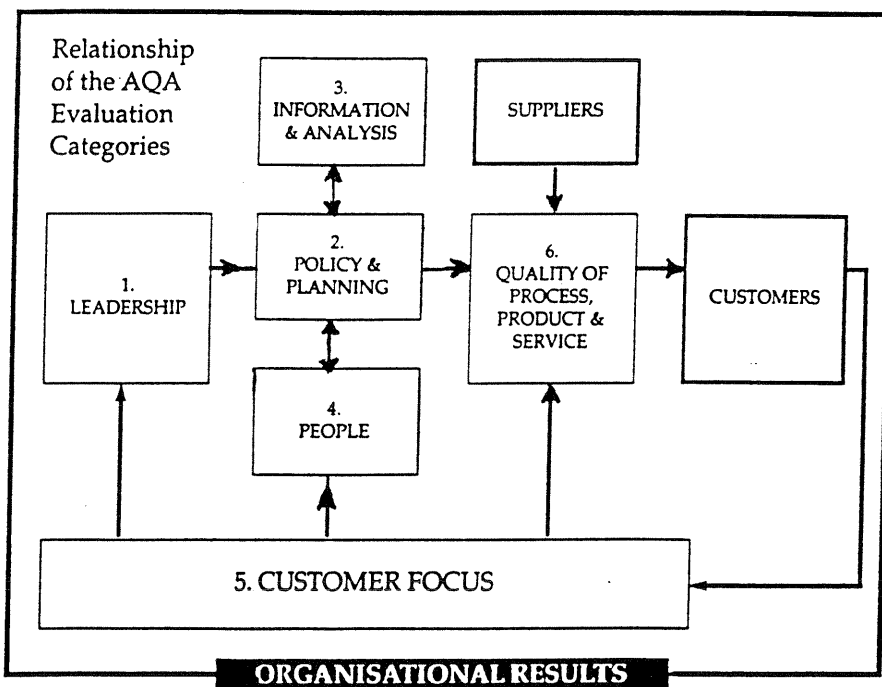
If "quality goals" to be achieved, within three to five years, are established to these criteria (or similar) and steps to achieve those long term goals determined - they can be shown in a Total Quality Matrix (refer Figure 4) here called a Continuous Improvement Matrix.

MANAGING ORGANISATIONS FOR STAKEHOLDER SATISFACTION

"Quality Management" requires an **integrated** approach to management.

"Quality" is delivered to customers/stakeholders through:

- Integrating quality initiatives into **Business Planning and Performance Management.** This requires linking:

  - quality goals
  - strategic (long term) breakthrough improvement objectives
  - operational performance (short to medium term) improvement targets
  - policy deployment. To enable corporate level goals, objectives and targets to be achieved through the involvement of staff at all levels.
  - benchmarking to achieve "Best Practice" into the business planning process

- People - make quality

- Processes - process management

- Products and Services which satisfy (fully conform) to customer's expectations.

To imbed "Quality thinking", management must develop:

- A mindset through the organisation about CONTINUOUS IMPROVEMENT

- An organisation CULTURE which addresses people relationships, values, motivation and commitment

- A strong CUSTOMER focus.

The Quality philosophy, then, can be implemented through:

- Business PLANNING, performance management AND POLICY DEPLOYMENT

- POPPLE, make quality

- PROCESS MANAGEMENT (daily process improvement).

Total Quality Management called the Quality Improvement Process in Figure 5 is based on a set of fundamental principles and *implemented* through three elements -

- Corporate level *planning* (establishing vision, mission, organisational values, critical success factors, and long term improvement objectives and short term operational targets driven by stakeholders (with a customer first focus) requirements. Alignment of lower organisational level improvement activities obtained through the Hoshin Kanri (or *Policy Deployment*) process.

- *People*. People make quality. Quality Teams are not sufficient. Leadership, teamwork, breaking down barriers, establishing a co-operative, continuous improvement culture leading to more skilful, enterprising people are essential quality ingredients.

- *Process improvement.* The identification of cross functional business and functional work place processes (activities) is followed by process documentation, measurement, control and improvement, in time, of every business activity to ensure continual satisfaction of customer (internal and external) requirements from the activities.

FIGURE 5 – TOTAL QUALITY MANAGEMENT
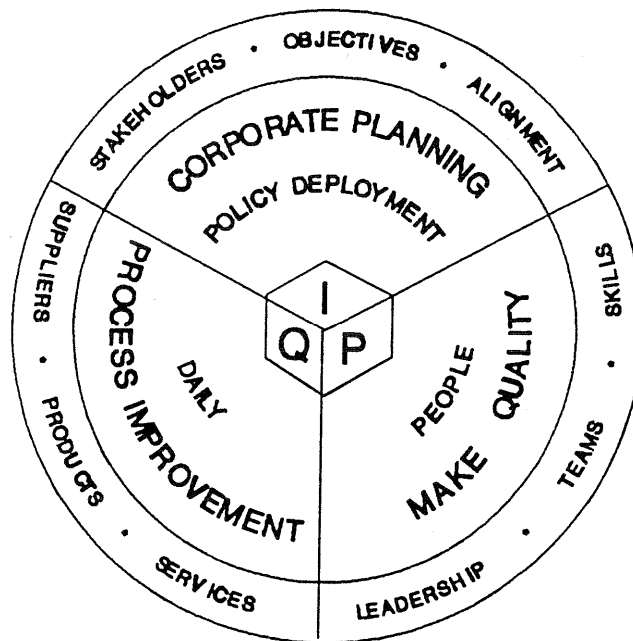
Quality Improvement Process

Quality Principles

* Respect for people
* Customer satisfaction
* Improvement through change
* Decisions using data
* Teamwork
* Self discipline

Activity based management concepts are included in Daily Process Improvedment - as the establishment of Quality Systems to the relevant Australian Standards for those functions interfacting with external suppliers or as needed for certification for competitive purposes.

HOW TQM & QUALITY ASSURANCE FIT

QA is an integral part of TQM - but it is possible to have QA without TQM. Figure 6 shows the relationship. Care needs to be taken in developing Procedures Manuals, in support of establishing Quality Systems, that processes are documented in a way that enables measurement, control and improvement of the processes - employing control of variation and statistical process control concepts where appropriate.
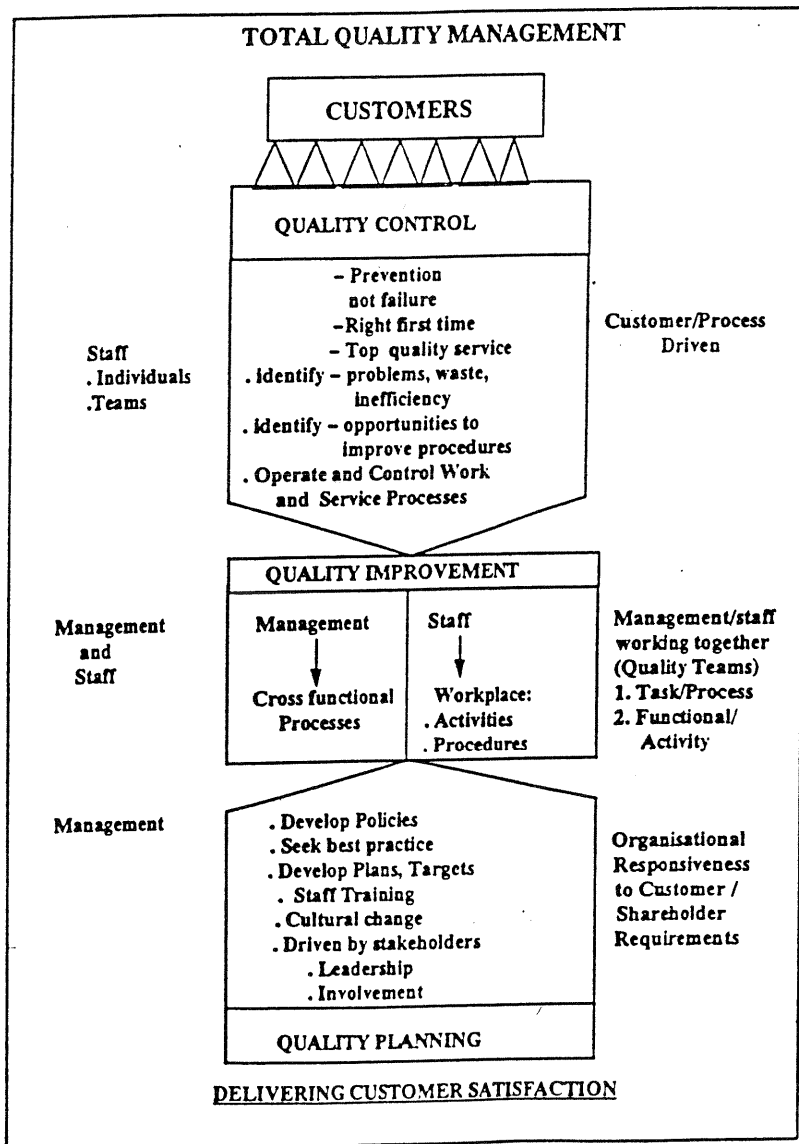

FIGURE 6 - TOTAL QUALITY MANAGEMENT
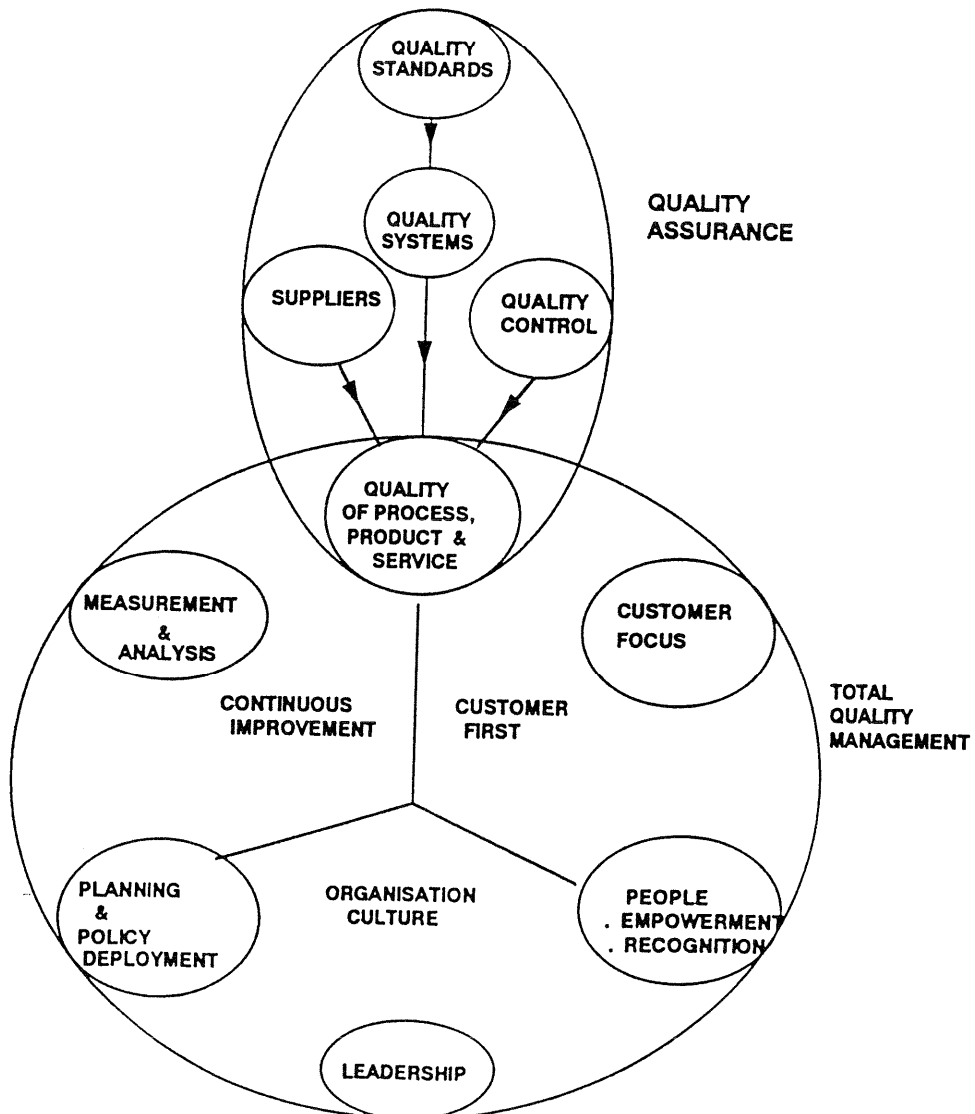
WHERE PEOPLE FIT INTO TQM

Dr. Joseph Juran, one of the true "gurus" of Total Quality Management and a leader for many years in introducing quality management concepts into USA and Japan - says that implementing quality requires - quality planning, quality control and quality improvement, just as the finance function in an organisation involves financial planning (budgets), financial control and financial improvement (eg. cost reductions).

If we then put people and the actions they must carry out into that framework, Figure 7 shows where they fit and how they are involved in quality management.

FIGURE 7 - QUALITY PLANNING, CONTROL AND IMPROVEMENT

AN INTEGRATED BUSINESS PLANNING
AND PERFORMANCE MANAGEMENT PROCESS.

Figure 8 shows how quality planning and goals (through the Quality Matrix) can be linked to the business planning process.

This process provides for

- The development of long term strategic plans to address big, breakthrough areas for improvement over a 3-5 year time frame.

  Note: If OH&S performance is poor and significant improvement is required, objectives can be set in this plan.

- The development of critical success factors and key performance indicators at company level and for every organisational unit.

  Note: OH&S can be made very high profile, if it is established as a corporate critical success factor and appropriate performance indicators and targets are set to drive improvement.

- Deployment of these plans down through the organisation so that EVERY WORK GROUP is able to establish:

  - Group accountabilities
  - Goals for improvement (Action Plans)
  - Performance measures
  - Which activities/processes the group is responsible for improving.

TQM AND OH&S

TQM concepts harness everyone's commitment to continually improving the quality of every aspect of work carried out in an organisation.

It requires education and training for everyone. It requires that problems (including OH&S issues) be identified and resolved and that all key processes/activities be prioritised and improved over time.

TQM requires that management works to improve the systems and processes in the company. Staff operate those systems and processes to their best abilities and correct operational problems which arise day to day.

The big challenge in TQM is for management. It is widely recognised that more than 85% of company problems and improvement opportunities lie in improving the systems and processes of the company. But in seeking to make these improvements, management must involve, through Quality Teams those staff who operate the systems.

TQM uses special "tools and techniques" including simple statistical methods, to examine problems and to improve current performance. But TQM can not be effectively implemented without cultural change. The right culture, the right staff behaviour must be cultivated to develop intrinsically motivated staff.

The problem solving methodology of TQM provides a process for improving the quality (the performance or compliance to specified requirements or objectives) of any activity which can be measured.

Whilst such processes are important, we must not lose sight that PEOPLE MAKE QUALITY - people, not systems, make safety.

Every manager seeks to operate a high staff morale environment. Whilst morale cannot be measured, there are indicators, which definitely suggest the morale of a work group. Four of the most important indicators are -

- Safety performance
- Absenteeism
- Positive or negative comment in discussion with the group.
- Participation in organisational attempts at work improvement.

The "bottom line" for management then, is that integrating modern OH&S management approaches into Total Quality Management will see improvements in morale, productivity, and business performance.

APPENDIX 1

KEY PERFORMANCE INDICATORS FOR OH&S

1. **Traditional**

   . Accident Frequency Rate

   . Accident Duration Rate

   . Accident Severity Rate

2. **Monetary/Productivity**

   . $ Actual WC/Employee to $ Possible WC/Employee

   . Opportunity Costs
     ($ Actual WC + Cost of safety absences)

   . Absences over duration rate

   . Opportunity costs as % EBIT
     (Earnings before Interest and Tax)

   . WC costs as % total labour expenses
     (Workers' compensation)

3. **Processes**

   . OH&S System Audit Results

   . OH&S Management Audit Results

   . Benchmarking/Best Practice of audit processes.

4. **Morale/Cultural**

   . H.R. Indicators

   . Employee Opinion Survey results

   . Absenteeism

   . Participation in Improvement/Problem Solving Teams

   . Willingness to submit ideas for innovation,
     problem identification, improvement.

FIGURE 1 – KEY ELEMENTS IN SUCCESSFUL OH&S MANAGEMENT

Policy Development

. Policy Knowledge/briefing of Senior Management to Supervisors
. Policy Support
. Understanding OH&S Obligations

. Develop OH&S Performance Measures
. Benchmark Performance
. Report performance to Management – Quarterly

. Understanding of Industry & National OH&S Situation
. Understanding safety costs/productivity impacts

OH&S KPI's in Corporate level Business Plans (at least Operational)

Deploy Plans for Improvement

Action Plans at Supervisor level, including strategies to maintain or improve OH&S performance

People/Cultural Issues Addressed
. EOS
. Communication
. Recognition
. Development
. Empowerment
. Involvement

Objective B Best OH&S Practice

. OH&S Reward/ Recognition Scheme
. Design/ Implementation/ Administration/
- Management Presentations

Establish OH & S Management Structure
. Safety Committees
. Staff Consultative Committees

. Establish Committee responsibilities
. Oversee operation

Build OH&S objectives into Enterprise Bargaining Agreements

Objective C Self Regulation by staff at the workplace

Awareness/Understanding Training for Supervisors in OH & S Policies and Management

OH&S Training according to risk exposure
.regulatory
.preventative

Analysis for Supervisors of Work Group OH&S Performance, Internally, external benchmarking – monthly

Auditing of Application of OH&S policies at work group level

Objective A
. Compliance with Policies and Regulation
. Due care

FIGURE 4 – CONTINUOUS IMPROVEMENT MATRIX

COLLINSVILLE COAL COMPANY PTY LTD – CONTINUOUS IMPROVEMENT MATRIX

COLLINSVILLE COAL

Level	Customer Focus	People – Training and Development/Involvement	People – Communication and Recognition	Management Commitment and Leadership	Business Planning	Quality of Products and Services – Process Improvement	Measurement and Analysis
4	* Recognised as an organisation that excels in satisfying our customer needs.	* Employees responsibilities understood and accepted. The majority are committed to continuous improvement, and have been involved in CI teams. * Employee development enables workforce flexibility in all work activities.	* Effective 2-way communication and appropriate recognition exist throughout the organisation.	* Leadership is focussed on best practice on key areas of activity, with all managers and supervisors personally committed, visibly involved and promoting quality initiatives.	* Strategic, operational and functional plans drive significant improvement actions.	* All key processes deliver services and products matched to customer needs to ensure long term viability by reducing process costs.	* All key decisions are based on the analysis of relevant data.
3	* No external service or quality complaints received. * Employees are committed to implementing the quality control plan and few internal quality/service complaints are necessary.	* Employees agree that the CI process is the right approach for CCP and accept that their commitment, involvement and cooperation is necessary to make it work.	* Employees agree that inter-departmental teamwork, communication and cooperation have significantly improved.	* Senior managers committed to quality improvement principles. * All supervisors have been involved in a continuous improvement team.	* Integrate benchmarking with the business planning process. * Action Plan working effectively and linked to group key performance measures and targets.	* All key processes under control and satisfying customer needs. * Process improvement techniques understood and being used by supervisors. * Sub-processes and activities identified and supervisory responsibilities established.	* Performance of key processes reviewed based on benchmarking analysis and analysis of data collected from Step 1.
2	* Develop and document a coal quality control plan from pit to product. * Workforce aware and accept their accountabilities for quality requirements for each step in the process.	* Employee development plan established and commenced. * Continuous improvement process established and team processes adopted to drive improvement.	* Employee recognition schemes developed and safety and innovation Awards introduced. * Employees agree that communications have improved.	* Audit and review processes developed and senior managers leading the review. * All senior managers have led a CIP team.	* The business planning process is fully integrated with the budgeting and performance review process. * Benchmarking measures established and comparative best practices identified and appropriate relationships established.	* Document measure and set improvement targets for the 20 critical processes. * Train managers and facilitation processes improvement techniques.	* Understanding of variation for managers, facilitators and supervisors. * Data collection continued and relevancy reviewed further, based on new information.
1	* Conduct a survey of local and export customers to determine needs and expectations. * Conduct an employee customer awareness program. * For No.2 U/G mine put in place a coal quality control plan.	* Enterprise Agreement in place. * Supervisory development program in place. * Initial continuous improvement team projects involving at least 10% of the workforce and completed. * Accountabilities for all work groups established.	* Employee communication mechanisms defined and introduced. * Employee attitude survey conducted, and initial findings addressed.	* Establish a quality structure, and a staged quality journey. * Quality principles understood by all managers/supervisors. * All employees have participated in a quality awareness program.	* Strategic, operational and quality objectives limited to the budgeting process, and other functional plans. * CCP and depart-mental plans communicated to all employees. * Action plan developed to implement department strategies, with employee participation.	* Problem and improvement reporting system designed and introduced. * Waste identification program introduced and waste elimination commenced. * Identify key processes and priorities the critical ones.	* Key performance measures established for all organisational groups to supervisor level. * Review data currently being collected for relevancy, currency and accuracy. * Determine new data required and how to measure, to facilitate better decisions.

FIGURE 8 – BUSINESS PLANNING PROCESS

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