

PRESENTATION TO QCO/DME COAL INDUSTRY SAFETY CONFERENCE

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INTRODUCTION

Camberwell Coal is a medium sized open cut coal mine which employs 124 people. Camberwell is situated approximately 8 km north west of Singleton in the NSW Hunter Valley.

Camberwell Coal is the Manager of the Camberwell Coal Joint Venture consisting of 50% Australian ownership and 50% Japanese ownership.

The Joint Venture was formed in 1989 and the construction of the infrastructure including a coal handling and preparation plant (CHPP) commenced in April 1990. The construction phase was fast tracked and coal mining commenced less than 12 months later in March 1991.

Camberwell had an annual turnover of approximately \$80M in 1993.

THE COAL INDUSTRY

The coal industry is Australia's largest single commodity export earner - it has developed under significant levels of Government intervention and control, strong union involvement and high levels of industrial accidents and fatalities.

In recent years a change in the focus of health and safety in coal mines has emerged. Some factors contributing to this change include:

- Recognition of the high cost of accidents.
- Commitment to a safe workplace by chief executives.
- Coal Inspectorate encouraging the adoption of a systems approach to health and safety.

Industry performance as measured by LTIFR's has shown continuous improvement over the past 8 years - Open Cut Mines have led the way with safety performance improving by 76% from a high of 129 in 1984-85 to a current low of 30.

THE MAJOR HEALTH & SAFETY RISKS ON SITE

- The operation and movement of very large vehicles and earthmoving equipment.
- Maintenance of equipment and processes.
- Strata Control.
- Open Cut Mining shares with other industries a wide range of common health and safety risks such as:

Noise
Chemicals
Manual Handling
Slips, trips and falls
Dust
UV Radiation

ORGANISATION

Camberwell is a flexible team based operation with the responsibilities for OH&S devolved to the appropriate levels in the organisation.

The organisation structure comprise the following three teams:

- WINNING TEAM - Technicians
- SUPPORT TEAM - Supervisory, Technical & Office Staff
- FOUNDATION TEAM - Managers

There is no specialist safety role, or no OH&S Committee as all team members are expected to raise safety issues where appropriate through the communication channels that have been devised on site.

Safety is a line management responsibility and Managers and Supervisors are accountable for the safety results within their teams.

The mine operates 5 days per week 3 shifts per day on 8½ shifts. There is no supervision on the afternoon and night shifts in the CHPP and Maintenance areas and the technicians in those areas operate as self managed teams. The mine is in a different situation as the supervisory structure is regulated by a statutory position under the Coal Mines Regulation Act.

WHY WE CHOSE TO BE DIFFERENT

Camberwell due to its difficult mining conditions and the forecast economic climate needed to do something different to the industry norm if it was to be a safe, efficient and productive operation.

The poor health and safety performance (plus associated high costs) was highlighted as one of the critical areas in which Camberwell had to outperform the industry - e.g. we have reduced our Workers Compensation premium by approx \$200,000 per annum since commencement.

As a first step in this process, the Foundation Team visited some of the top performers in the Australian industry and undertook a Benchmarking tour to the USA and Canada in 1990. The tour group included representatives from the two unions on site (UMW and ACSA).

The tour group highlighted a number of issues that were different from our overseas counterparts and their differences were not in the area of technology and methods of mining but in the human relations areas such as:

- Satisfying, challenging jobs in a team based environment.
- Ownership of the mine's goals and achievements by employees.
- Employee pride in high levels of safety and productivity.

The tour to the USA focused the Foundation Team on how it was going to manage the business. A workplace based on minimum supervision, team based, with all employees sharing the responsibilities and accountabilities for all aspects of their jobs. This focus was translated in to Camberwell's Mission Statement and Basic Tenants.

Camberwell does not have a separate Safety Policy as it is integral to the mine's culture that safety is not seen as something separate from the everyday business of the Company.

As the company's focus was a radical change to the traditional industry practice support and co-operation of the key industry unions was essential. Negotiations between the unions and the company at District level resulted in the development of the Memorandum of Understanding - this understanding setting out the vision and goal of the parties in achieving a new culture for the business. Some of the key features of the understanding are:

- Single union coverage for production and maintenance functions in an open cut coal mine for the first time in Australia.
- Flexibility of jobs and duties within and between work streams subject to effective training and development.
- A commitment based rather than control based organisation.
- Greater participation in decision making and involvement in matters affecting the work environment.
- An organisation based on teams and team work.
- A highly skilled workforce with career path opportunities.
- Full and open communication between the Company and employees.

The Memorandum of Understanding set the scene for the negotiation of "The Site Agreement" between the UMW and Camberwell which in turn was ratified by the Coal Industry Tribunal as a separate award in the industry.

The agreement even though being negotiated in a difficult industrial climate allowed a commonsense approach to the allocation of duties. Camberwell was able to take advantage of being a greenfield's site and being able to offer the UMW single union coverage in the production and maintenance areas.

We were able to implement significant changes to industry practices and take advantage of improvement ideas that were being sought by the rest of the industry at that time.

OH&S AT CAMBERWELL

Health and safety is addressed as an integral part of the management process of the organisation. The integration of health and safety into the Mission is central to Camberwell's approach to health and safety. There is no separate Safety Policy, Safety Department or Safety Officer.

MANAGEMENT ROLES

GENERAL MANAGER

The General Manager's role is one of setting goals and being a visionary, creating a climate where people can achieve those goals and creating awareness.

LINE MANAGER

Our Line Managers oversee and manage the operation of the mine and CHPP. They are directly responsible and accountable for the health and safety performance of their departments.

SUPERVISOR

The supervisors are also responsible and accountable for their safety results. A system has been put in place to enable supervisors to act as coaches and co-ordinators, not "cops".

RECRUITMENT AND INDUCTION PROCEDURES

Our recruitment and induction procedures have been the key to the creation and maintenance of our unique culture. The process of setting expectations of participation and behaviour begins here. As part of our recruitment program we used technicians as part of our panel interviewing team to interview potential recruits. Technicians were involved in both interviewing other technicians as well as supervisory staff.

Our induction program is very intensive and is of a week's duration. The objectives of the program are to orient employees to the mission, culture and expectations of the Company.

Health and Safety is addressed on all days of the induction program with day one including two addresses by the General Manager, one for two hours on the Company's philosophies and a one hour session on Health and Safety.

The Induction Program includes the following:

The training includes:

- Mine visit with introduction to common hazards
- Accident and incident investigation emphasising the search for cause not blame
- Danger and out of service tags
- Manager's rules
- Heavy vehicle inspections and safe operating techniques
- Fire fighting and first aid essentials (presented at the Hunter Valley Mine Rescue Station)
- The environment
- CHPP visit including hazards, health and safety features and procedures
- Manual handling

On an annual basis we shut the operation down for a day and a re-induction is held for all employees. The issues covered during the re-induction include:

- Basis first aid and bandaging refresher (room activity)
- Cardio-pulmonary resuscitation/Expired air resuscitation refresher (room activity)
- Manager's Rules refresher (room activity including team building exercises)
- Fire and emergency refresher (includes fire simulation exercise)
- General Manager talk (includes brain teaser)
- First aid exercise (simulation in CHPP)
- Isolation procedures refresher for CHPP.

ACCIDENT/INCIDENT INVESTIGATION

As seen in our visit to the USA, mines in general encouraged their employees to notify accidents, incidents or near hits. In doing this there is a need to take a "no-blame" approach to accident/incident reporting. This has resulted in us being able to research accident/incident that have occurred and put in the appropriate corrective measures to prevent a re-occurrence.

All accidents/incidents are reported on a standard form and are logged onto a computer data base. All accidents are reviewed at the weekly Manager's Meeting.

The investigation follows a structural approach which is used to analyse cause and identify measures to prevent a repetition. Accident/investigation is the responsibility of the supervisor with the line management playing a monitoring role. The system relies on the involvement of team members in the investigation.

HAZARD REPORTING/AUDITING

HAZARD REPORTING

Small pocket sized notebooks are given to all employees. They are encouraged to report all hazards no matter how minor. One of the most important features has been our ability to provide feedback to the reporter by the next available shift.

HOUSEKEEPING AUDIT

Once a month a workplace inspection report is carried out by a cross-sectional group of 4 people who audit the whole site. Participation in the audit team varies each month. This audit looks at Housekeeping, Hazard Identification, Equipment Damage, Breaches to Manager's Rules, General Safety Breaches.

ANNUAL SAFETY AUDIT

An annual safety audit is conducted by an external consultant to verify the systems and standards that have been established and ensure problems have not been overlooked in routine operations.

CONSULTATIVE MECHANISMS

Critical to Camberwell's success to date has been the information sharing and consultative mechanisms that have been developed. It has been our aim at Camberwell since commencement to provide our employees with as much information as they require to make them feel as though they are part of the Company. The main consultative mechanisms comprise:

- Team briefs
- Supervisor's meetings
- Communications Meetings
- Joint Review Committee

MANAGER'S RULES AND SAFE WORK PROCEDURES

Compliance with provisions of the CMRA is maintained through the application of "Manager's Rules". The act requires managers to prepare rules and schemes for a variety of issues concerning the safety, conduct or discipline of persons in mines.

Our rules have been written to minimise their number and the degree of prescription. A commonsense approach has been adopted with the requirement of a personal responsibility from all on site rather than relying on the existence of a set of rules to protect them.

Training Manuals have been developed on site for all operating and maintenance skills. These training manuals in the main have been developed by our own technicians. Each training manual features the safe working and operational procedures of the piece of equipment.

EMPOWERED EMPLOYEES

As part of the building of the Camberwell Culture devolving the responsibility and accountability to our technicians was paramount in our goal to empower our employees. The old adage of "hang your brains at the gate" is significant to the traditional mining industry culture and we believed in order to change this we needed to apply certain principles to support the empowerment of employees. These principles as outlined below are stressed to all new employees during induction:

- The Company is engaged in a learning process which requires an acceptance that mistakes will be made and that patience is required
- Acceptance that management does not have all the answers and the knowledge and experience of the technicians will be actively sought
- There are more opportunities provided to be involved in jobs and experience job satisfaction
- Acceptance that a great deal of communication is required to involve people in decision making leading to understanding and commitment

PURCHASING & STORES

In order to achieve change, trust is a significant element. The trust shown in Camberwell's employees has been highlighted by the introduction of an open store. All employees have access to the store and are trained to utilise the Stores computer to book in and out stores items.

The purchasing system can be directly accessed by all technicians and it is widely utilised in the maintenance area whereby technicians are able to order any items they require for the job to be done.

Training in stores and purchasing procedures is part of the technicians' work model.

The majority of the mine's operating equipment was purchased prior to the technicians being appointed. Equipment improvements have been made as the need is identified, for example:

- A team of technicians recently looked at inadequate boarding procedures on the shovel and to improve the safety additional communication was provided to enhance the boarding procedure.
- A team of technicians were involved in the selection of more ergonomically sound seating in our dozer fleet.

Where new purchases have been made, teams of technicians in conjunction with the management develop the purchase recommendation. As part of this process visits to other mines have taken place to review the safety measures in place and what can be implemented for improvement.

CONTRACTORS

Contractors play a major role in the mine operation. The safety standards which are applied to mine employees also apply to contractors engaged for work on the site.

All contractors are required to undertake induction training before their first shift at the mine. To assist the contracting company, arrangements are sometimes made to carry out this induction for all of the appropriate employees at the contractor's premises. To improve impact and ensure uniformity, a new induction process was developed in 1993.

Some of the features of the new process, which is designed to increase compliance with Camberwell's health and safety standards, include:

- Rationalisation of the numbers of contracting companies used, to a smaller more carefully screened list of preferred contractors aware of Camberwell's requirements for health and safety performance, service and competitive pricing.
- Selection of contractors to include a consideration of their health and safety management policies, systems, training, promotion of health and safety and performance.
- Upgraded induction of contractors through:
- Provision of an in-depth booklet on Camberwell's site conditions, plan, manager's rules.
- Viewing of an induction video which includes a presentation by the General Manager on the company's expectations for health and safety.
- Test of knowledge of procedures for isolation, first aid and emergency procedures.

Accountability for use of well-maintained, safe equipment is part of the contractor's responsibility and Camberwell audits compliance. Any equipment found in an unsatisfactory condition or in breach of requirements will be removed from the site and contract management will be notified.

The Company has indicated its willingness to work with contracting companies and provide training to improve their performance.

TRAINING

MULTI-SKILLING

Creating well skilled and satisfied employees was a goal that we set from the beginning. It was something that we saw from our benchmarking tour in the USA, that employees were given the opportunity to diversify their skills in the jobs. Multi-skilling incorporating OH&S skills into operational training, provides our employees with a clear and structured career path.

Our multi-skilling agreement is built around a 5 step work model.

The key features of the model are:

- Everyone starts at the bottom level regardless of prior experience.
- Everyone can reach the top level and they are encouraged to do so.
- There is a time component associated with each level (it takes 3½ years to progress from Level E to Level A).

A feature of this training has been that most people trained in the mine had no previous experience on operating equipment.

We have experienced significant OH&S benefits from our multi-skilling arrangements and these include:

- Reduction in fatigue
- Higher levels of interest
- Greater awareness of a wider range of hazards
- Maintenance technicians are more aware of the needs of mining technicians
- Greater flexibility to change tasks in difficult operating conditions.

HEALTH PROMOTIONS

We have been actively promoting onsite health initiatives for our employees and these include:

- Onsite Gymnasium
A gymnasium has been established on site to promote a healthy lifestyle and physical fitness. Exercise programs are developed by a technician who is accredited and qualified by appropriate fitness training organisations.
- Quit Smoking Programs
- Back Care Programs
- Hepatitis B Immunisations
- Influenza Immunisations
- On site medicals

We have also contracted Industrial Program Services to operate an Employee Assistance Program. This program gives all our employees and their families access to confidential counselling in a wide range of areas.

HOW DO WE MONITOR THE RESULTS

This is done in a number of ways, the tangible results of our productivity and safety performances are indicative to us that we have followed the correct path.

On an annual basis we have used some of our safety trained employees (NSCA Diploma Course) to conduct what we define as an attitude survey which explores and identifies where our strengths and weaknesses are. The survey provides a useful means of benchmarking improvements in hard to measure areas. It includes questions related to:

- Health and Safety before production
- Hazard Identification
- Health and Safety Training
- Emergency and Fire procedures
- Culture

The survey is conducted with all employees and is done on a one to one basis.

OUR SAFETY AND PRODUCTION RESULTS

Our Safety achievements have been recognised in winning the Open Cut Section of the New South Wales Coal Association's Sentinels of Safety Award in 1992 (judged by a panel including trade union and Department of Mineral Resources Representatives) and as runner-up in the State Minerals Advisory Council's inaugural Safety Commitment Award.

We have experienced four lost time injuries since commencing full scale operation in 1991.

A period of 294,131 hours were worked before the first lost time injury was recorded. Some 670,000 hours have now been worked for four lost time injuries. The Table below provides details of health and safety performance through a variety of standard indicators:

	Duration Rate	Incidence Rate	Reported Incidences/Near Hits	Lost Time Injury Frequency Rate	Unplanned Absenteeism
1991	0	0	32	0	0.5%
1992	5	1	93	4.5	1.17%
1993	2	1.6	96	8.1	0.96%

Duration Rate: Shifts lost / Number of lost time injuries
 Incidence Rate: No. of lost time injuries/No. of employees x 100
 Lost Time Injury Frequency Rate: No. of lost time injuries /Man hours of exposure x 1,000,000
 Reported Incidents /Near Hits: As reported in the Daily Injury Book
 Incidents: Accident Reporting Forms
 Unplanned Absenteeism: Any absence which has been unplanned including sick leave, pressing domestic leave, compassionate leave, workers compensation leave.

Our productivity and absenteeism performance is significantly better than industry averages. See Table below:

	Camberwell Year 1 1/4/91 to 1/4/92	Camberwell Year 2 29/3/92 to 31/3/93	Camberwell Year 3 1/4/93 to 28/2/94	NSW Open Cut Industry 92/93
Labour Productivity				
. clean tonnes per employee per year	8,978	11,972	13,247	7,670
. cubic metres total movement per employee per year	72,939	91,044	108,963	48,537 *
Working Days lost per Employee per year				
. workers compensation	Nil	0.05	0.51	2.06
. sick leave/other stoppages	1.0	3.35	1.64	9.20
. industrial/other stoppages	4.0	1.48	2.54	1.80
TOTAL	5.0	4.88	4.69	13.06

* 1991/92 Figure - No data provided for 1992/93.

SUMMARY

It is clear that we have made significant gains in establishing a culture which supports the achievement of Safety and Productivity Performances that are substantially better than the industry as a whole.

We believe the achievement of this culture has been built on the following areas:

- Commitment from the Board of Directors to the technicians on the job
- Integration of OH&S into the normal operational framework
- Acceptance of a personal responsibility and accountability
- Challenging and more satisfying jobs
- Commitment and support of the two unions involved in the project
- Active and direct involvement of the General Manager in OH&S.

Our challenge now is to maintain our momentum and reach our goal of zero - lost time injuries, but we must remember that to manage in an environment such as ours there is a need to continually monitor our performance because I believe there is a fine line between success and failure.