

## Manual Handling Booklet

### Xstrata Coal Queensland – Oaky No 1

#### The Problem or Initiative

##### a) Identified problem

- Poor manual handling practice is one of the most common hazards confronted by people in all workplaces. No industry or workplace is free from manual handling hazards. However, the degree of risk differs significantly from one workplace to another and from one activity to another.
- Underground coal mining presents a number of challenges, as many tasks are manual by nature. Added to this is uneven, variable ground conditions, restricted spaces, dark areas and awkward postures and you're presented with quite a unique and challenging environment.
- Manual handling seldom causes fatalities, however the injuries that occur are often disabling, long term and costly.

##### b) How the improvement opportunity was identified

- Manual handling sprain and strain injuries makes up over 32% of OC1's Total Recordable Injuries since January 2009. OC1 has implemented a number of interventions to control manual handling risks, including a manual handling immersion program which utilised exercise physiologists working with each crew to make improvements in their work methods.
- It was from the immersion program where the manual handling awareness book was born.

##### c) What health and safety consequences were to be addressed

- Manual handling sprain and strain injuries.

#### The Solution

##### a) Strategies and initiatives developed to identify and address the problem

- A Manual Handling Booklet was developed to create awareness around the most common manual handling activities and the preferred physical techniques to safely complete these activities which as workforce driven .
- Many organizations utilize manual handling training as their primary means of control for sprain and strain injuries, however this often proves to be ineffective. Therefore OC1 have taken a more comprehensive approach by implementing a combination of hard controls e.g. innovations aimed at engineering controls and higher, and promotional and awareness tools such as the manual handling booklet.
- This is an excellent example where the employer and employees have worked together to identify, assess and control the risk of manual handling injuries.

##### b) Internal and external resources used

- The awareness booklet was developed in consultation between workers doing the tasks, safety personnel and exercise physiologists. The goal was to create a simple and easy to follow awareness tool that could be referred to frequently by workers conducting the tasks. The booklet fits into the pocket of workers, therefore is readily accessible whenever required.



##### c) Methods used to trial and test

- A draft was developed and reviewed by workers conducting the tasks, safety personnel, and XCQ personnel.
- A final draft was approved by the XC communications team and implemented into the workforce.

##### d) Implementation process

- The booklets have been deployed throughout the mine.

##### e) Demonstrate how hierarchy of control has been applied

- In many instances, it is not possible to eliminate a manual handling risk. This is the case at OC1.
- Despite a detailed risk management program in place, manual handling risks still exist, however the manual handling booklet (Administrative control) is used in parallel with the innovation program which targets the development of hard controls e.g. innovations aimed at engineering controls and higher.

## Benefits / Effects / Outcomes

### a) Safety and occupational health benefits

- Benefits of the pocket guide are that guidance on how to perform a task with correct manual handling principles are at the worker's fingertips.
- The information is presented in a simple, easy-to-follow guide, developed by knowledge experts in the task, in conjunction with knowledge experts in ergonomic principles.
- Workforce acknowledgement that more than 75% of development crew members were asked for one on one feedback and recognition of workmates through photography.

### b) Supporting data

- Feedback from crews has been very positive in that as they were the providers of the technique improvements that were simply refined by the consultants there is minimal to no pushback with respect to task change.
- It has also lead to crews openly commenting to one another about their possible improvements.

### c) Extent of deployment

- The booklets have been deployed throughout the mine in combination with further training.

## Transferability

### a) Potential for innovation to be used, modified, transferred across the industry

- This concept has transferability across any industry. Other operations would need to customize the photos to suit their operation, however the concepts within the booklet could remain standard.
- It is simple and inexpensive.

## Innovation

### a) Originality of the innovation

- The concept of pocket guides is not original, however the application of a pocket guide to manual handling, particularly to tasks that are actually being performed by people underground is a great idea.
- Many other pocket guides on the market are quite general in nature, however this guide targets the higher risk components of manual handling at Oaky Creek.
- Is an excellent way to ensure that new people to the industry get to understand best and most efficient practice for manual handling instead of simply following or copying a co worker who may or may not utilize the most efficient practices.

## Approximate Cost

### a) Statement of approximate cost, if known

- The cost of photography and printing was approximately \$13,000.

