COLLINSVILLE - SAFETY PLANNING - HEALTHY OUTCOMES

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SUMMARY

Thiess Contractors Pty Limited began total mining operations at Collinsville in July 1996. Safety management plans were developed from Thiess Management systems and the best of existing operational procedures. Coal mining began at Collinsville in 1919 with large scale open-cut mining commencing in 1984. Due to difficulties experienced in the early 1990's Mount Isa Mines Holding Limited adopted a new approach, inviting Thiess to develop a submission to operate the mine. The induction programme was a critical document, introducing employees to Thiess, driving cultural change through communication, participation and commitment. Planning for health and safety is an integral part of Thiess Contractors business procedures. The key to our success at Collinsville is teamwork, systems and procedures.

INTRODUCTION

Collinsville is predominantly a mining community 85 kms west of Bowen in North Queensland whose livelihood is in a large part dependant upon the success of the coal operation. Tough economic conditions, structural change and redundancies throughout the early to mid 90's created low morale and an uncertain future.

In planning for health, safety and environmental management on this project Thiess was able to develop a safety management plan and induction package using the Thiess Management System and the very best of existing operational procedures.

With a strong emphasis on communication and teamwork Thiess adopted a strategic plan to make Collinsville Coal Operations a safe, efficient, productive and viable project. The key criteria for success is as follows:

- The production of a safety management plan that genuinely provides the tools for prevention rather than reaction.
- An induction package which highlights not only heath and safety planning but also provides an honest, open view of goals, objectives and target performance.
- Clearly defined authorities and responsibilities.
- Strong communication through a responsible, active safety committee, pre-start talks which emphasises open discussion, regular updates, procedural reviews and toolbox meeting.
- Quarterly audits which provide bench marking opportunities for safety supervisors throughout the Thiess organisation.

With now in excess of 370 days lost time injury free and significantly lower frequency rates and stronger safety and productive performance, the future looks much brighter. The goals and objectives Thiess established in planning health and safety are now providing successful outcomes and targets for future success.

BRIEF HISTORY OF COLLINSVILLE COAL MINE

Coal mining in the Collinsville district commenced in 1919, with underground mining of the Garrick Seam. Open cut mining commenced on a small scale in the 1950's. Mount Isa Mines Holding Limited acquired the Collinsville fields in 1977 and built the first stage of the existing coal handling and process plant in the early 1980's. Large scale open cut operations began in 1984 and the Collinsville pit became part of the NCA Project which comprised Newlands, Collinsville and the port of Abbott Point. The MIM labour force peaked in the late 1980's at 816 employees and produced an average of 2 million tonne of coal per year. During the early 1990's MIM began a restructuring programme to improve the productive output of the mine. Due to numerous difficulties experienced during the restructuring programme, MIM saw the need for a new approach. Towards the end of 1995 MIM invited Thiess Contractors to develop a submission for the operation of the mine. The future of Collinsville mine and township was dependent on the outcome. Thiess Contractors accepted the challenge of a new future for Collinsville.

Change is always difficult to accept and the uncertainty had a significant affect of the workforce and township. On the announcement that Thiess Contractors were to take over the operation of the open cut mining and that all personnel at the mine

were to be dismissed emotion ran high, adding to incident and accident rates. Local doctors indicated high levels of stress related illness amongst the families of mine employees.

Thiess commenced total operation of the open cut mine in July 1996 with a workforce of 121 people increasing five months later to 147. There are five main subcontractors on site with a total of 44 employees on site, as required. Ninety percent of the workforce came from the ranks of the retrenched mine workforce.

Prior to the commencement of operations, a project based industrial agreement was struck between Thiess and the CFMEU. While requiring Thiess to provide preference to former MIM employees who were previously made redundant, it allowed the introduction of 12 hour shifts for the mine. A set of management plans were developed for the project. These included the central Project Management Plan (PMP), Operations Management Plan (OMP), Health, Safety and Environment Management Plan (HS & EMP), and an induction programme. These plans are based on Thiess Management Systems (TMS).

INDUCTION PROGRAM

For many people their introduction to Thiess would begin at the induction, making it a critical document in the successful operation of the mine. Prior to the development of the induction programme discussions were held with staff to ensure a positive start to the project. There had to be open communication between staff and employees, the "Us and Them" syndrome had to be abolished. The worker at the coal face had to have information to help them understand how the project was costed and the major part that they played in the future of the mine. The requirements of the relevant Acts had to be incorporated into the induction document. Systems and procedures were developed using the requirements of relevant acts and the TMS.

The document introduced employees to the Thiess philosophies of working safely and efficiently. It explained how the contract for the project was formulated and how, depending on conditions, it could be terminated. The emphasis was on team work and that we were all in the same boat together. The project could only remain viable in the long term with a team approach.

The document incorporated statutory requirements, Thiess safe work procedures and the very best of the operational procedures that were currently used at the mine site. It contained the Environment Management Plan for the project. Each employee was given a copy which was arranged to accommodate a change in any of the procedures. These could be individually replaced at any time and employees are given updates of new sections following review and toolbox talks.

A CHANGING CULTURE

At Collinsville, a safety culture was created on site by management and employees sharing the same goals to ensure safety is a prerequisite for each activity, promoting a team work approach.

Our crews are extremely safety conscious, the well being of each member being important to the other. The safety incentive system for achieving targets and goals increases safety awareness and is a motivator for all employees on site to carry out their duties safely. While incentive schemes have their critics it must be stated that they cannot stand alone. Only professional safety management systems and a committed work force will provide the results that are required to make the Collinsville Project a leader in safety.

You may ask how so much has changed at Collinsville. A culture that had existed for many years and was so firmly entrenched has changed so suddenly. It can be simply summed up in three words **"communication, participation and commitment".**

- Communication
  - through a responsible active Safety Committee, regular tool box talks, pre-start talks with the emphasis on open discussion, regular updates of procedures, active communication between all levels of the project team. (Every member of the project team is responsible for safety and if they see someone doing something that is unsafe they have the right and responsibility to stop the person and point out the safe and correct procedure for doing the task).
- Participating
  - in providing a future for Collinsville with safety first and foremost. When you restore pride and sense of ownership you drive change. It is not the individual that turns a project around, it is team work, the involvement of everyone on the project to pull together as a team to prove that safety and viability are attainable goals.
- Commitment
  - is working safely and adhering to systems and procedures. Working safely is part of the mining process.

Our motto at Collinsville is **"Safety, Efficiency, Productivity, Viability".**

- **Safety**
  - Foremost in every person's mind when undertaking every activity.
- **Efficiency**
  - To optimise the cost of all operations associated with the project (e.g. fuel consumption, tyre/undercarriage life and component life on mobile equipment or power usage and demand at prep plant).
- **Productivity**
  - To maximise the output of every activity undertaken (whether this is the amount of time taken to service equipment or for a Fitter to repair a transmission, whether this is the bank cubic metres per hour that the equipment moves or the time taken to wash a 36,000 tonne coal stockpile or to prepare an end of the month report.
- **Viability**
  - The necessary measurement of success that determines the existence and duration of the Thiess Contract.

First and foremost every task must be completed safely and we must consciously endeavour to work efficiently. If the work is performed safely and efficiently we can achieve maximum productivity which will ensure Collinsville Coal Operations Project will sustain viability and our future.

MANAGING HEALTH AND SAFETY AT COLLINSVILLE

The Health, Safety & Environment Management Plan was developed on site incorporating requirements of the Coal Mining Act as well as requirements of the Thiess Management Systems. Volume 2 of the Thiess Management System is the Health, Safety and Environmental Management Systems and Procedures developed internally through consultation within the company. The HS & EMP consists of 25 separate sections covering all requirements of a coal mining lease. This document was also set up so that sections could be reviewed and replaced as procedures and systems changed. The plan incorporated clearly defined authorities and responsibilities of all sections of the workforce, from the Project Manager to the Employee as well as Subcontractors. Copies of the Health Safety & Environment Management Plan were given to production staff, safety committee members and placed in every crib room. This allowed easy access to the plan if anyone had a query on a given procedure. The review of the procedures in the plan is the responsibility of the project safety committee, which has representation from all production areas and line management. Their task is to review the procedures in the plan every six months.

PLANNING

Planning for Health and Safety is an integral part of the Thiess Qld/NT/Pacific Business unit procedures. Occupational Health Safety and the Environmental management goals and objectives are developed through consultation and addressed in the Business Plan which outlines targets and strategies to achieve the objectives.
Issues to be addressed are identified through:

- Audit results
- Risk Management Process
- Injury statistics including incident and disabling injury frequency and severity rates
- Site based Toolbox and Safety Committee Meetings
- Accident/Injury, near miss reporting
- Workers Compensation Data
- Physical Job Assessment

Responsibilities for Health and Safety are clearly defined for the following people:

- Business Unit Manager
- Discipline Manager (Building, Civil, Mining).
- Safety Manager
- Project Manager
- Superintendent
- Supervisor
- All Employees
- Subcontractors

Site specific rules and standards are a combination of client, regulatory and our own policy and procedural requirements.

RISK ASSESSMENT

Once the hazards are identified a risk assessment is conducted to determine the extent of the hazard and the control measures required.
The risk assessment determines the following:

- The occupations/tasks at risk
- The number of persons at risk
- The probability of the hazard resulting in injury or disease
- The duration of exposure to the hazard
- The possible consequences that may result

New safe work procedures are communicated via pre-start work team and toolbox meetings and specialised groups. Safe work procedures are stored in a central location and are issued to all employees in the induction document.

CONTROL MEASURES

Using the results of the Risk Assessment, the appropriate control measures are determined. Control measures are categorised in order of preference.

- Design
- Substitution
- Redesign
- Separation
- Administration
- Personal Protective Equipment

REVIEW, APPLICATION AND MONITORING OF CONTROL MEASURES

One of the best monitor and control measures available to the Collinsville Operation is employee feedback. Work management systems have often changed as a result of experience gained on site.
Once the control measures are selected they are then reviewed to determine:

- The effectiveness of the control measure.
- Will it introduce a new hazard

If the answer to the above is no then the control measure can be implemented.

MONITORING AND CONTROL

The Area Safety Manager is responsible for monitoring changes to applicable legislation and advising Management and Project Staff of same. This is achieved through an update service run by GoPrint and being on the mailing list of The Department of Mines and Energy, Minerals Council of Australia and The Division of Workplace Health and Safety.
Auditing for compliance with internal standards and applicable legislation is conducted by the Area Safety Manager and Safety Representatives from other projects. Each project is to be audited within three months of startup and every three months thereafter. All audits are conducted by convening a brief meeting with the Project Manager, Supervisors and Safety Officer to discuss the audit scope and agenda. All objective evidence of compliance with policy and procedures is examined and the findings recorded. Once the objective evidence has been examined the auditor, Project Manager and Safety Officer will test the performance of the systems through an inspection of the workplace and questioning of employees as appropriate.
The Auditor, Project Manager and Safety Representatives/Officer will discuss the audit findings and where necessary, ways to improve the system. The audit report is then distributed to the General Manager Qld/NT and the Manager (Building, Civil, Mining) as appropriate, the Project Manager and the Group Safety Manager. All "Remedial Action Taken" section is completed by the Project Manager and forwarded to the Manager within 7 days of receiving the formal audit report. Within 7 days of issue of the audit record the Area Safety Manager will have contact with the Manager (Building, Civil, Mining) as. appropriate, to verify and discuss any strategy required to bring about compliance. Corrective action taken is verified with the auditor then re-evaluated at the time of the next audit. A summary of all audit reports is provided to the Managing Director by the Group Safety Manager.

RESULTS

Site performance is monitored by the safety committee who review audit results, accidents and incidents, feedback from toolbox and pre-start team meetings, changes to legislation and physical task assessment. Currently 370 days lost time injury free, supported by significant increases in production, Collinsville is an example of the results of communication, participation and commitment. Success can and will only be achieved through the use of systems and procedures, teamwork, and analysis strategically managed to gain the outcomes you desire. In developing your system the key element in your strategic plan must be communication and participation. Results depend on it.
Finally I would like to take the opportunity to thank the men and women at Collinsville, "the team". Their effort and commitment has allowed us to be here today.