NSW Resources
Resources Regulator

# Change management

## What does it look like?

**Small Mine Roadshow**

February / March / April 2025

# Contents

# What is change management ?

A ‘change management’ process is intended to ensure that any proposed changes to plant, systems, processes or practices are managed in a way that guarantees a controlled outcome and to ensure that changes do not have the potential to adversely affect people, environment, community, plant or property (risk to the business).

Change management is a risk-based process of controlling and communicating the change.

Changes should be authorised prior to implementation.

Poor change management is not just about safety and, if not done well, often leads to a deterioration of your business!!

# Group exercise – assessing change!

# Group exercise – reviewing controls!

01

Each table will receive a **different scenario**

02

Think about the **systems and controls** that will need to be reviewed

03

Build a checklist of **headings and controls** to support your thoughts and decisions

04

**Report back** to the audience

# Example of a checklist

**CHANGE MANAGEMENT CHECK - LIST (EXAMPLE only)**

**Scope and Context**

This checklist is to be used as a reference and prompt, when assessing what actions may be needed when a change is under consideration, or otherwise being implemented. It should be used in conjunction with the various definitions and aspects of Change Management as described in our procedures and control plans.

| TYPE OR NATURE OF CHANGE | EXAMPLES FOR GUIDANCE | DETERMINING FACTOR/S | ACTION / RESPONSE |
|---|---|---|---|
| **Introduction of new or modified equipment to the site.** | • New HME<br>• New processing plant or processing equipment | • Does the new plant / equipment introduce new hazards / risks, or change the profile & nature of existing hazards / risks?<br>• Does the new plant / equipment require training / instruction of operations &/or maintenance personnel?<br>• Are any other changes to the site infrastructure or operations triggered? (e.g. width of haul / working roads) | • Obtain and review the OEM's (Supplier's) Risk Assessment (if available).<br>• Review and amend (as necessary) site-specific Risk Assessment/s, SOP's &/or SWMS.<br>• Cross-check all relevant PCP's and PHMP's in this process.<br>• Determine operational and maintenance training / VOC requirements and rollout.<br>• Amend (as necessary) pre-start checklists and ITP's. |
| | • Modified or altered HME<br>• Modified or altered processing equipment, including changes to energy sources. | • Does the modified plant / equipment introduce new hazards / risks, or change the profile & nature of existing hazards / risks?<br>• Does the modified plant / equipment require training / instruction of operations &/or maintenance personnel? | • Does the equipment supplier / OEM need to be consulted?<br>• Are 3rd party engineering checks / certifications required?<br>• Is a compliance check against site licence conditions, HSE regulations &/or recognised standards (e.g. AS/NZS) required?<br>• Review and amend (as necessary) site-specific Risk Assessment/s, SOP's &/or SWMS.<br>• Cross-check all relevant PCP's and PHMP's in this process.<br>• Determine skills needs, operational and maintenance training / VOC requirements and rollout.<br>• Amend (as necessary) pre-start checklists and ITP's. |
| | • Changes to settings / parameters (e.g. operating pressures, pressure relief, power, overload settings, loadings / load ratings, structural adequacy, safeguards, lubricants, pipes / hoses, tyres, max. travel speeds, etc) | • Do the proposed changes introduce new hazards / risks, or change the profile & nature of existing hazards / risks?<br>• Do the proposed changes require training / instruction of operations &/or maintenance personnel? | |
| **Changes to methods of operation** | • Changes to site access / egress.<br>• Changes to the site VMP/TMP.<br>• Changes to methods of extraction, waste dumps, stockpiling, sales, re-hab areas, water management, etc.<br>• Other operational changes (e.g. hours of operation). | • Does the proposed change trigger a review of the site's SHMS / PCP's / PHMP's?<br>• What level of stakeholder consultation is required? (e.g. external regulators, response agencies, internal management, community, other)<br>• Are external notifications / approvals required? | • Confirm with a compliance check against site licence conditions, OHSE regulations, EPA conditions, etc.<br>• Review and amend (as necessary) site-specific operational controls, Emergency Management Plan, SOP's &/or SWMS.<br>• Cross-check all relevant PCP's and PHMP's in this process. |
| **Introduction of new materials / products** | • Fuels / lubricants<br>• Chemicals / solvents<br>• Dry powders (e.g. cement / flyash / other additives)<br>• Hazardous, volatile, flammable materials (e.g. welding gases)<br>• Explosives | • Are there specified / mandatory storage requirements (e.g. separation distances)?<br>• Do the proposed changes introduce new hazards / risks, or change the profile & nature of existing hazards / risks?<br>• Do the proposed changes require training / instruction of operations &/or maintenance personnel? | • Update site HazMat register and SDS files.<br>• Determine any specific PPE / RPE requirements and procure same.<br>• Update site layout plans (if relevant).<br>• Review and update FFE type / locations / qty.<br>• Review & update (if required) site EMP, &/or other control plans.<br>• Provide training and rollout to site personnel. |
| **Changes to company / operational / management / responsibility structures** | • Company restructuring / management changes<br>• Changes to management &/or statutory responsibilities<br>• Internal / external service & support providers<br>• Reporting / communications lines<br>• Authority limits | • Does the proposed change trigger a review of the site's SHMS / PCP's / PHMP's?<br>• What level of stakeholder consultation is required? (e.g. external regulators, response agencies, internal management, community, other)<br>• Are external notifications / approvals required? | • Cross-check and initiate any mandatory regulator (statutory) notifications that may be impacted (e.g. in the case of change of nominated quarry manager, or electrical appointment/s).<br>• Update (if required) the SHMS, and cross-check all relevant PCP's and PHMP's as part of this process.<br>• Provide information, training and rollout to site personnel. |

# More examples of checklists

**F. Action plan checklist.**

| Item | Description | Response | | Action by |
|---|---|---|---|---|
| 1 | Does the change require engineering design and /or approval? | Yes | No | |
| If so provide details: | | | | |
| 2 | Does the change require a process / operating review? | Yes | No | |
| If so provide details: | | | | |
| 3 | Does the change require new or changes to existing plans, or procedures? | Yes | No | |
| If so provide details: | | | | |
| 4 | Does the change require consultation with the workforce, or others e.g. legislation, inspectors? | Yes | No | |
| If so provide details: | | | | |
| 5 | Does the change affect warranties or certifications? | Yes | No | |
| If so provide details: | | | | |
| 6 | Does the change require drawing updates? | Yes | No | |
| If so provide details: | | | | |
| 7 | Does the change require stocking of new parts or materials? | Yes | No | |
| If so provide details: | | | | |
| 8 | Does the change affect required competencies? | Yes | No | |
| If so provide details: | | | | |
| 9 | Does the change require communication or notification? | Yes | No | |
| If so provide details: | | | | |
| 10 | Does the change require records to be maintained? | Yes | No | |
| If so provide details: | | | | |

5.03.001 ALL SITES
**CHANGE MANAGEMENT CHECKLIST**

- the following checklist is to enable users to assess the magnitude and consequences of the change they are intending. It is not a formal risk assessment – however it may guide the user in determining if a formal risk assessment needs to take place. Risk Assessments are outlined in SMS STD 5-02 Risk Assessment

**Assessing & describing change**

**Change Being Reviewed:**

**Reviewer:** **Date:** 9th February 2005

If answers to any of these questions is yes or unknown, initiate the MOC procedure with the SMS INSPCHCK 5-03-002 Change Request Form

| | Question | No | Yes | Unk |
|---|---|---|---|---|
| 1 | Does the change affect any existing safety equipment or procedure or require any new safety equipment or procedures? | | | |
| 2 | Does the change affect site configuration, roads, etc, in a manner inconsistent with the approved site plan and operating procedures? | | | |
| 3 | Does the change introduce or revise existing pre-shift, pre-operation relief or cross-shift inspections or communication? | | | |
| 4 | Does the change introduce new equipment or alter existing equipment? | | | |
| 5 | Does the change affect alarms? | | | |
| 6 | Does the change introduce new operating procedures or revision of existing procedures? | | | |
| 7 | Will training or retraining be required due to change in personnel, equipment or facilities? | | | |
| 8 | Will the change result in an increase in emissions to air, water, or land? | | | |
| 9 | Will the change result in an increase in waste generation? | | | |
| 10 | Will the change be in conflict with any regulation or approved standard? | | | |
| 11 | Does the change require new, or revision to existing, permits | | | |
| 12 | Does the change involve a change in types or quantities of chemicals or materials used or stored? | | | |
| 13 | Does the change involve an increase in noise, vibration, temperature, pressure or weight to be lifted. | | | |

Forward completed form to Site Safety Superintendent.

# Why this topic?

## SAFETY BULLETIN

NSW DEPARTMENT OF
**PRIMARY INDUSTRIES**

Now incorporating Department of Mineral Resources
ABN 51 734 124 190-003

**CHANGED WORK PRACTICES**
**EMPLOYER OBLIGATIONS**

**ISSUE**

A number of recent incidents have raised concern regarding the proper management of changed work practices in the workplace. Recent investigations have shown that when changes in workplace practices are not properly supported by adequate risk assessments, consultation and training they can become a key contributor to accidents on site. Although investigations are continuing evidence is sufficient to warrant the release of this advice.

**ADVICE TO INDUSTRY**

Mines should note that, as with new work practices, when changed work practices are implemented the employer is obligated to review and, where necessary, implement new or amended health, safety and welfare measures. Changed worked practices may include, but are not limited to, the employment of new staff, the introduction of contract staff, a change in the way a task or job is undertaken, a change in systems or equipment, a change in staffing levels or a change in responsibilities of site staff.

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## Compliance Priorities Outcomes

Change Management

### Change Management

**Issue:** Several serious incidents occurred in 2018 and 2019 which are indicative of change management issues. For example, in September 2018 a floating concentrator sank at a dredging operation. At a quarry, a relatively new conveyor gantry collapsed after it had been modified by adding extra mass to the structure.

Change must be managed appropriately, otherwise hazards introduced due to change may not be adequately controlled and lead to an unwanted event occurring.

### What we did

We assessed 32 sites between February and June 2020. Sites were assessed on the following:

- Has a change management policy or procedure been developed and implemented?
- Has a change management checklist been developed and implemented to ensure assigned actions completed?
- Has a risk assessment been undertaken when change was considered?
- Have engineering considerations been evaluated and approved?
- Have a relevant cross section of workers been consulted about change?
- Have affected workers been adequately trained in any new or different processes?
- Was the change communicated to the workforce?

2020 compliance priority

# Assessment outcomes

- Many sites do not have a change management process/procedure.
- Change management was not part of their risk management process.
- Some mine operators were not managing change by failing to:

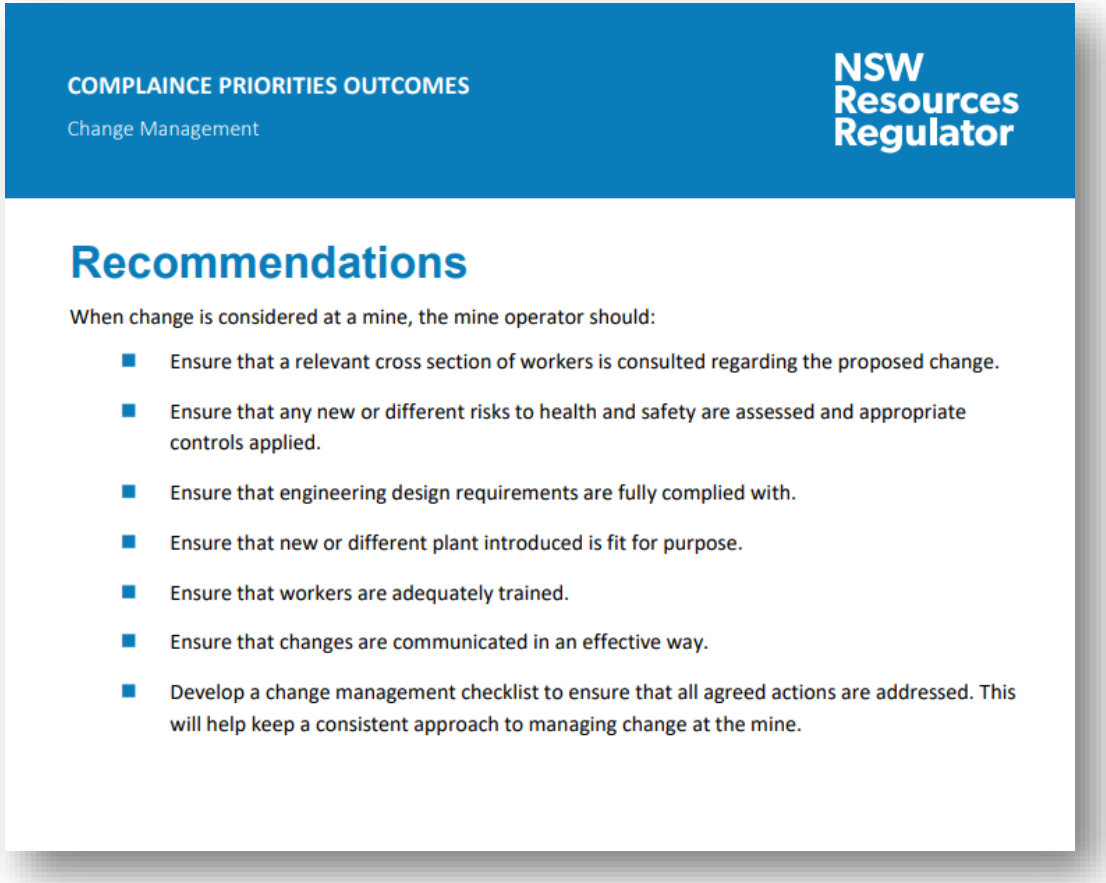
– review procedures/practices

– conduct risk assessments

– ensure engineering standards are met

– consult with workers

– provide additional information, training or instruction.



COMPLAINCE PRIORITIES OUTCOMES

Change Management

NSW Resources Regulator

## Recommendations

When change is considered at a mine, the mine operator should:

- Ensure that a relevant cross section of workers is consulted regarding the proposed change.
- Ensure that any new or different risks to health and safety are assessed and appropriate controls applied.
- Ensure that engineering design requirements are fully complied with.
- Ensure that new or different plant introduced is fit for purpose.
- Ensure that workers are adequately trained.
- Ensure that changes are communicated in an effective way.
- Develop a change management checklist to ensure that all agreed actions are addressed. This will help keep a consistent approach to managing change at the mine.

# Change management failures – examples ($$$)

- New FEL has different controls, and the training and VOC process was poor. This led to a collision where an operator was injured, and the site was closed for an extended period (major $$ loss to business).
- A new crusher had different electric and hydraulic circuits, and these drawings and associated SWPs weren't updated. This led to an incident due to incorrect isolation (electric shock or hydraulic fluid injection).
- The 'give way' direction at an intersection at the production entrance was altered. The traffic plan was not updated, there was no communication with sales trucks and a severe collision incident occurred.

# Potential triggers – some examples

1. **Change in organisational structure** and/or roles, or introduction of new people with different skills.

2. **New plant, equipment, materials and processes prior** to final design, tender or purchase.

3. **Modifications to existing plant** (digital control systems and any emergency/safety protection devices) equipment, materials or processes with the potential to affect the health and safety of employees.

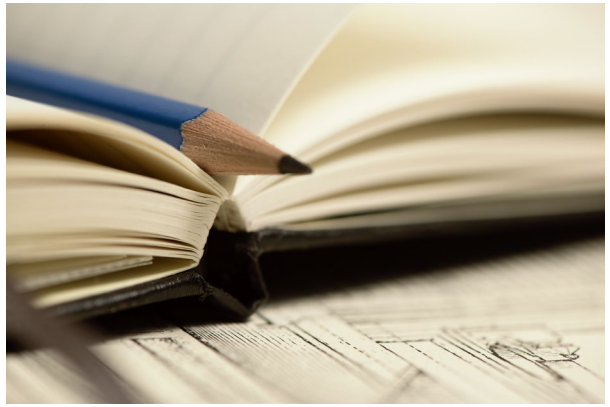
4. All changes that have the **potential to impact on the environment**, community or to create financial loss.

5. **Legislative or regulatory change.**

6. Changes to **mine design, mine traffic rules, layout or configuration of roadways.**

# Possible scenarios

| |
|---|
| A change in reporting lines within a quarry will mean that the Production Supervisor will report directly to the Area Manager with the Quarry Manager no longer in the line management structure for the site. Subsequently all the reporting responsibilities and documentation now lie with the Production Supervisor who is unfamiliar with many of the systems. |
| An asphalt site receives delivery of a new FEL for use in the yard area. The machine is larger and contains many new features & innovations. As a consequence, the maintenance system, operational activities and competencies need to be reviewed. |
| A Supervisor returns to work after suffering a serious illness. All parties agree that any tasks involving working on top of the plant accessed by the fixed ladder should not be undertaken by the individual but the inspection and maintenance regimes need to be adequately fulfilled |
| A Department has to carry out staff cuts/increase resulting in changes in responsibility and job descriptions for the remaining staff |
| An asphalt plant has to significantly increase the number of tippers parked overnight within the site. Site access, security, planning, welfare facilities etc. will need to be considered. |
| A site has to introduce a shift pattern to satisfy the additional production demands. (Night work/Shift work) |
| A new type of raw material (e.g. blended sand/dust combination) is to be introduced to a concrete plant which will result in the need for additional material handling equipment (e.g. liners, vibrators, blowers) and improved dust abatement measures for permit compliance. |
| A packed products site's new forklifts are fitted with a telematics option that provide an integrated solution to pre-start checks and defect reporting which are to be used as a substitution for the paper based system |
| The weighbridge at a quarry site is out of commission due to structural defects. Alternative methods need to be introduced. |
| A customers project required the batching of large quantities of Fibre steel. To address the manual handling issue a fibre dispensing machine is installed into the concrete plant for the duration of the project. The machine is loaded by the use of a fork lift.<br>Changes on site are traffic management issues, use of and competency for use of Fork lift , storage of materials, Conveyor guarding, housekeeping requirements around the conveyor etc |



# Change management procedures – reflecting RR recommendations

Ensure that:

- a relevant cross section of **workers is consulted** regarding the proposed change
- all new or different **risks to safety & environment are assessed** and appropriate **controls applied**
- **engineering design requirements** are fully complied with
- new or different **plant introduced is fit for purpose**
- **maintenance and inspection procedures** have been modified
- **systems and procedures** are updated
- **workers are adequately trained**
- changes are **communicated to all appropriate stake holders** in an effective way.

Include a **change management checklist** to ensure that all agreed actions are addressed. This will help keep a consistent approach to managing changes on all related sites.

**Consider –**

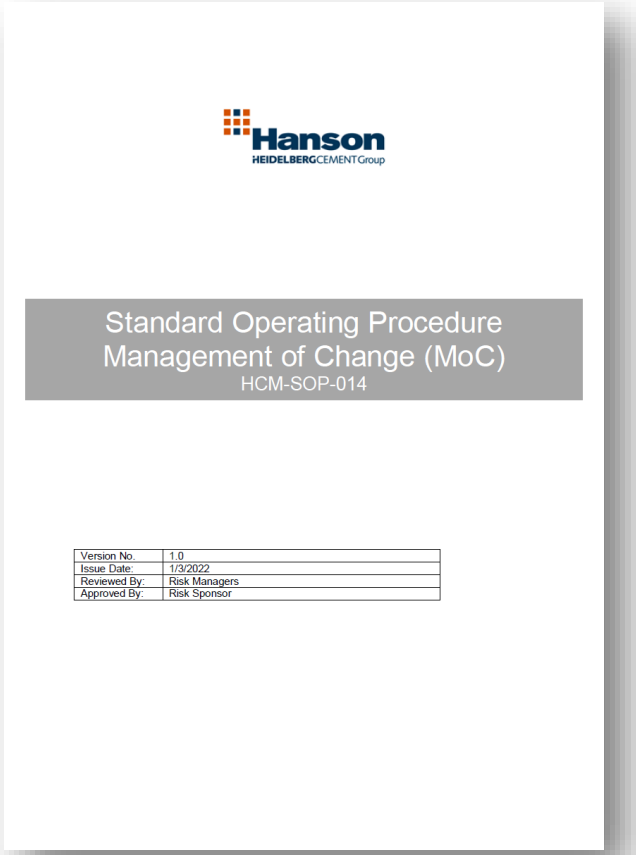
**temporary**

**and**

**permanent change**

**SIGNOFF**

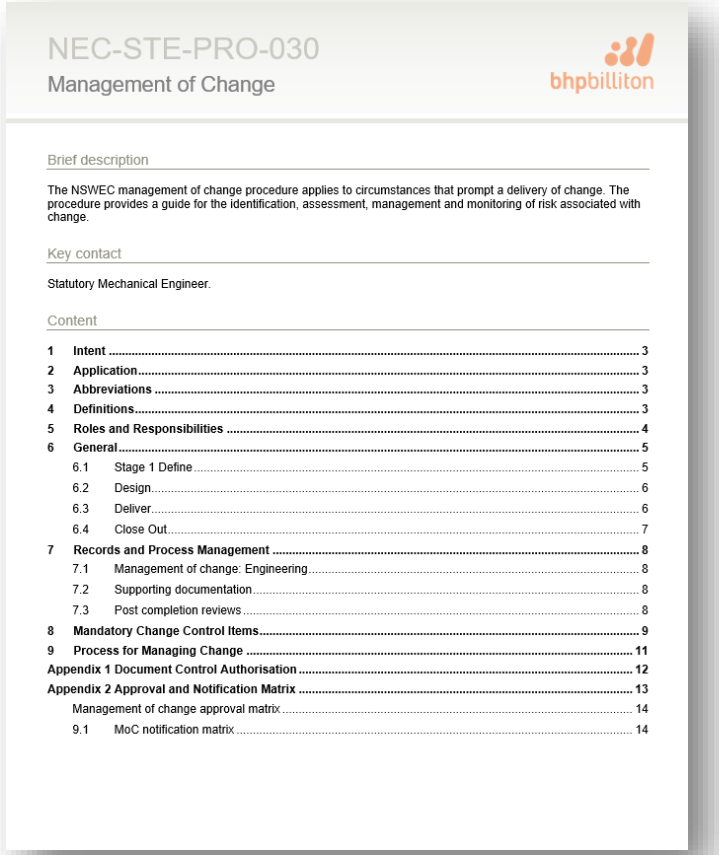
# Change management procedures – examples



Hanson
HEIDELBERGCEMENT Group

Standard Operating Procedure
Management of Change (MoC)
HCM-SOP-014

| | |
|---|---|
| Version No. | 1.0 |
| Issue Date: | 1/3/2022 |
| Reviewed By: | Risk Managers |
| Approved By: | Risk Sponsor |



NEC-STE-PRO-030
Management of Change

bhpbilliton

Brief description

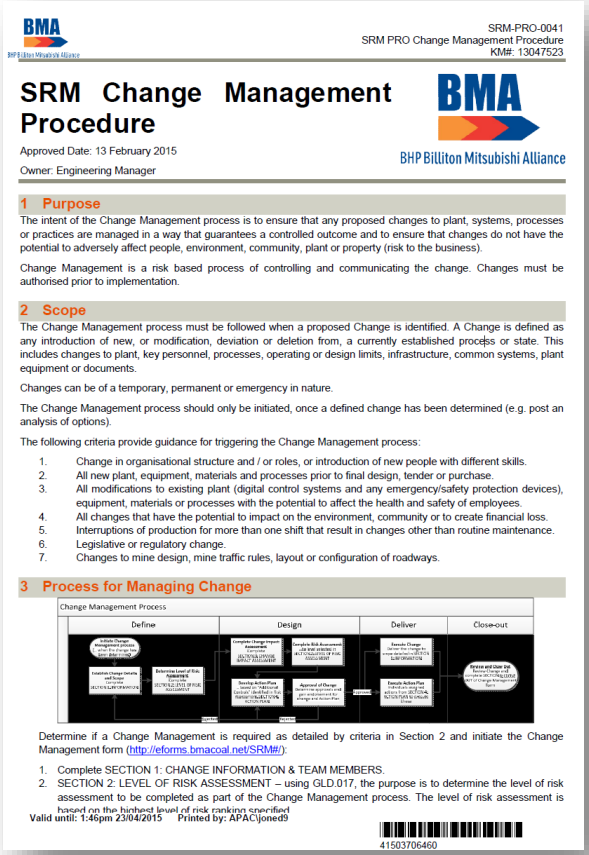
The NSWEC management of change procedure applies to circumstances that prompt a delivery of change. The procedure provides a guide for the identification, assessment, management and monitoring of risk associated with change.

Key contact

Statutory Mechanical Engineer.

Content





BMA
BHP Billiton Mitsubishi Alliance

SRM-PRO-0041
SRM PRO Change Management Procedure
KM#: 13047523

## SRM Change Management Procedure

BMA
BHP Billiton Mitsubishi Alliance

Approved Date: 13 February 2015
Owner: Engineering Manager

### 1 Purpose

The intent of the Change Management process is to ensure that any proposed changes to plant, systems, processes or practices are managed in a way that guarantees a controlled outcome and to ensure that changes do not have the potential to adversely affect people, environment, community, plant or property (risk to the business).

Change Management is a risk based process of controlling and communicating the change. Changes must be authorised prior to implementation.

### 2 Scope

The Change Management process must be followed when a proposed Change is identified. A Change is defined as any introduction of new, or modification, deviation or deletion from, a currently established process or state. This includes changes to plant, key personnel, processes, operating or design limits, infrastructure, common systems, plant equipment or documents.

Changes can be of a temporary, permanent or emergency in nature.

The Change Management process should only be initiated, once a defined change has been determined (e.g. post an analysis of options).

The following criteria provide guidance for triggering the Change Management process:

1. Change in organisational structure and / or roles, or introduction of new people with different skills.
2. All new plant, equipment, materials and processes prior to final design, tender or purchase.
3. All modifications to existing plant (digital control systems and any emergency/safety protection devices), equipment, materials or processes with the potential to affect the health and safety of employees.
4. All changes that have the potential to impact on the environment, community or to create financial loss.
5. Interruptions of production for more than one shift that result in changes other than routine maintenance.
6. Legislative or regulatory change.
7. Changes to mine design, mine traffic rules, layout or configuration of roadways.

### 3 Process for Managing Change




Determine if a Change Management is required as detailed by criteria in Section 2 and initiate the Change Management form (http://eforms.bmacoal.net/SRM#/):

1. Complete SECTION 1: CHANGE INFORMATION & TEAM MEMBERS.
2. SECTION 2: LEVEL OF RISK ASSESSMENT – using GLD.017, the purpose is to determine the level of risk assessment to be completed as part of the Change Management process. The level of risk assessment is based on the highest level of risk ranking specified

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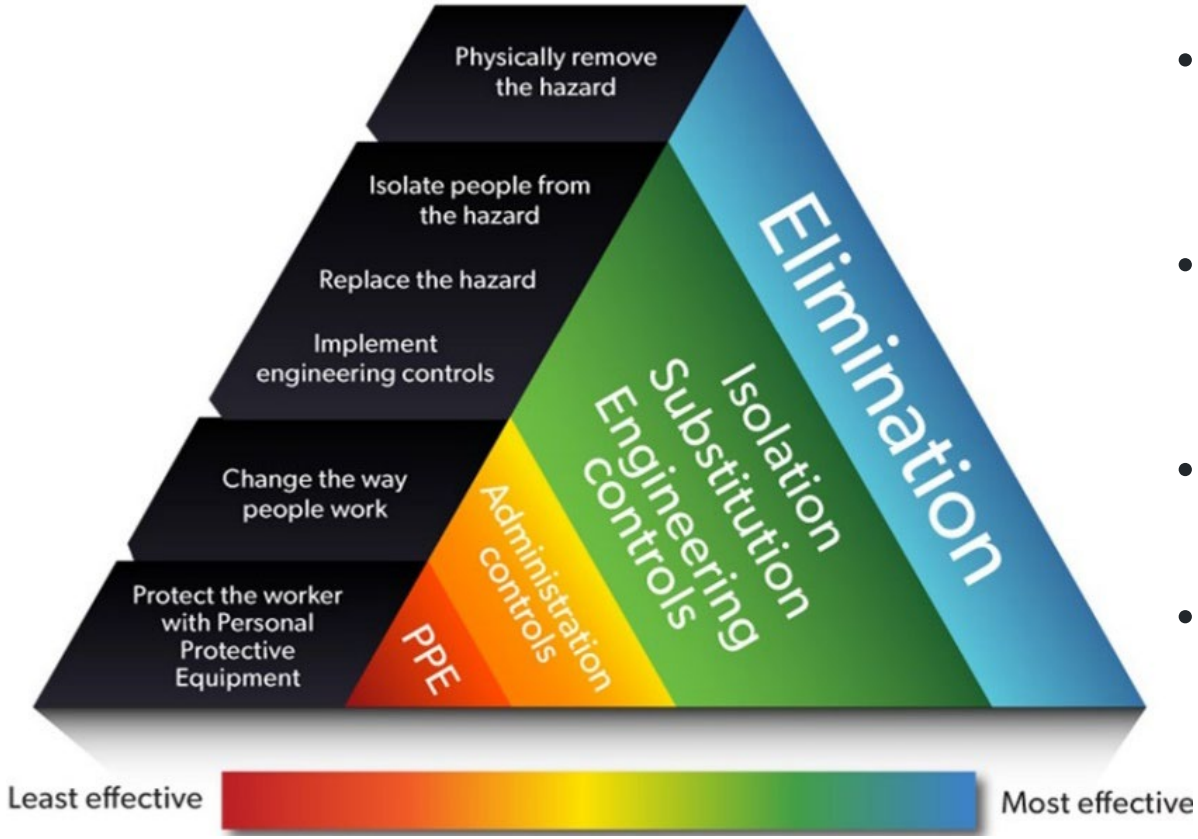
# Take home messages




- **Ensure** that your risk management process includes a method for assessing and controlling ‘change’
- **Ensure** that managers and supervisors are trained in agreed change management procedures
- **Consider** having a checklist to manage the process to ensure consistency
- **Manage** record keeping to substantiate that change is being managed

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# Questions?

Thank you