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| CONSOLIDATED POWER PROJECTS |
| Work Health and Safety Management Plan | |
| <Client> Project  <Project Name> | |
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| CPP Project No: <Project Number>  Principal Contractor: <Insert Name>   |  |  |  |  | | --- | --- | --- | --- | | Current Revision | | | | | Revision: | A – Initial Draft | Revision Date: |  | | Task: | Responsibility: | Date: | Signature: | | Developed by: |  |  |  | | HSE Review: |  |  |  | | Review by Responsible Site Manager: |  |  |  | | Project Manager: |  |  |  | | |

**Consolidated Power Projects Australia Pty Ltd**

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| Prepared By | Nerina Hodge |
| Reviewed By | Carl Hogg |
| Approved By | Carl Hogg |

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# Introduction

This Work Health, Safety Management Plan (WHSMP) provides guidance to workers and interested parties who may be affected by activities or works facilitated by Consolidated Power Projects (CPP). The project details are referenced in the TMP-C087 Management Plan Appendices.

## Aim

The aim of this WHSMP is to provide an oversight of CPP’s overarching Work Health and Safety (WHS) management system for managing known hazards, risks associated with project activities or works, and continually monitoring for potential opportunities for improvement when undertaking contractual obligations.

## Success factors

The success factors this WHSMP delivers are the safe systems of work through effectively planning and eliminating hazards and risks to As Low As Reasonably Practicable (ALARP). In addition to promoting workers physical and mental health and wellbeing as a norm and work-related injury or illness is eliminated or minimised.

CPP operates using The Capacity Model (TCM) and S\*\*t that Kills You (STKY) concepts, which has changed the way we look at safety. Based upon these principles we find the balance between prevention and controls, ensuring we have the capacity to fail safely. We plan for when things do go wrong or when people do make mistakes, they “fail safely” with no workers harmed, environmental or infrastructure damage.

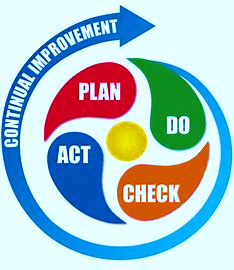
**“Safety Done Differently”**



*Figure 1: S\*\*t That Kills You*

## Plan Do Check Act

The iterative Plan Do Check Act concept shall be used to monitor, assess, and determine whether the referenced targets and objectives established successfully deliver the required results and validate the intended performance outcomes.



*Figure 2 Plan Do Check Act*

## Content

This WHSMP contains the requirements CPP has developed in order to manage the work health and safety hazards, and potential risks associated with the activities or works performed, contractual obligations and legislative requirements applicable to the organisation.

Some aspects specific to the project are included in the Management Plan Appendices.

*Refer: TMP-C087 Management Plan Appendices*

# Purpose

The purpose of this WHSMP is to outline the work health, safety and environment management strategies that shall be implemented to control any reasonably foreseeable health, safety and environmental risks that may occur during the projects contracted works.

The plan has been developed in accordance with the CPP Values, Policies and Business Management Systems Framework that has been structured to conform with ISO 9001, ISO 14001 ISO 45001 systems, the Office Federal Safety Commission (OFSC) Audit Criteria and WHS Act and Regulation requirements.

The plan is defined by two key components:

1. ISO:45001, ISO:14001, ISO:9001 Systems Alignment
2. Hazard Identification, Risk Assessment and Control (HIRAC)

*Refer: GUI-Q001 Working with CPP Templates*

# Scope

This WHSMP applies to the tender, initiation, planning, construction, commissioning, decommissioning and defects liability phases of all works to be undertaken as part of the Project. It applies to all workers, service providers, suppliers working for or on behalf of CPP.

# Organisational context

Consolidated Power Projects specialises in providing specialist design, construction, commissioning and maintenance services for distribution, transmission line and substation infrastructure for industrial and renewable energy sectors.

CPP is a trusted partner to Australia's largest renewable and power transmission utility companies, we continue to deliver successful, large-scale projects including battery infrastructure, solar and wind farms.

CPP shall ensure all interested parties needs and expectations are identified and met as per contractual obligations and or legislative requirements.

CPP has implemented and established a HSE Management System, where the integrity of the system is maintained in accordance with the ISO:45001 Occupational Health and Safety Management Systems-Requirements with guidance for use and Federal Safety Commissioners (FSC) Audit Criteria Guidelines.

# Project specific details

## Project details

| Table 1 Project Specific Details | |
| --- | --- |
| Client: |  |
| Principal Contractor: |  |
| Project Name: |  |
| Project Number: |  |
| Project Address: |  |
| Project Manager: |  |
| Site Manager: |  |
| Site HSE Advisors |  |

## Project scope of works

insert scope of work>

## Map of project

<Insert map of project>

## Construction Activities Zone

<Insert map of Construction Activity Zone>

Graphical user interface, chart, treemap chart

Description automatically generated

# HSE system documents

All checklists, registers and forms listed in this plan may be in hard copy or electronic form, or on the CPP digital HSE System called QEST (Quality, Environment, Safety, Training).

# Leadership and worker participation

## Leadership

The CPP executive management team demonstrates leadership and commitment to workplace health and safety objectives through taking accountability for ensuring the prevention of work-related injury or illness. In addition to ensuring the businesses activities or tasks are aligned with industry best practice and provide safe systems of work comparative to the potential risks of those activities and tasks. While supporting workers to contribute to the effectiveness of the business management HSE systems outcomes holistically.

The CPP executive management team shall ensure WHS objectives remain compatible to the business’s strategic direction through developing, leading and promoting a safety culture that supports the intent of this WHSMP in its entirety. The leadership interaction program is designed for senior management to engage with field personnel, including subcontractors in relation to work activities hazards, controls, at risk behaviours and recognition of behaviours that align to organisations values.

## WHS Policy

The CPP’s executive management team’s commitment is demonstrated in WHS Policy and shall be displayed in prominent areas and is available upon request or easily accessed via the intranet (The Volt).

Refer: POL-S001 WHS Policy

POL-H001 Diversity Culture

POL-H005 Drug and Alcohol Policy

[The Volt - Home (sharepoint.com)](https://quantaservices.sharepoint.com/sites/CPP)

# Abbreviations

|  |  |  |  |
| --- | --- | --- | --- |
| ACM/PACM | Asbestos Control Monitoring | PPE | Personal Protective Equipment |
| ALARP | As Low As Reasonably Practicable | PTW | Permit to Work |
| ARN | Aviation Reference Number | QEST | Quality, Environment, Safety, Training App |
| AS/NZS | Australian / New Zealand StandardTM | ReOC | Remote Operators Certificate |
| ASAP | As Soon As Practicable | RPA | Remote Pilot Aircraft |
| BMS | Business Management System | RePL | Remote Pilots Licence |
| BOM | Bureau of Meteorology | PCBU | Persons Conducting a Business or Undertaking |
| BYDA | Before You Dig Australia | RGBY | Red, Green, Blue Yellow |
| CASA | Civil Aviation Safety Authority | SMF | Synthetic Mineral Fibres |
| CAT | Corrective Action Timeframes | RRTWC | Rehabilitation Return to Work Coordinator |
| CAZ | Construction Activity Zone | RTO | Registered Training Organisation |
| CoP | Code of Practice | SAD | Safe Approach Distance |
| CPP | Consolidated Power Projects | SDS | Safety Data Sheet |
| D&A | Drug and Alcohol | SME | Subject Matter Expert |
| EDD | Emergency Descent Devices | STKY | Stuff That Kills You |
| ERP | Emergency Response Plan | TCM | The Capacity Model |
| FDP | Fire Danger Period | TCP | Traffic Control Plan |
| GHS | Global Harmonisation System | TFB | Total Fire Ban |
| HSE | Health Safety & Environment | TMP | Traffic Management Plan |
| HVNL | Heavy Vehicle National Law | VTO | Verification To Operate |
| ICAM | Incident Cause Analysis Method | WBS | Work Breakdown Structure |
| ISO | International Organisation for Standardisation | WHS | Work Health and Safety |
| KPI | Key Performance Indicator | WHSMP | Work Health and Safety Management Plan |
| OFI | Opportunity for Improvement | Worker | All workers - working for or on behalf of CPP |
| OFSC | Office of the Federal Safety Commission |  |  |

*Table 1 Abbreviations*

# Management responsibility

## Organisational roles, responsibilities and authority

CPP have identified the following roles as being held accountable and or responsible for achieving the WHS requirements for the project. The following process identifies who is accountable and who has been nominated as being responsible for the business management systems, process implementation and monitoring obligations.

### Project Manager

Without limiting the role of the Project Manager, they are accountable for:

* Being accountable for the planning and implementation of all plans on the project.
* Leading by example in all health and safety risks of the project.
* Maintaining the progress and communication with interested parties to reduce the risk of failure.

### Site Manager

Without limiting the role of the Site Manager, they are responsible for:

* The day-to-day management of the project.
* Managing the health and safety risks on the project.
* Managing the communications between interested parties involved on the project.

### Health Safety and Environmental (HSE) Advisor

The HSE Advisor is responsible for:

* Ensuring that the WHS Management Plans are implemented as intended on site.
* Maintaining a high level of WHS compliance and awareness amongst all workers.
* Managing all aspects of WHS, non-conformances, events, hazard identification and event reporting requirements.

### Supervisors and Leading Hands

Without limiting the role of the Site Manager, they are responsible for:

* The day-to-day management of the project.
* Managing the quality, health and safety issues and environmental aspects on the project.
* Managing the communications between interested parties involved on the project.

### Workers

Without limiting the role of workers, they are responsible for:

* Providing adequate supervision and control of workers and their intended activities.
* Providing records, licenses, tickets, and verification of competencies prior to commencement of work.
* Ensuring their own and the safety of interested parties in the workplace.
* Attending all required WHS meetings, toolboxes and SWMS reviews as required.
* Reporting any hazards or risks and participating in an event investigation where required.

# Planning

When planning the activities and works applicable to CPP’s known external and internal risks, CPP shall take into consideration the client’s, interested parties and legislative requirements applicable to the scope of works in order to fulfil our duty of care obligations holistically. Through facilitating monitoring and audit schedules which validate the WHS management systems effectiveness and ascertains where opportunities for improvement may be achieved to prevent, reduce unplanned and or undesirable events.

# Hazard identification, risk assessment and control (HIRAC)

The Hazard identification, risk assessment and control (HIRAC) process shall be implemented throughout the project, effective consultation with workers and interested parties who may be impacted by scheduled activities or works shall be undertaken prior to activities or works commencing.

The Project Manager shall ensure a project risk register is developed, maintained, and reviewed regularly to identify all HSE risks associated with the projects scope of works including variations, and plan adequate controls to minimise those risks to ALARP. The manager shall review the project risk register prior to scheduling works in conjunction with interested parties, all controls must reflect legislative requirements and supporting Codes of Practice (CoP), Standards (AS/NZS, ISO), CPP procedures.

Refer: SOP-S119 Hazard Risk Management

REG-S031 Master Risk Register

## Risk Assessment

The following information describes the intent behind how CPP shall risk assess and implement appropriate controls to the risks identified in the project risk register.

### Likelihood

The likelihood is the chance that something may happen, the information provided in the following table is what CPP uses to determine the likelihood of an identified risk will occur.

|  |  |  |  |
| --- | --- | --- | --- |
| Category | Likelihood | Example | Frequency |
| 1 | Rare | The event may occur only in exceptional circumstances | Less than once in 5 years |
| 2 | Unlikely | The event could occur at some time | At least once in five years |
| 3 | Possible | The event should occur at some time | At least once in 3 years |
| 4 | Likely | The event will probably occur in most circumstances | At least once per year |
| 5 | Almost Certain | The event is expected to occur in most circumstances | More than once per year |

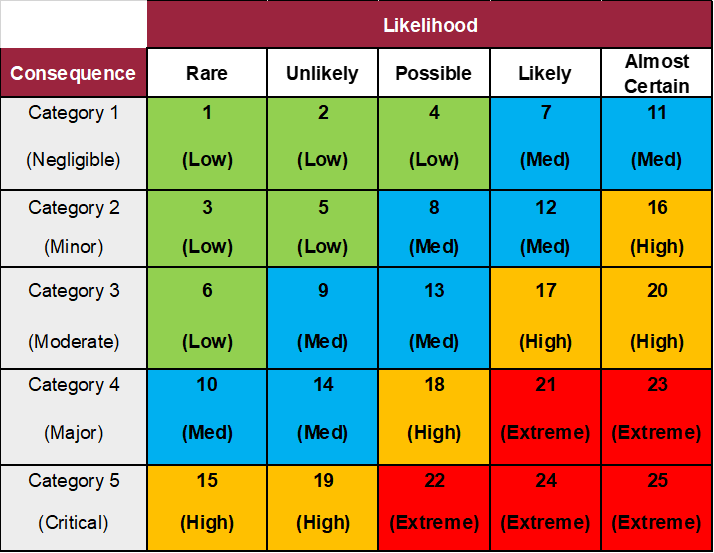
*Table 2 Likelihood Table*

### Consequence

* The consequence is the outcome (impact) of an unplanned event occurring, establish the consequence by using the information provided in Table 4: Consequence Table below.

### Risk Matrix

* The risk ratings are evaluated using the likelihood and the consequence score which are combined to get the inherent risk rating.
* As the rating of risk is a subjective, when assessing the likelihood and consequence of an identified risk, the following information shall be considered:
* Results of audits or observations.
* Review of historical events, documentation, and data.



*Table 3 Consequence and Likelihood Matrix*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Example | | | | | |
| Consequence | WHS Impact | Environment Impact | Community / Reputational Impact | Client/Network Impact | Financial /Corporate Impact | Legal Impact |
| Category 1  (Negligible) | Report Only, negligible or no injury | Negligible and short-term environmental impact to localised area of negligible environmental value | No impact beyond CPP’s operational area, issue resolved internally. No interest by local community or Media | <0.1 system minute – network, projects – No unplanned outage but planned approved outages utilised | < $ 10,000  No significant impact | Once off minor breach  Notification of relevant authority may be required but negligible possibility of prosecution |
| Category 2  (Minor) | Minor injury, First aid treatment | Small scale and short-term environmental impact to localised area of low environmental value | Managed locally, Minor interest by local community, or some publicity in local and state press | 0.5 – 2 system minutes – network, project – 1 project related unplanned outage | > $10k to $100k  No ongoing issues, dealt with internally | Multiple minor breaches, Regulator may express concern. Requires notification to relevant regulator/authority but unlikely to be associated with financial penalty |
| Category 3  (Moderate) | Return to work, or medical treatment (no hospital admission) | Moderate, short to medium term environmental impact that may extend beyond CPP’s operational area | Impact beyond CPP’s operational area affected landholder complaints Sustained regional coverage | 2 to 20 system minutes-network – project – multiple unplanned outages | > $100k to- $500k  Ongoing issues with further consequences | Small systemic breaches or 1 large breach. Breach of regulatory / license requirements with action by authorities resulting in tightening of license conditions and financial penalty  Enforceable undertaking possible |
| Category 4  (Major) | Extensive Injuries (Hospital admission, permanent disability) | Significant medium-term impacts to soil, water, flora, or fauna, with long term effects, but no changes to biodiversity, ecology, or land use | Impact beyond CPP’s operational area, Multiple local community complaints Sustained national press coverage | 20 system minutes – 2 system hours – network, project – Major widespread outages | > $500k to $1m  Impact on business operations, e.g., regulatory investigations | Incident could result in revocation of licenses / permits.  Prosecution occurs |
| Category 5  (Critical) | Fatality(s) or permanent serious disability(s) | Severe long-term damage to soil, water, flora, or fauna, with permanent effects to biodiversity and/or land-use. Damage to listed or protected environments / habitat | Widespread community complaints Continuous national and / or international coverage | >2 hours network, project – prolonged and widespread outages | >$1m  Significant or permanent effect on business operations | Civil / Criminal prosecution  Loss of operating licenses  Possible closure of facilities  Significant fines  Possible jail penalties |

*Table 4: Consequence Table*

|  |  |
| --- | --- |
| Residual Risk Treatment Authorisation | |
| Low | Workers to manage – requires Take 5 |
| Medium | Workers to manage – Pre-Site Risk Assessment Required |
| High | Site / Project Manager to sign off action plans |
| Extreme | Vice President to sign off action plan |

*Table 5 Authorisation Table*

### Residual risk

The residual rating referenced in the following table shall be utilised to determine what action is required, who has the authority and must sign off on activities and or works which are determined to be high or extreme risk.

|  |  |
| --- | --- |
| Risk Rating | Criteria for Management of Risk |
| 1–6  (Low) | Work can proceed **–** Take 5 Required |
| 7-14  (Medium) | Work can proceed **–** Pre-Site Risk Assessment Required |
| 15-20  (High) | Work can proceed – SWMS Required and signed off by the Site or Project manager |
| 21–25  (Extreme) | No work allowed – Task to be signed off by the Vice President |

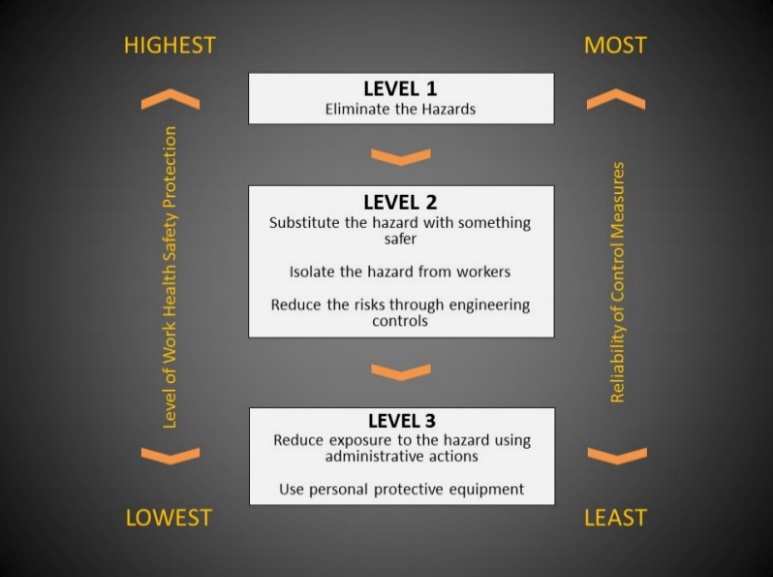
*Table 6 Residual Risk Table*

Refer: SOP-S119 Hazard Risk Management

REG-S031 Master Risk Register

### Control measures

All controls shall be established in accordance with applicable legislative requirements, industry best practice and CPP procedures which are committed to reducing the risk to (ALARP) and shall remain aligned with the “hierarchy of controls” shown below.



*Figure 3 Hierarchy of Controls*

## Hazard reporting

* All workers shall manage hazards to ALARP immediately if safe to do so, any hazard, which is outside their competency or cannot be rectified or reasonably controlled immediately shall be:
* Made safe via isolation (barricading, warning signs).
* Verbally reported to the site manager immediately to action.
* Recorded on the hazard report form and WHS register.

Refer: FRM-S004 Hazard Report / or electronic version

REG-S009 WHS Registers or electronic equivalent

## Corrective actions

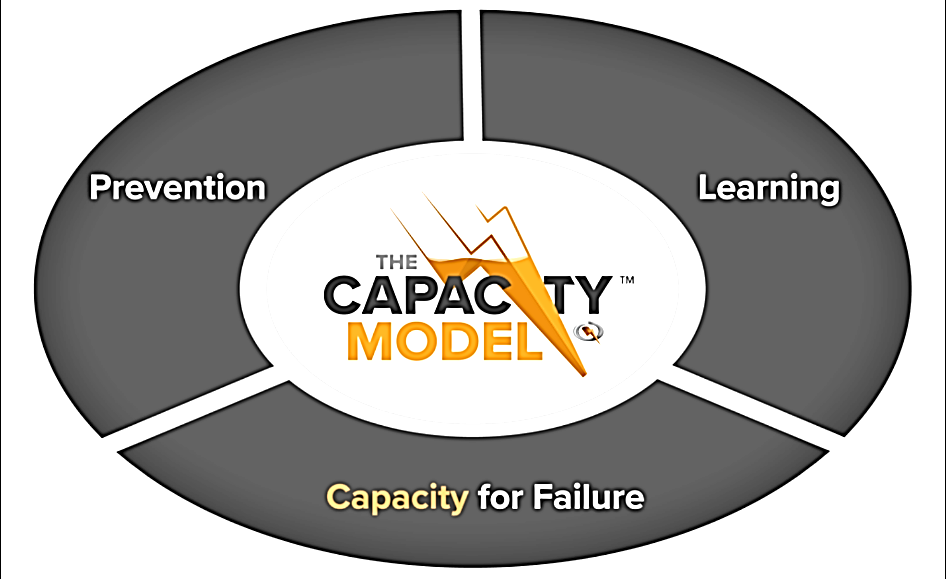
* All Corrective actions shall be implemented in a timely manner based on the risk, complexity, hierarchy of control and practicalities of implementation. All work associated with the hazard shall be managed in accordance with the risk until the controls are implemented.

# CPP risk management approach

CPP does safety differently. We use the energy wheel to assist in the identification of hazards, with a focus on the S\*\*t That Kills You (STKY) and plan for failure as if it will occur, to ensure we build capacity and prevent a STKY event. This is called the Capacity Model (TCM), to help ensure the safety and wellbeing of our workers is paramount.

## The Capacity Model

CPP shall plan and execute work assuming that a failure may occur at any time, we learn from activities, works, and each mistake respectively in order to continually improve our WHS BMS successfully. Through asking at each phase of a work activity “Do we have the capacity to absorb a failure without causing harm?”. The following diagram defines the core values behind the rationalisation of the TCM concept.



*Figure 4 The Capacity Model*

## The Energy Wheel

The energy wheel is a visual tool to assist in the identification of the 10 sources of hazardous energy, both before (job planning) and during work. It can further be used as a guide to identify which hazards may be STKY and to implement controls.

Chart, radar chart

Description automatically generated

*Figure 5 The Energy Wheel*

## Safety in Design

* Safety in Design is the key process to allow CPP to discharge its legal duty as Designer.
* CPP shall consider “Elimination” as the starting point of its risk control process in order to align itself with the CPP Safety in Design Process.
* Design Constructability review is an informal discussion with CPP stakeholders to identify high level issues such as delivery of buildings, space requirements, obstacles, access etc. This helps to define some aspects of construction methodology.
* Once concept design is at between 15% and 45% a CHAIR review (SiD) is required.
* If any issues are identified that require an additional review a 2nd or 3rd SiD session will be planned.

Diagram

Description automatically generated*Figure 6 SiD Overview*

### Design risk reviews

* Where CPP has no input into the design, a documented process will be developed to ensure design-related constructability issues identified, are assessed, and managed prior to construction works commencing.
* Where the design is externally sourced, ensure requirements stipulated in this plan and related procedures form part of the design contract.
* All relevant residual risks are transferred to the Project Risk Register as constructability hazards that will be managed on site.

### Changes to design

Once the specified design activities have been completed up to the ‘issue for construction’ stage, a design freeze will be in effect.

* Modifications made to “Issued for Construction Drawings” (Site Copy) during the construction, installation, testing and commissioning process must be assessed using Change Assessment Form.
* The assessment must be completed by the responsible Manager (e.g., Project Manager, Site Manager, Civil Manager, Commissioning Manager).

### Communication of design changes

Methods for communicating design related construction changes include marked up drawings, amended design reports or amended project risk registers.

## Risk register

CPP shall facilitate several Project Risk Workshops throughout the life cycle of the project to eliminate hazards and reduce the WHS risks to ALARP. The hierarchy of controls shall be followed in accordance with the applicable legislative, regulatory requirements and aligned with industry best practice and businesses size and context of an operational organisation with multiple workplaces established.

| Workshop/Review | Timeframe | Evidence / Report Required | Requires Signed Attendance |
| --- | --- | --- | --- |
| Safety in Design/HAZOP | At the commencement of Design and during preliminary design | Safety in Design Report  HAZOP Project Risk register | YES |
| Risk Workshop / HAZID / HAZCON / CRAW (e.g., Civil construction, electrical, trenching, change in scope, new sub-contractor, major event) | Prior to mobilisation | Project Risk Register  WHSMP  CEMP | YES |
| Risk Workshop / HAZID / HAZCON / CRAW | As required during scope changes | Project Risk Register | YES |
| Environment Hazard and Risk | Prior to mobilisation | See Project Risk Register | YES |
| Project HSE Risk Register Review with stakeholders | Monthly, in accordance with work schedule | Attendance sheet / review history tab updated | YES |

*Table 7 Risk Workshops and Register*

Refer: REG-S031 Master Risk Register

FRM-Q004 Meeting Agenda Minutes

## Safe Work Method Statements

CPP shall develop Safe Work Method Statements (SWMS) for all potential high-risk activities associated with its work, which shall identify, and risk assess each hazard and record appropriate controls individually to mitigate the risks using the “Hierarchy of Controls” methodology to achieve ALARP. An approved SWMS must be signed off by the site manager and forwarded to the Client or Principal Contractor prior to commencing work.

Refer: SOP-S118 Development of SWMS

TMP-S025 SWMS Template

FRM-S131 SWMS Review Form

FRM-S126 SWMS Observation Form

## Take 5

A Take 5 form must be completed to identify and assess basic workplace hazards that are not addressed by a SWMS or the Pre-work Risk Assessment. Once assessed, should the controls not be deemed effective in managing the risk, work must cease, and the Site manager contacted so that appropriate controls can be determined.

Refer: FRM-S158 Take 5, Take 5 books or electronic version

STKY Engagement - books or electronic

# Legal and other requirements

The HSE Manager monitors legislative and regulatory changes, advises key stakeholders via email or bulletins, and schedules the business management system to be updated accordingly. To ensure contractual works remain compliant with applicable legislative and regulatory requirements, CoP, AS/NZS, ISO and OFSC accreditation commitments.

CPP complies with all legislative requirements. Copies of legislation are available via HSE or management representative

Refer: TMP-C087 Management Plan Appendices

SOP-Q015 Legislative Review

## Subscriptions and libraries

CPP shall only use approved sources to verify changes to industry, standards, or legislative changes.

Refer: SAI Global [www.saiglobal.com/online/](http://www.saiglobal.com/online/)

Workplace Safety Australia [www.worksafe.com.au](http://www.worksafe.com.au)

## Change management

CPP shall communicate proposed and or potential business management system changes to interested parties and workers during pre-start, toolbox meetings or schedule meetings as required. CPP defines management of change as being the proposed implementation of new or variations to existing mobile plant or equipment, products, services, processes that may impact workers and or working conditions. In addition to introducing new risks through new technology or lack of development in knowledge or information.

Refer: SOP-Q009 Management of Change

# Management review

The CPP responsible departmental management team shall ensure the WHS BMS audit report findings are communicated, reviewed and appropriate actions assigned to nominated roles. To address findings where WHS BMS legislative obligations requirements or non-conformances may impact the adequacy or effectiveness of the business achieving continual improvement outcomes.

# Objectives and targets

## Key performance indicators

CPP shall measure the implementation of this WHSMP objectives utilising both lead and lag key performance indicators (KPI’s) to ensure the intent of the business management systems performance is continually improving. In addition to remaining aligned with the businesses policies, applicable legislative requirements, and can be easily evaluated.

### Lead indicators

CPP shall identify lead indictors on a HSE activity planner which achieves compliance with the projects WHS objectives through allocating roles and responsible for monitoring, recording the data and communicating the monthly results to interested parties as required.

|  |  |  |  |
| --- | --- | --- | --- |
| Lead Indicator | Target | KPI | Responsibility |
| Mobilisation Audit | Within 2 weeks of site establishment | 90% Compliance | HSE Advisor |
| Safety Management Plan Initial Audit | 3 months after the mobilisation audit | 90% Compliance | HSE Advisor |
| Safety Management Plan Audit | 6 monthly or risk based after initial audit | 90% Compliance | HSE Advisor |
| Sub-Contractor Compliance Audits | Aligned with CPP HSE Audit Schedule | 90% Compliance | HSE Advisor |
| Pre-Start Meetings | 1 per day worked | 100% Compliance | Site Manager |
| Toolbox Meetings | 1 per Fortnight | 100% Compliance | Site Manager |
| Visits by Project Manager | 1 per month | 100% Compliance | Project Manager |
| SWMS Observation | 2 per month | 100% Compliance | Site Leadership Team |
| STKY Engagements | 1 each day onsite | 100% Compliance | HSE Advisor |
| STKY Engagements | 4 per month (each) | 100% Compliance | Site Leadership Team |
| Weekly HSE Inspections | 1 per week | 100% Compliance | Site Leadership Team |
| Hazards Reported | 5 per month | Site Manager | ALL on site |
| Project Risk Register Reviewed with work schedule | At least 1 per quarter or risk based | | Site Manager |
| Maintain Legislative Compliance | No prosecutions, breaches, fines, or notices | | Site Manager |

*Table 8 Lead Indicators*

### Lag indicators

CPP shall record lag indictors through reported event data and reports against WHS objectives, allocating roles responsible for monitoring, recording, and communicating the results in the monthly to interested parties as required.

|  |  |  |  |
| --- | --- | --- | --- |
| Lag Indicator | Target | KPI | Responsibility |
| Number of Near Miss Events (NM) | Capacity to Fail Safely | 100% Reported | Project Manager |
| Number of Report Only Events (RO) | <= 1 per project | Project Manager |
| Number of First Aid Treatment Injuries (FAI) | <= 1 per project | Project Manager |
| Number of Medical Treatment Injuries (MTI) | <= 1 per project | Project Manager |
| Number of Lost Time Injuries (LTI) | 0 | Project Manager |
| STKY Actual | 0 | Project Manager |
| STKY Potential | No Target | Project Manager |
| STKY Success | No Target | Project Manager |
| Number of Environmental Events (ENV) | 0 | Project Manager |
| Number of OFIs for non-conformance and issues (OFI) | <= 2 per month | HSE Manager / Project Manager |

*Table 9 Lag Indicators*

# Performance evaluation

The CPP leadership team has developed and established an internal audit schedule to monitor and measure the performance of the WHS and BMS obligations against the ISO certificates and OFSC accreditation requirements.

## Internal audits

The following protocols shall be facilitated by CPP internal auditors when undertaking audits to verify the implementation and compliance with the HSE BMS requirements with certified systems:

* An audit report shall be reviewed and agreed upon with the Auditee prior to formally issuing the report.
* Audit reports shall be completed and issued in a timely manner.
* All findings shall be recorded.
* The Auditee shall track and record the action close out requirements and follow up of all Opportunity for Improvements (OFI’s).
* Copies of audits shall be retained in the relevant project audit, OFI folder.

## External audits

External audits are facilitated by external parties and scheduled to be completed prior to the expiration dates of the existing accreditation certificates, to validate conformity of CPP’s BMS against accreditation criteria.

CPP conforms with the ISO:31000 Risk Management standard and holds Certificates of Conformity to the:

* Client The client, or independent 3rd party engaged by a client
* OFSC Office of the Federal Safety Commission
* Quality ISO:90001 Quality management systems-requirements
* Safety ISO:45001 Occupational health and safety management systems-requirements
* Environment ISO:14001 Environmental management

Refer: SOP-Q002 Auditing

TMP-Q008 Client Audit Summary

CHK-Q001 Internal HSE Pre Audit Check Tool

CHK-Q002 Mobilisation Pre Audit Check Tool

CHK-Q003 Subcontractor HSE Pre Audit Tool

REG-Q002 Audit Register

## HSE inspections

* The Site Manager shall ensure all inspections are completed in accordance with the KPI requirements.

## SWMS observations

* The HSE Advisor (primarily) shall conduct an observation of high-risk SWMS to ensure they are implemented correctly. If discrepancies are identified, then the either the SWMS or the application must be corrected. Each high-risk SWMS must be checked at least once and additional random reviews are encouraged (refer KPI requirements). Site Managers, Project Managers and senior managers can also participate in SWMS observations as required.

Refer: FRM-S126 SWMS Observation / QEST

## STKY Engagements

* The Site Manager shall ensure nominated project personnel (typically supervisors and above) undertake regular STKY Engagements (refer KPI requirements).

Refer: STKY Engagement (booklet or QEST)

## Non-conformances

Where a non-conformance has been identified the person identifying the issue shall raise an Opportunity for Improvement (OFI) for remediation. Depending on the type of issue and the associated risk, work may need to cease pending the remediation action.

Refer: SOP-Q003 Opportunity for Improvement Process

REG-Q005 Opportunity for Improvement Register

FRM-Q012 Opportunity for Improvement

# Procurement

CPP shall ensure the procurement of products and or services are facilitated as per requirements set out in the procurement of goods and service procedure, as such the following evaluations shall be facilitated prior to procuring products or services.

* Supplier’s and sub-contractor’s commercial viability shall be verified.
* Technical evaluations will be undertaken by the engineering group.
* The HSE team shall facilitate a HSE evaluation.

Refer: SOP-F005 Procurement of Goods & Services

FRM-F011 New Vendor Request

FRM-F020 New Vendor Information

# Workplace environment and facilities

Safe and adequate amenities and facilities will be provided and maintained for workers at CPP workplaces and Project sites. Decisions about workplace facilities will be made based on the nature of the work and hazards being carried out at the workplace, the size, location and number and composition of the workers at the workplace.

All facilities and amenities must conform to the relevant Australian Standard and will be monitored for suitability through the workplace inspection program.

Refer: FRM-S100 Project Amenities Assessment

# Training and competency

CPP **will not** permit any work to be undertaken where the required licenses, cards or certificates of competency cannot be provided.

*Refer: Table 10.*

## Training Matrix

The Site Manager is to develop a Project Training Matrix inclusive of all workers onsite. Subcontractors are responsible to ensure the CPP Site Manager is provided with all relevant employee’s tickets and licenses.

|  |  |
| --- | --- |
| Task | Qualification / Training |
| All Workers | Work Safely in the Construction Industry (mandatory) |
| High Risk Work | Personnel who carry out high risk work must be licensed and competent for the work they are undertaking. |
| Traffic Management on public roads | Applicable Qualifications |
| Telehandler | Refer Appendix R of Management Plan Appendices – Telescopic Handler Operator Competency / Duty of Care Training Requirements by State/Territory |
| Motor Vehicle | Appropriate driver’s licence for class of vehicle |
| Mobile Plant | Must have a ticket issued by a registered RTO providing evidence of competency |
| Mobile Plant on public roads | Driver’s licence applicable to the weight of the plant |
| Elevated Work Platform (all) | Operate Elevated Work Platform |
| Elevated Work Platform (over11m) | High Risk Work License (HRWL) – WP for EWP over 11m Ticket |
| Dogman | HRWL |
| Rigger | HRWL |
| Concrete Boom Pump | HRWL |
| Confined Space Entry | Enter and Work in Confined Spaces |
| Working at Heights | WAH Training for heights over 2 metres and users of fall arrest equipment |
| Crane Operation | High Risk Work License applicable to weight and type |
| Underground Service Locating | Dial Before you Dig Certified Locator, or Identify, Locate and Protect underground Services |
| Electrical Work including Low Voltage and Circuit Board | Appropriate Electrical Worker’s License  Provide First Aid or above  Low Voltage Rescue and Resuscitation |
| HV Switching | Applicable Switching Operator Certificate |
| Refrigerant Handling | Refrigerant Handling Licence |
| Refrigerant Recovery | Refrigerant Recover Licence |
| Visitors | Visitor induction (must be accompanied by a fully inducted person) |
| Delivery Drivers | Delivery driver induction or full Site Induction |

*Table 10 Training Table*

Refer: SOP-H002 Training and Development

FRM-H002 Training Request

REG-H004 Training Register

## Competency verification

At CPP, an operator is deemed competent if we witness a competency certificate (ticket) issued by an RTO.

In addition to the above, if the plant being operated is a “Dry Hired” Telehandler or EWP, the Site Manager will complete a Verification to Operate (VTO) form with the operator, prior to commencing operations. This is due to specific licensing issues and to ensure the operator is familiar with the specific piece of plant.

## Exemptions

CPP shall not accept trainees for operation of any earthmoving equipment, or apprentices, without prior notification; written authorisation must be obtained from the Project Manager prior to the trainee or apprentice being inducted to the project.

* Upon written authorisation being obtained the following conditions apply:
* the trainee or apprentice must be provided with and complete a training logbook as verification of training;
* the trainee must be directly supervised by a competent worker at all times (holding relevant qualification and or license);
* visual and audible positive communication must be maintained at all times between the worker providing the supervision and the trainee.

# Communication and consultation

CPP has systems and processes in place to ensure clear communication and consultation with workers and clients to facilitate positive input and participation in quality matters relating to the Project.

## Consultation

Consultation between workers and interested parties shall be facilitated during the development, implementation, and scheduled reviews of the following project business management systems and or processes as required:

* Change management
* Management Plan reviews
* Policy / Procedural / Work Instruction reviews
* SWMS reviews
* Pre-starts; and Toolboxes.

## Internal communication

* Internal meetings will be held for the project with all relevant stakeholders.
* CPP have the following regular internal communication sessions:
  + Daily pre-starts
  + Regular toolbox meetings
  + SWMS reviews
  + Other meeting / communication sessions as required

Refer: FRM-S027 Daily Pre-Start

FRM-S028 Toolbox Meeting Agenda

FRM-Q004 Meeting Agenda Minutes

## Daily pre-start meetings

CPP shall hold pre-start meetings daily, they are to be facilitated and led primarily by the Site manager, with support from the Supervisor, and or HSE Advisor.

Daily pre-starts shall cover as a minimum:

* Safety issues (hazards, permits, equipment, interactions, deliveries) that are anticipated or identified for the day’s work.
* Advising and discussing with workers the work planned for the day.
* Advising workers which Supervisor is responsible for each part of the scheduled work.
* Providing a forum at which workers can discuss work related issues that have not been resolved.
* Reviewing issues from the previous day.

Refer: FRM-S027 Daily Pre-Start

## Toolbox talks

Toolbox meetings shall be facilitated by the Site manager, Supervisor, and or HSE Advisor and shall include:

* Work related issues that have not been resolved elsewhere.
* Action items to be recorded and followed up at the subsequent meeting.
* Safety first, alerts and other safety information is discussed.
* Periodically revising and reinforcing emergency procedures.
* Provide a short information training session.
* Toolbox meetings shall be conducted at least once every 2 weeks (fortnightly).

Refer: FRM-S028 Toolbox Meeting Agenda

## WHS issue resolution

The CPP Resolving Workplace Grievance Procedure shall be followed when WHS issues are raised.

* The matter must be brought to the attention of the CPP Site Manager.
* The Site Manager shall organise to have the matter rectified immediately.
* If this is not reasonably practicable, the Site Manager will arrange for all workers affected by the issue to be notified and advised of any temporary measures until the necessary corrective actions have been implemented.

Should a dispute arise over a WHS issue:

* An immediate inspection of the issue shall be conducted by the Project Manager, Site Manager, HSE Advisor.
* Where the dispute involves a subcontractor, the subcontractor’s Project Manager must be present.

The resolution of WHS issues shall:

* Be raised and discussed with the relevant supervisor and or site manager initially.
* If agreement cannot be reached on the level of risk or the required actions, the issue should be referred in the first instance to the site HSE Advisor.
* If the issue remains unresolved, the matter will be referred to the HSE Manager and the project manager.
* The HSE Manager or Project Manager may involve the Program, Regional or the Vice President Operations as required.
* In the event that no agreement can be reached an independent assessment of the issue may be undertaken.
* In all cases, the aim is to reduce the risk of exposure to injury to ALARP.
* If the issue is not directly related to a WHS issue but is to resolve workplace grievances and address complaints arising from the Acceptable Workplace Behaviour Procedure, the matter shall be referred to the People & Culture department to be resolved using the Acceptable Workplace Behaviour Procedure.

Refer: SOP-H006 Acceptable Workplace Behaviour

SOP-H008 Resolving Workplace Grievances

SOP-H001 CPP Employee Counselling and Disciplinary

## Industrial relations

* All industrial relations shall be managed in accordance with the industrial agreement principles and content.
* The PCBU must notify the Project Manager of any industrial dispute that may affect the project.
* The CPP Site Manager shall notify the Client of any industrial disputes that may affect the project.
* Right of Entry events shall be managed in accordance with the Fair Work Act.
* Any right of entry requests must be referred to the Site Manager prior to access being granted.

Additional information can be sourced from the following:

* CPP People & Culture Department
* Work Health and Safety Act, Workplace entry by work health and safety entry permit holders
* Fair Work Ombudsman Fact Sheet – Right of Entry (available on-line)

Refer: GUI-H003 Industrial Relations Guideline

TMP-H001 Industrial Management Plan

## Health and safety representatives (HSRs)

* CPP shall ensure workers are aware of their rights to have an HSR represent them on WHSE issues.
* If a worker makes this request, work groups must be established to facilitate this election.
* This process requires CPP and their workers to negotiate and agree on the formation of work groups.
* A work group may operate across multiple businesses if all parties agree to such an arrangement.

Refer: FRM-S103 Consultation and Communication Election

## Notice board

A CPP HSE notice board shall be installed in one or more locations and include:

* CPP Policies
* Safety Alerts and Industry Incidents
* If you are Injured at Work poster
* Employee Assistance Program
* Emergency Response Plan
* HSE promotional programs
* Nominated First Aid workers
* Emergency Contact Information
* Construction Activity Zone, TMP Diagrams
* HSE performance including positive performance indicators

## External communication

The nominated CPP representative shall consult and liaise with the client, interested parties and workers. External communications may consist of:

* WorkSafe / Safe Work Authorities
* Councils / Road Authorities
* Landowner and interested party communications
* Contracted works progress updates as agreed between CPP and the client
* Queries raised, direction to be sort and confirmed in writing (variations, design modifications, altered schedule, delayed work)

Refer: TMP-Q007 Letterhead

## Construction Risk Assessment Workshop (CRAW)

* Prior to works commencing, CPP shall facilitate a Kick-Off Meeting with sub-contractors, clients and interested parties where required in order to ensure all interested parties:
* Understand the safe systems of work requirements, procedures, and related work instructions to relevant the SoW.
* Participate in Project Risk Register discussions to ensure all parties understand the identified hazards, risks and mitigation strategies which are required to be implemented.

Refer: PRE-C001 Construction Risk Assessment Workshop

SOP-C001 Project Management and Control

SOP-C002 Start Construction Process

CHK-C046 Project Management

## Satisfaction and complaints

Client satisfaction is monitored and measured at appropriate levels through regular meetings with the client, all feedback from the client must be documented and reviewed by the area manager as part of the management review process. Corrective actions shall be developed and a response to the feedback.

CPP shall manage complaints received and shall:

* Record the complaint for remediation, allocate nominated roles to action.
* The Site Manager shall notify the client’s representative immediately.

The CPP Project Manager shall:

* Provide an initial response to the complainant within three (3) days of receipt of the complaint.
* Undertake all practical measures to modify the activity causing the negative impact.
* For external complaints, a detailed response shall be provided to the complainant within an agreed timeframe following receipt of the complaint.

Refer: FRM-Q012 Opportunity for Improvement

REG-Q005 Opportunity for Improvement Register

# Document and data control

The CPP Business Management System (BMS) encompasses what CPP has determined as being necessary to effectively support the businesses documented WHS and other business risks. In addition to fulfilling legislative requirements and obligations pertinent to providing safe systems of work and processes associated with the complexity of product and services CPP provides. The documents are located on The Volt under the following subheadings:

* Corporate Hub
* Project Hub
* Functional Team Spaces
* Business Management System – Controlled Library

Refer: [The Volt – (CPP Intranet)](https://quantaservices.sharepoint.com/sites/CPP)

# Emergency preparedness

* A risk assessment of the types of emergencies for this project must be conducted and managed as part of the project specific risk register.
* The identified project specific emergency risks identified during the development of the project risk register must be added to the project Emergency Management Plan.
* Consideration MUST be given to how the emergency plan interacts with 3rd parties or asset owners, if working on an operational or otherwise occupied site. (e.g., conducting work within a live sub-station).
* Plans will highlight the types and nature of emergencies, emergency contacts, procedures.
* Frequency of project emergency drills is **3** months, but the intervals between tests may be reduced depending on type of emergency and duties for people specified in the plan.
* The emergency plan of a project **MUST** be tested within the first **4** weeks from when a project commences and then re-tested at least every three months.
* Emergency drills must be documented using the *Emergency Response Review Form.*
* Emergency Management Plans **MUST** be communicated to all project personnel during the induction and placed on notice boards.

Refer: TMP-C066 Emergency Management Plan

FRM-S115 Emergency Response Review

REG-S031 Master Risk Register

## Evacuation diagram

The evacuation diagram is communicated during the induction process and is displayed on site noticeboards, and central areas within the depot. The location of items listed below on the evacuation diagram includes:

|  |  |
| --- | --- |
| * First aid kit / AED * Firefighting equipment * Muster points (2) | * Spill kits * Car parking locations * Plant / vehicle travel paths |

Consideration shall be given to how the emergency plan integrates with 3rd parties or asset owner’s emergency response requirements.

* Plans will highlight the types and nature of emergencies, emergency contacts, procedures.
* Emergency drills shall be conducted quarterly.
* Emergency drills must be documented using the *Emergency Response Review Form.*

Refer: FRM-S115 Emergency Response Review

## First aid resources

* CPP shall ensure first aid resources are comparable to the workplace risks associated to the projects SoW, a first aid risk assessment shall be facilitated during site mobilisation to ensure first aid kits are fit for purpose and adequate supplies are readily available. In addition to ensuring workers are competent in first aid response as per role requirements dictates.
* Subcontractors are required to provide competent first aid workers and kits comparative to the contracted SoW as per role requirements.
* A ratio of 1:20 workers as a minimum are required to hold current first aid qualifications. For high-risk workplaces that do not have timely access to medical or ambulance services this ratio changes to 1:10 workers.
* The location of the first aid kits will be identified on the CAZ map.
* First aid kits will be formally examined, and an anti-tamper tag installed at the commencement of a project and on a six-monthly basis thereafter by a First Aid trained worker.
* Qualified first aiders shall be notified and recorded on the Emergency Contact Details displayed in the site office and lunchroom. All workers shall be made aware of the names and phone numbers of the site first aid representatives at the site induction.

Refer: FRM-S107 First Aid Assessment

CHK-S116 First Aid Kit Checklist

FRM-S117 Emergency Contact Details

# Event reporting and recording

* All CPP workers are required to report all events, near misses, dangerous occurrences involving workplace injury, environmental impact or mobile, plant and equipment or infrastructure damage directly following the occurrence.

Refer: SOP-S001 Event Reporting & Investigation Procedure or QEST

## Event management

* CPP shall ensure all incidents are reported immediately to the site supervisor, who will then notify the project manager accordingly. The client shall be notified within 2 hours of an unplanned event occurring unless otherwise agreed upon. The project has an HSE Event Reporting Matrix that indicates the response required and whom must be contacted when an unplanned event occurs.

Refer: SOP-S001 Event Reporting & Investigation Procedure

## Notifiable event reporting

The CPP HSE manager shall notify the relevant state authorities when there has been a:

* notifiable work-related injury
* serious event involving the failure or malfunction of safety equipment or a breach of procedure

Refer: SOP-S001 Event Reporting & Investigation Procedure

## Incident notification

* The Project must ensure all incidents are documented and entered into the incident management database to allow incident actions to be monitored and an effective method of follow up to occur. All incidents, no matter how insignificant, must be reported and investigated to prevent similar incidents from occurring.

Refer: SOP-S001 Event Reporting & Investigation Procedure

FRM-S001 Event Notification Report Form or QEST

## Safety alert

For potential and actual level 4 and 5 events, the project HSE Advisor shall prepare a safety alert and submit it to the HSE Manager to record and raise awareness of the events occurrence with 48 hours. Other events that offer relevant learnings shall also be considered for distribution and communication as a safety alert, regardless of event severity. Safety alerts shall be developed and disseminated to encourage a high level of safety awareness across all of CPP.

Refer: TMP-S003 Lessons Learnt

## Event investigation

Investigations shall take place as soon as practicable, event investigations shall focus on identifying the root causes of the unplanned event, so that appropriate control measures can be identified, recommended, and implemented. The incident investigation methodology CPP uses is ICAM (Incident Causation Analysis Method). The depth and composition of the investigation teams reporting requirements vary subject to the assessment of the actual and the potential consequence of the event. The level of the investigation shall be determined by the potential consequences.

Upon the completion of the investigation, the findings and recommendations must be distributed to the relevant work groups for discussion at a toolbox meeting. All incidents and the results of the subsequent investigation are to be tabled and reviewed at the next project management review meeting as a minimum.

Refer: SOP-S001 Event Reporting and Investigation Process

FRM-S002 Event ICAM Investigation Form or Electronic Equivalent

FRM-S003 Event Witness Form or Electronic Equivalent

FRM-S005 ICAM Investigation Report or Electronic Equivalent

## Lessons learnt

In line with the capacity models continual improvement and learning opportunities, lessons learnt shall be disseminated to the business consistently in order to improve transparent event communications and demonstrate how we are able to “fail safely”.

Refer: TMP-S003 Lessons Learnt

# Injury management

* In the event a worker’s health or wellbeing is impacted at work the overriding aim is to return the worker to pre-injury duties As Soon As Practicable (ASAP). Therefore, CPP shall facilitate injury management and rehabilitation protocols where CPP, the worker, medical professionals and the relevant WorkCover body work together to successfully achieve the impacted workers rehabilitation in a timely manner. The following process and documents must be completed and followed.
* Appointing a responsible worker to accompany the injured worker if medical treatment is required.
* Communicate and complete the following forms in conjunction with the injured worker:
  + Doctor’s Letter is issued
  + Authority to Exchange Information
  + Employers Obligations and Rights

Refer: TMP-S007 Doctor Letter Template

FRM-S008 Authority to Exchange Information

FRM-S009 Employers Obligations and Rights

## Rehabilitation and return to work

CPP shall ensure a rehabilitation program is developed by the Rehabilitation and Return to Work Coordinator (RRTWC) in conjunction with the injured worker, rehabilitation provider, and project manager. The return-to-work plan shall provide an objective, measurable system to plan and monitor the injured worker’s safe return to work. The Return to Work (RTW) program may include partial or staged return to work, modified duties, retraining, or alternative duties.

|  |  |  |
| --- | --- | --- |
| Return to Work Coordinators | Carl Hogg | Shield Miranda |
| Contact Details | 0400 166 121 | 0418 719 816 |

*Table 10: RRTW Coordinator*

# Health surveillance and workplace monitoring

CPP shall determine health surveillance requirements to ensure safe work practices effectively mitigate the Potential to negatively impact workers health and well-being based upon:

* Potential exposure to hazardous chemical or substances which are known carcinogens or are known to negatively impact workers health (asbestos, synthetic fibres, lead, silicon, PCB, BTEX, NORM).
* Exposure Time Weighted Average (TWA) limits may be exceeded.
* CPP shall engage an industrial hygienist to identify and assess levels of exposure and validate whether existing controls are effective to manage exposure, PPE is fit for purpose or if further health monitoring is warranted on a as needs basis.

## Health surveillance

All health surveillance shall be carried out by a registered medical practitioner (e.g., assessment can be completed by an occupational health nurse).

All health surveillance reports shall remain confidential and will be kept in the workers secure personnel file managed by the CPP People & Culture Department. Managers will be notified of the assessment results only as required and not provided with copies of the reports. A copy of the health surveillance report must be provided to:

* The worker.
* The Regulator, if the report contains any of the following:
  + - Advice that the test results indicate the worker may have contracted a disease, injury, or illness as a result of carrying out work
    - Recommendation that remedial measures be taken, including whether the worker can continue to carry out work with the hazardous chemical that triggered the health surveillance.

## Workplace monitoring

The monitoring of physical and chemical agents that may harm a worker’s health will be conducted to ensure time weighted average (TWA) exposure standards are not exceeded.

Workplace monitoring shall be conducted in line with standard methodologies utilising well-maintained and calibrated sampling devices.

If the monitoring results demonstrates the TWA exposure standard has been exceeded, the event must be recorded as and investigated to identify causal factors and implement appropriate corrective actions.

Following an investigation, the affected workers must be informed of the potential health effects are clearly understood, and health surveillance scheduled as per legislative requirements.

Refer: SOP-S011 Health Surveillance Procedure

## Fatigue management

CPP shall ensure project constructions hours including travel are risk assessed to confirm hours of work comply with the fatigue management guideline and workers fatigue is managed.

* Strictly follow the maximum ten-hour work-day rule. Exceptional cases of working beyond ten-hours must be approved by the Project Manager, or above.
* Minimum rest breaks between shifts to be established.
* Short breaks are recommended to be taken to eat, stay hydrated, to relieve physical and/or mental work stress.
* Scheduled R&R time is to be established and taken.
* Journey management plans shall be implemented and followed.
* Continual monitoring of workers fatigue shall be facilitated where fatigue impairment has been identified.

Refer: GUI-S003 Fatigue Management

## Drugs and alcohol

* CPP shall implement processes to monitor workers fitness to work through facilitating Drug and Alcohol testing throughout the project. other than for evidenced medical purposes. Where a worker is taking prescription drugs which may impact on the worker’s capacity to undertake work safely, they must notify the site manager and declare their medical condition on the site induction form for use in the event of an emergency.
* Alcohol testing will be conducted daily prior to commencing project work.
* CPP shall conduct random, post-incident and ‘for cause’ testing.
* Drug testing shall only be facilitated by competent third-party NATA accredited service providers which meet the testing standard requirements.

Refer: SOP-H005 Drug and Alcohol

FRM-S162 Oral Fluid and Alcohol Drug Assessment

FRM-Q024 Medical Declaration

## Smoking

* CPP is a smoke-free workplace, smoking is prohibited within all enclosed indoor areas including vehicles, fuel, and chemical storage areas. Designated smoking areas may be installed at the Project Manager’s discretion so long as butt receptacles are procured and cigarettes are disposed of accordingly, the designated smoking area shall be identified on the CAZ map.

## Pandemic management

CPP shall facilitate the monitoring and exposure management as per state and client requirements as they evolve for any declared pandemic.

Refer: PLN-S001 Covid-19 Management Plan

# Permit to work systems

CPP shall comply with the clients Permit to Work (PTW) system applicable to the project, copies of all permits issued by the PCBU shall be retained in the project folder. Where the HSR Advisor is not available, the site or project manager shall be responsible for issuing permits.

Where the CPP PTW system is to be used the following high-risk activities must have appropriate permits authorised prior to commencing work:

|  |  |
| --- | --- |
| Permit Type | Requirement |
| Excavation and Trenches (Sec 35.13) | Shall be completed for any excavation or ground penetrating activities prior to work being undertaken. |
| Hot Work (Sec 26.2) | A Hot Work permit is required for any work involving the generation of sufficient heat or ignition source to ignite flammable liquids, vapours, gases, or materials. |
| Working at Height (Sec 35.11) | A working at height permit must be completed if fall arrest, prevention or restraint equipment is used as the main safety control (e.g., climbing structures). Note: not required when working in an EWP. |
| Confined Space Entry (Sec 35.12) | A Confined Space (CS) permit is required for every entry and work in a CS. |
| Lift Study (Sec 35.15.2) | A lift study is required when the load exceeds 10 tonnes, the Load mass > 75% Safe Working Load (SWL), it’s a Large or complex tilt up and precast concrete lifts, it’s a dual lift, or involves workers in a work box. |

Refer: TMP-C087 Management Plan Appendices

## Isolations, lockout and tagging

Isolations and worker lock out tag out shall be in accordance with Client’s or Principal’s isolation requirements, in conjunction with CPP Isolations and Lock out Procedure. The isolations and lock out procedure apply to all workplaces where ‘live’ or potentially live services are present. Isolation of high voltage equipment shall only be facilitated by authorised and approved appointed workers.

Refer: SOP-S005 Isolations and Lock Out

SOP-S007 Performing Secondary Isolations

FRM-E017 Secondary Isolation Sheet

FRM-E018 Secondary Isolation Risk Assessment

## Hot work

CPP shall ensure risks associated with hot works during Fire Danger Season and Total Fire Ban (TFB) comply with the local and or state authority requirements. Additionally, workers must complete a hot work permit daily when project activities include welding, grinding, soldering, gas cutting, or any use of heat or flames. The following control measures must be in place during all hot work activities:

* A hot work permit is required for any work involving the generation of sufficient heat or ignition source to ignite flammable liquids, vapours, gases, or materials.
* The hot work permit details all task specific requirements that must be implemented prior to the hot work commencing.
* A hot work permit may be cancelled, and hot works ordered to cease if surrounding conditions change.

### Total fire ban days

All hot works require an exemption from relevant fire authorities during total fire ban days.

### Designated hot work bay

* A Designated hot work area (DHWA) is an area specifically configured to undertake Hot Work activities.
* A permit for hot work inside a DHWA requires a permit to be completed only **once** and the permit conditions must be maintained at all times.

Refer: FRM-S018 Hot Work Permit

# Mobile plant

Mobile plant will be onboarded prior to being used on site, inspected daily (logbook or equivalent), operated by a competent / licensed operator, and maintained in accordance with manufacturers specifications.

Mobile plant will be selected on the best for project basis, considering the SWL, required use, available space, simultaneous operations, and safe approach distances.

### Plant movement

Plant movement must be considered when developing the traffic management plan to ensure there is minimum interaction between people and plant.

Any plant that leaves site for anything other than maintenance or repairs must be re-onboarded, (including weed and seed checks) prior to recommencing work.

### Plant modifications

Any modifications to plant must be certified by an engineer.

### Plant registration

When certain types of high-risk plant are purchased, they must be registered with the relevant State or Territory Regulatory Authority before they can be used.

Refer: FRM-S123 Mobile Plant Inspection Form

TMP-C019 Traffic Management Plan

# Tools and equipment inspection and calibration

CPP shall ensure all portable tools and equipment procured are fit for purpose, are stored appropriately, and maintained in good working condition in addition to being:

* Inspected prior to mobilisation.
* Calibration test date validated prior to mobilisation.
* Daily checks facilitated when in use.
* Any damaged or worn equipment shall be tagged out of service and quarantined.
* High pressured hydraulic equipment shall be:
* Operated in accordance with the manufacturer’s instructions.
* Inspected prior to use including:
  + condition of pressure plugs
  + dates where applicable
  + pressure hoses and connections.

## Equipment, inspection testing tagging and maintenance

### Electrical inspection test and tag requirements

The project must ensure that all Powered Electrical Tools and Equipment (PETE) items are fit for purpose and inspected to ensure they remain safe to use. PETE testing shall be performed by a licensed electrician or a person who has completed a nationally recognised Test and Tag Training Course.

* CPP shall ensure installation and testing of electrical equipment complies with AS 3000 Electrical installations (known as the Australian/New Zealand Wiring Rules) and AS 3760 In-service safety inspection and testing of electrical equipment.
* The recording of RCD test results shall include the actual trip time as recorded on the test device.
* CPP shall ensure inspection, testing and tagging of electrical equipment is carried out as follows:
  + **Daily Inspection** ofelectrical equipment by workers prior to use
  + **Quarterly inspection,** testing and tagging of all electrical equipment on a construction site
* The equipment requires fitting of a tag that shows the name of the worker or company that performed the test and the test or retest date.
* All portable electrical equipment shall be tagged, or otherwise identified as having undergone a 3-monthly inspection in line with the Rugby (RGBY) colour system, with quarterly inspections records maintained in the onsite compliance register.

|  |  |  |  |
| --- | --- | --- | --- |
| Dec - Feb | Mar – May | June – Aug | Sept - Nov |

### Lifting equipment

Prior to procurement, the purchaser must ensure that the specifications for each item meet the industry and regulatory standards, in addition to the manufacturer or supplier being able to supply the instructions for inspection and testing documents. All lifting equipment must be inspected, proof tested and marked where required by a National Association of Testing Authorities (NATA) accredited specialist prior to use.

* Rigging and lifting equipment shall be inspected prior to use including:
  + shackles
  + slings
  + chains.
* Lifting gear shall have visible manufacturer markings that shall be legible throughout the working life of the equipment.
* A qualified engineer must approve manufactured lifting attachments.
* Non-Destructive Testing (NDT) shall be carried out as required.
* Regular inspections shall be carried out on anchor points, fall prevention systems and structures.
* All lifting gear shall be tagged, or otherwise identified as having undergone a 3-monthly inspection in line with the RGBY colour system, with quarterly inspections records maintained in the onsite compliance register.
* The use of synthetic fibre slings is restricted and must be inspected by a competent worker for defects each time before use.
* All rigging gear shall be stored off floor level and away from hazardous substances.
* Any damaged or worn equipment will be tagged Out of Service.

|  |  |  |  |
| --- | --- | --- | --- |
| Dec - Feb | Mar – May | June – Aug | Sept - Nov |

Refer: REG-S009 WHS Register

FRM-S122 Fall Protection Equipment Inspection

### Other tools and equipment

* Inspection and or calibration of tools and equipment must be conducted in accordance with the table below. **If a specific competency** is required to conduct an inspection, it will be recorded on the inspection form.

|  |  |
| --- | --- |
| ACTIONS | FREQUENCY |
| Weekly vehicle inspections | WEEKLY |
| AED / Defibrillator | MONTHLY |
| RCD inspections | MONTHLY (30 Days) |
| Electrical equipment (tag and testing) | QUARTERLY |
| Height safety equipment (e.g., harnesses, lanyards etc.) | QUARTERLY |
| Rigging and lifting equipment | QUARTERLY |
| Alcolizer re-calibration | SIX MONTHLY |
| Fire extinguishers | SIX MONTHLY |
| First aid kits / Eye wash station | SIX MONTHLY |
| Ladders and access equipment | SIX MONTHLY |
| LVR kits | SIX MONTHLY |
| Spill kits | SIX MONTHLY |
| Torque wrenches | ANNUAL |
| Electrical test equipment | ANNUAL |
| Plant onboarding (continuous) | UPON ARRIVAL ON SITE |

# Hazardous chemicals and substances

* CPP shall ensure all management of hazardous chemicals and substances comply with the Global Harmonised System (GHS), state and commonwealth use and disposal requirements. In addition to providing workers with safe systems of work, information, instruction, supervision, training and fit for purpose PPE in order to undertake work safely.
* CPP hazardous chemical and substance quantities are procured on demand to avoid storage over long periods of time and minimise the risk on significant unplanned releases. CPP shall ensure hazardous chemicals and substances are bunded or stored in compliant chemical cabinets or containers and shall be segregated as per the segregation chart, in addition to ensuring:
  + Bunds shall hold > 120% of the volume of the largest chemical container.
  + Shall not be stored within 5m of No-Go Zones.
  + Shall not be stored within unventilated sea containers.
  + Shall not be stored near stormwater drains, causeways, rivers, or creeks.
  + Shall have a fit-for-purpose spill kit available near storage area.
  + Safety Data Sheets (SDS) shall be readily available (electronic copies are sufficient).
  + Decanted chemicals are labelled and stored in compliant containers.
  + Labels and signage are intact and can be easily read.
  + Transportation and disposal requirements are adhered to:
    - < 20 Litres—disposed of at a licensed / registered landfill depot
    - > 20 litres—a licensed waste contractor shall be engaged to remove the substance.
* Auditable records of waste company licences, disposal sites and waste consignment notes must be held on file for each removal activity.
* CPP shall ensure all fuel trailers, pods or trucks are either self-bunded, stored and or transferred within a bunded area, to minimize the potential risk of uncontrolled release causing an unplanned environmental event.

## Compressed gases

* CPP shall ensure compressed gases are segregated, stored, and secured to prevent falling as per GHS requirements, in addition to ensuring ignitions sources are kept at a distance of >3m, and shall not be located within one metre from any door, window, air vent or duct.
* Liquefied gases (e.g., anhydrous ammonia, chlorine, propane, nitrous oxide, and carbon dioxide)
* Non-liquefied gases (e.g., argon, oxygen, nitrogen, and helium)
* Dissolved gases- (acetylene is a dissolved gas)
* Gauges for flammable compressed gases such as oxyacetylene must be fitted with flash back arrestors.

Refer: REG-S002 Master Register of Substances

FRM-S020 Hazardous Chemical and Dangerous Goods Risk Assessment

GUI-S019 Dangerous Goods Storage Segregation Chart

FRM-G006 Spill Response Equipment

CHK-G003 Spill Response Checklist

## Asbestos, synthetic material fibre and silica management

CPP shall ensure all potential risk of exposure to asbestos (ACM/PACM), synthetic mineral fibres (SMF) and silica is managed in accordance with state legislative and regulatory requirements to ensure that any potential respirable workplace exposure risks are mitigated where practicable or reduced to ALARP.

### Friable asbestos

Friable asbestos means material that is in a natural or powder form or that can be crumbled, pulverised, or reduced to powder by hand pressure when dry and contains asbestos e.g. pipe lagging and natural in ground material.

### Non-friable asbestos

Non-friable asbestos can be defined as material containing asbestos that is not friable asbestos, including material containing asbestos fibres reinforced with a bonding compound e.g. asbestos pipes, floor tiles, asbestos sheets used for building.

### General

* If either friable or non-friable asbestos is discovered on a project site, the following should be implemented:
  + The person who discovers the asbestos situation will notify / contact Site Manager immediately.
  + The Site Manager in turn will contact Project Manager and Head of Safety.
  + An asbestos removal specialist company will be engaged to remove the asbestos. (Class B asbestos removal licence is required for removal of non-friable asbestos. Class A asbestos removal licence is required for removal of friable asbestos).
  + An Asbestos Removal Plan and safe work method statement is to be prepared for the removal of friable asbestos by the asbestos removal specialist company for the removal of the asbestos waste.
  + A SWMS (only) is required for non-friable asbestos under 10m2.
  + To make the site safe while waiting for an Asbestos specialist, the areas should be disturbed as little as possible, and barricaded.

**Note** – prior to the preparation of the Asbestos Removal Plan, Consolidated Power Projects will forward to the asbestos removal specialist company a copy of their Asbestos Plan Review.

Refer: FRM-S102 Asbestos Removal Plan Review

REG-S005 Asbestos Register

## SMF categories

Synthetic mineral fibres (SMF) are a sub-category of man-made vitreous fibres manufactured for high temperature, high performance thermal insulation applications and used to line furnaces, kilns etc., posing similar risks as ACM to workers, and therefore respirable SMF shall be treated with similar risk mitigation strategies as ACM.

## Silica

Silica dust is generated at CPP during processes such as crushing, cutting, drilling, grinding, sawing, and jackhammering of concrete, during earthworks and working in, or adjacent concrete batch plants.

Silica exposure is a potential STKY event and controls must be implemented. Controls include:

* Use of water carts to minimize dust exposure to all workers.
* Isolation (distance) between bulk earthworks and workers.
* Pressurised, (air-conditioned) cabins for earthmoving equipment.
* Non pneumatic jack hammers to limit the dust generation.
* Wet cutting / drilling during the demolition of concrete.
* Dust clean-up using an M or H-class industrial vacuum cleaner.
* Where wet cuts are not possible, there is a mandatory requirement for dust clean up and P2 respirators (not dust masks).
* P2 dust masks for nuisance dust
* P2 respirators when working directly in a dust cloud.
* Concrete batch plants require a full independent risk assessment on dust control measures, in conjunction with the plant owner, with an emphasis on engineering controls and dust minimization at the source.

Refer: FRM-S020 Hazardous Substance and Dangerous Goods Assessment

REG-S031 Master Risk Register / Project Risk Register

# Waste management

CPP’s industrial and general waste management solutions shall comply with local, state, federal agencies, and contractual obligations in order to help conserve finite resources. Where practicable sustainable reduce, reuse, and recycle methodologies shall be used when facilitating asset and material disposal associated with our core work activities.

Waste management and minimisation assessments shall adopt the following principles:

|  |  |  |
| --- | --- | --- |
| Priority | Strategy | Action |
| 1 | Avoidance as top priority | Action to reduce waste generated by industry and government |
| 2 | Resource Recovery | Reuse, reprocessing, recycling, and energy recovery |
| 3 | Disposal as last resort | Environmentally responsible disposal management |

*Table 11 Waste Management Principles*

## Waste separation

To assist in the achievement of the waste management strategy, all wastes from this project will be separated into the following streams:

* Recyclable waste, such as metal, cardboard, wood, etc., shall be separated into their own categories
* General waste
* Regulated waste shall be separated into its own categories.

## Waste tracking

All regulated wastes from this project will be tracked using Waste Disposal Register.

## Contaminated materials and wastes

*Waste Management and Minimisation Assessment* will also determine the requirements for contaminated materials and wastes.

Refer: TMP-C009 Construction Environmental Management Plan

FRM-G002 Waste Management and Minimisation Assessment

REG-S009 WHS Registers

# Mobilisation

CPP shall plan, implement, control, and maintain the BMS, and associated processes required to identify, risk assess and manage the predetermined WHS objectives successfully.

Refer: CHK-Q002 Mobilisation Pre-Audit Check

## Site establishment

* CPP shall develop a site establishment mobilisation checklist that affords a systematic approach to the site set up. An inspection shall be facilitated within two weeks of the site being established to check conformance against the checklists predetermined goals.

Refer: FRM-S052 WHSE Admin Mobilisation Checklist

## Security

CPP shall ensure site security restricts unauthorised access to the project’s infrastructure, materials, assets, mobile plant, and equipment, and are secure from damage or vandalism through providing the following resources:

* All worksites shall have perimeter fences or delineators erected that are deemed adequate for effectively controlling the risk associated with the SoW.
* Lockable containers to store hazardous substances, tools, and small equipment.
* Plant and equipment locked and secure when not in use.
* All site compound and laydown area gates shall be locked outside of working hours.
* All unauthorised entries will be reported to the site manager immediately.

Refer: FRM-S052 Admin Mobilisation

## Barricading

Barricading shall be erected and maintained around work areas where work group segregation, work area delineation, protection of open excavations, trenches, pits or drop zones must be established.

CPP has established four standard barrier indicators for exclusion zones that shall be used:

* Delineation – Woven barricading tape, bunting, danger tape and reflective signs
* Soft Barricading – Red / Orange 700mm hi-visibility safety cones, webbed or mesh fencing
* Hard Barricading – Windrows (must be half the height of the largest tyre on site), concrete or water filled barriers
* Fencing – Temporary fencing, portable electric fencing, scaffold fencing

| Barrier Type | Description | Example |
| --- | --- | --- |
| Delineation | **Tape** - Yellow and black caution tape must be used in conjunction with an information tag hung at intervals on the barricade to indicate its purpose and owner.  To be erected using temporary bollards, star pickets or permanent fixtures.  Must not be used to prevent access to a restricted area or prevent fall at an open trench or excavation.  To provide a warning only. | BlackYellow_Stripe  Please note barrier tape colour must be selected to ensure it does not conflict with client asset access requirements. |
| **Tape** - Used to identify hazards that pose an immediate danger to life or health.  Not to be used for general work.  To be erected using temporary bollards, star pickets or permanent fixtures.  Must not be used to prevent access to a restricted area or prevent fall at an open trench or excavation.  To provide a warning only. | Danger  Please note barrier tape colour must be selected to ensure it does not conflict with client asset access requirements. |
| **Temporary Bollards** - Used to secure bunting flags or tape around a cordoned-off area. | th |
| **Traffic Cones** - Should be used as a means of directing traffic away from hazardous areas such as slew arcs of cranes, or equipment parked on roadways. | Image result for traffic cones |
| **Bunting Flags** - Bunting should be used in conjunction with an information tag hung at intervals on the barricade to indicate its purpose and owner.  To be erected using temporary bollards, star pickets or permanent fixtures.  Also used for warning when crossing or working near overhead power lines.  Should not be used to prevent access to a restricted area or prevent fall at an open trench or excavation.  To provide a warning only. | C:\Users\M.Klaassen\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\2F1FFFBE.tmp |
| Soft barricading | **Orange Para-webbing or mesh** - Semi-permanent protection from hazardous areas where there is no risk of a fall. Prevents general access.  To be erected using star pickets no greater than 5 metres apart and must be capped.  Can be used to protect open trenches / excavations less than 1.5m deep if erected at a minimum of 1m from the edge  Should not be used in live substations | C:\Users\M.Klaassen\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\AF9CD96F.tmp |
| Used to delineate working above or restrict access to low-moderate hazards.  Traffic Cones with adjoining bar or chain Barrier Boards  Retractable Barrier  Temporary Fencing (1100mm high) | Cone_Pole |
| Barrier_board |
| Image result for Retractable Barrier |
| Image result for Temporary Fencing (1100 mm high) |
| Hard barricading | Temporary protection for workers in high traffic areas, directs traffic away from areas such as work sites, pedestrian traffic only access and hazardous areas.  Foldable Frame  Scaffold  Water-filled  Concrete  Engineered barrier | 100744_06417541_A |
| Image result for Tubular Scaffold or Timber balustrade |
| concrete_barrier |
| Semi-permanent secure fencing (1800mm high) | Semi-permanent delineation of walkways or protection of hazardous areas. May be used to protect from falls around trenches and high severity hazards. Prevents general access. | C:\Users\M.Klaassen\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\E64D19EA.tmp |
| Star picket | Used to secure barrier materials around a cordoned off area.  Should be installed by firmly driving into the ground no deeper than 300mm at maximum intervals of 5m. Consideration must be made of potential underground services in the area.  Not be used in areas where earth grids are installed e.g., substations.  All star pickets must be capped with plastic protective covers.  Star picket must be installed with the use of a star picket driver. | A picture containing paper clip  Description automatically generatedproduct1-s |
| Pig-tail stake | Used to secure bunting flags or tape around a cordoned off area.  Should only be used on soft ground surfaces e.g., grass / soil.  **Should not be** used in live substations | 75365-green_rope_stake_1_2 |

*Table 12 Barrier Table*

## Signage

* As a minimum CPP shall ensure the following signage is erected:
* Construction site “No Unauthorised Entry” signs displayed at access and egress points
* Construction signage advising PPE requirements, Principal Contractor, address, contact details
* STKY Essentials and Energy Wheel
* Muster point
* Speed limits and CCTV Warning

Refer: GEN-C002 Construction Signs Code

## Site shutdown

* The CPP Site Manager has a duty of care to ensure that the worksites are left in a safe and secure when they are shut down for extended periods (not including rostered project breaks).
* The CPP site shutdown checklist must be completed prior to the worksite shutdown to ensure the site is secure and safe state

Refer: CHK-S053 Site Shutdown Checklist

## Site remobilisation

* When the site is scheduled to remobilise following a shutdown a WHSE inspection must be completed to ensure the site WHSE conditions are adequate for the return to work.

Refer: FRM-S063 Weekly Inspection

FRM-S062 Lines Weekly Inspection

# Traffic management

## Traffic Management Plan

* CPP shall ensure a Traffic Management Plan (TMP) is developed where we are the Principal Contractor, referenced as (PCBU), which shall incorporate Construction Activity Zone (CAZ) maps detailing site speed limits, travel path direction, parking areas, access and egress, speed limits, signage, designated smoking area, communications, radio protocols, minimization of reversing, barriers, muster point. In addition to minimising community member access and egress inconvenience where practicable.

Refer: TMP-C019 Traffic Management Plan

## Traffic control

Traffic Control Plans (TCPs) required by local authorities shall be outsourced and prepared by approved vendors when works may potentially impact local road networks and interested parties. Workers shall be verified and deemed competent as per state guideline requirements prior to developing and endorsing TCPs.

## Chain of responsibility

CPP workers and business partners who undertake delivery of materials and or supplies shall adhere to the Heavy Vehicle national Law (HVNL) requirements and Chain of Responsibility (CoR) obligations to ensure the safe transit of materials to and from the project. This includes but is not limited to:

* Driver of a heavy vehicles shall follow the CoR licensing, fatigue management and all other requirements.
* Assurance shall be sought from haulage service providers that statutory requirements, traffic permits and associated controls are appropriate to loads (e.g., oversize / over-weight, pilot vehicle, additional road signage / traffic management measures).

Refer: SOP-S004 Chain of Responsibility

# Subcontractor management

Subcontractor HSE systems shall be initially evaluated prior to engagement by the HSE team. subcontractors are required to comply with the CPP HSE requirements predetermined by the project. Once the SoW has been awarded the subcontractor shall be issued with project specific subcontractor pack which provides the information necessary to successfully comply with contractual obligations.

All subcontractors will utilise the CPP HSE systems unless otherwise formally requested and approved to use their own system.

To be approved for use, a subcontractor’s HSE management system must meet or exceed CPP’s HSE system requirements. Subcontractors shall be held to account and have the same responsibility to deliver the contracted SoW as CPP therefore any deviation and or variation must be approved and authorised in writing.

Refer: GEN-C010 Subcontractor Pack

TMP-C087 Management Plan Appendices

# Site induction

## Inductions

* The CPP site manager shall ensure all personnel who attend site have completed the appropriate induction/s.
* A site-specific induction shall be developed addressing site specific HSE hazards, not already included in the CPP induction.
* All workers who attend site shall complete the online CPP Induction (via QEST) and the site-specific induction (conducted in person on site).
* All visitors or delivery drivers shall complete the visitor or delivery driver induction.
* Records of completed CPP inductions and copies of tickets, licenses and construction cards are readily available for all workers.
* All workers must hold a General Induction Construction Card (white Card) prior to attending site (non-negotiable).

Refer: CPP Online Induction (QEST)

TMP-S135 Project Induction

## Management of visitors

* CPP defines a visitor as a person that:
  + is not a frequently on site, operating plant, or equipment
  + does not perform any works.
* Visitors must complete the visitor’s induction and be accompanied by an inducted worker at all times.
* Visitors are required to wear the minimum PPE requirements when attending site.
* It is not mandatory for visitors to hold a construction card.

Refer: FRM-S139 Project Visitor Induction

## Management of delivery drivers

* CPP defines a delivery driver as a person that:
  + Delivers or receives materials, loads
  + Does not perform any other work (other than delivering or receiving materials)
* Delivery drivers must sign in and out on the site attendance register
* Deliver drivers must be escorted by a fully inducted person

Refer: FRM-S161 Delivery Driver Induction

## Personal protective equipment

The minimum task specific personal protective equipment (PPE) requirements shall be identified and must be worn as per project requirements.

|  |  |  |
| --- | --- | --- |
| All personnel working at site shall wear the following PPE as a minimum: | | |
| Name | PPE | Use |
| Day / Night long sleeve cotton high visibility shirt | A picture containing clothing, yellow, work-clothing  Description automatically generated | To be worn at all times while on site |
| Day / Night long cotton trousers | A pair of blue jeans  Description automatically generated with medium confidence | To be worn at all times while on site |
| Lace up steel toe-cap boots | A pair of brown boots  Description automatically generated with low confidence | To be worn at all times while on site |
| Safety glasses -  Medium impact | A picture containing sunglasses, spectacles  Description automatically generated | To be worn at all times while on site. Additional eye protection required if working with power tools |
| Hard hat | A picture containing headdress, clothing, helmet  Description automatically generated | To be worn at all times while on site and in operational areas. The sun shield brim is optional. To be worn at all times when in an operational sub station |
| Glove clip |  | To be worn at all times while on site |
| Correct rated gloves for task | A picture containing handwear, clothing, plant  Description automatically generated | To be worn at all times whilst completing tasks where cuts and puncture risks are identified  Minimum Mechanical Protection is 5 for cut resistance and 4 for puncture protection. Any gloves rated less than that can be used if their use is explained on the SWMS or Take 5. |

# Project high risks identified

* CPP shall plan and execute work assuming that a failure may occur at any time, we shall endeavour to learn from activities, works, and mistake in order to continually improve our WHS BMS successfully. Through asking at each phase of a work activity “Do we have the capacity to absorb a failure without causing harm?”.
* The STKY Essentials (STKY) have been established to the minimum standardised controls to be facilitated when undertaking high-risk activities. So, when they are effectively implemented the potential of STKY failures causing life-changing events shall be mitigated and “fail safely” without causing harm to workers, environmental, infrastructure or mobile plant and equipment damage.

## Simultaneous work activities

CPP shall ensure that where two or more site operational activities scheduled to occur simultaneously, the HSE planning, execution and controls are identified throughout each phase of where the works physical aspects interface. A discussion and agreed upon controls shall be documented, recorded, and distributed by CPP to all key interested parties for their individual SoW.



*Figure 7 Simultaneous Work Considerations*

## Working remotely

CPP shall ensure work activities facilitated in isolated and remote work areas defined as being areas where emergency assistance will be delayed due to the location, time or nature of the SoWs, the additional controls must be implemented:

* UHF radio fitted to vehicles
* Satellite phones
* Water stored >10 litres
* Journey Management Plans completed

Refer: SOP-S021 Working Remotely

## Inclement weather

CPP shall ensure environmental exposure risks associated with extreme weather events are managed, PPE is fit for purpose and suitable for geographical locations, appropriate measures shall be implemented during adverse weather conditions to ensure the safety of workers. In addition to ensuring temporary construction offices, depots, and amenities are secured sufficiently, with due consideration given to cyclone prone regions.

Weather conditions shall be monitored using Bureau of Meteorology (BOM) for the potential extreme weather events and the Lightning near me app used to track for lightning activity from as far as a 50 km radius of the work area. At 30km from the work area, plans shall commence to shut down work and all work will cease outside when lightning approaches 10km from the work area.

## Working outdoors

* CPP shall ensureworks conducted in outdoor environments are risk assessed and fit for purpose PPE is provided and safe systems of work implemented to mitigate the potential risks of exposure from transpiring.
* Artificial or natural shelter
* Water made available
* Wear appropriate layers thermal clothing in cold temperatures
* Industrial safety helmets fitted with a solar protection brim attachment
* 30+ sunscreen applied to exposed skin every 2 hours
* Wear tinted protective safety glasses

## Hazardous manual handling

* CPP shall ensure hazardous manual handling activities where an activity requires workers to lift, lower, push, pull, carry, or otherwise move, hold, or restrain a person(s), animal(s) or thing(s) are risk assessed prior to commencing work, involving one or more of the following:
* Repetitive or sustained force
* High or sudden force
* Repetitive movement
* Sustained or awkward positions
* Exposure to vibration

## Hazardous noise and vibration

CPP shall identify areas where work activities may produce noise levels exceeding the noise exposure standard, provide fit for purpose PPE and provide the necessary risk awareness, supervision, and instruction

Projects shall facilitate the following controls:

* Ensure mobile plant and equipment service and maintenance schedule adhered to.
* Schedule works to reduce the amount of time a worker is exposed to excessive noise.
* Establish exclusion zones around hazardous noise areas where practicable.
* Provide fit for purpose hearing protection for tasks.
* Rotate tasks to reduce exposure.

## Helicopter OPGW tensioning

* CPP shall ensure the following pre-flight checks risk assessments have been carried out by the contractor prior to commencement of any helicopter stringing operations:
* Review airborne emergency procedure.
* Verify weather warnings and risk assessments have been reviewed.
* Safety briefing conducted for workers involved in the helicopter OPGW work methodology.
* Conduct a briefing for the brake operator on the terminology to be used when communicating.
* Check the cargo hook, swivels, attachment hooks and any other equipment and material to conduct the work is in serviceable order.
* Obtain from the network operator or contractor, a clear indication of the lines and structures to be included in the operation and all known areas of public concern.
* Before lifting off, confirm that the strop is positioned correctly above the skid.
* The pilot shall setup and communicate with tensioning crew when to prepare for the draw wire/OPGW.
* The pilot must maintain communications with tensioner operator.

## Drones

A drone is classified by the Civil Aviation Safety Authority (CASA) as a Remotely Piloted Aircraft (RPA), CPP shall ensure the following requirements are applied when using an RPA on CPP worksites.

### CPP requirements

All RPA operations over CPP worksites are classified as commercial operations, therefore:

* Where CPP is not the principal contractor, permission must be obtained from the client, asset owner, and or principal contractor prior to RPA operations commencing.
* A SWMS for RPA operations must be developed, reviewed, and approved by workers and interested parties prior to works commencing.
* All RPA’s must remain at > 30 metres from assets, infrastructure e.g., sub stations, wind turbines, overhead lines.
* The operators RPA license must be verified and recorded in the training matrix.
* RPA operations must be communicated at project pre-start meetings so that all site staff and contractors are aware of the scheduled RPA operations.
* All workers have a right not be photographed and must be given an opportunity to decline having their image recorded.

### CASA requirements for RPA < 2kg

* The CASA Aviation Reference Number (CASA ARN) must be provided to the Site Manager.
* The pilot must lodge flight details to CASA using the [CASA online notification form](https://forms.casa.gov.au/public/launch.aspx?portal=1&id=%7b1b396e81-f96a-433c-b377-05e5aa11cba2%7d&Form=RPAS).
* The pilot must obtain CASA permission to operate any RPA within 5.5km of any airfield.
* Flights must not be >120 metres above ground level.
* Flights must be facilitated during daylight hours.
* The operator must keep the RPA within visual range.
* Flights must be kept within the project worksite boundaries.

### CASA requirements for RPA > 2kg

* The pilot must obtain CASA permission to operate any RPA within 5.5km of any airfield.
* A Remote Pilot Licence (RePL) is required for each specific RPA that is scheduled to be operated.
* The pilot must hold, or work for a company that holds a Remote Operators Certificate (ReOC).
* The model of the RPA in operation must be referenced on the ReOC.

## Driving, working in or near traffic

CPP recognises the threat of injury while driving for work and as such has implemented policy and supporting documents that outlines expectations to workers and safe systems of works to be applied, including but not limited to ensuring:

* Compliance with CPP’s Motor Vehicle Procedure.
* Drivers must not use mobile phones while driving (unless hands free accessories are installed).
* Drivers must ensure vehicles are roadworthy, fit for purpose, service and maintenance schedule are up to date.
* Drivers must ensure all loads are secured, including inside cabin.
* An approved Journey Management Plan (JMP) for any travel in adverse weather condition, or > three hours, or >2 hours if the driver is under <25 years old.
* Work activity where vehicles, mobile plant and equipment, community members may be impacted during construction works are facilitated on or near roads, verges, footpaths shall be managed in accordance with contractual obligation and local state traffic management requirements.
* A traffic management plan shall be developed for road sections affected by project works, and active controls must be implemented.

Refer: QEST Journey Planner

QEST Fatigue Test

SOP-S002 Driving Safely

SOP-F004 Motor Vehicle Procedure

FRM-S021 Weekly Vehicle Inspection

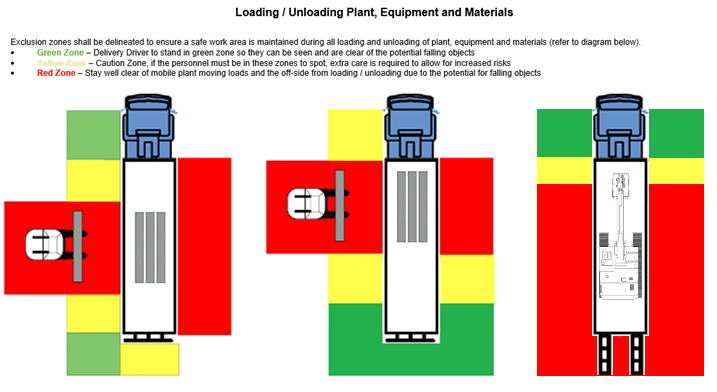
## Working with or around high-risk plant

CPP shall ensure any work with, or around high-risk plant used to facilitate project works e.g., cranes, truck mounted cranes, gantry cranes, excavators, kanga diggers, skid steers, loaders, elevated work platforms (boom, scissor, knuckle), forklifts, manitou, telehandlers, Tesmec, drill rigs, helicopters, drones must ensure the following:

* Prior to commencing work on site, a pre-acceptance form has been completed to ensure fit for purpose.
* Ensure plant risk assessment, operator’s manual and safe operating instructions are within cabin.
* Ensure service and maintenance records are readily available.
* Only operate high risk plant with the relevant HRW licence.
* Overhead and underground services are identified prior to commencing works.
* Set up plant operating exclusion zones, identify blind spots, establish positive communication protocols, consult, and communicate risks to workers.
* ROP’s and FOP’s are fitted where determined by the plant risk assessment.

### Loading / Unloading plant, equipment and materials

* Loading and unloading of plant, equipment and materials exclusion zones shall be demarcated to ensure a safe work area.
* **Green Zone** – When not in the cabin or operating lifting devices, the delivery driver must stand in green zone so they can be seen and remain clear of the potential falling objects.
* **Yellow Zone** – Caution zone, when workers must be in the zone to spot, extra care is required as there is an increased risk of falling objects.
* **Red Zone** – Workers must stay well clear of mobile plant when moving loading or unloading due to the increased risk of line of fire and falling objects.



*Figure 8 Loading and Unloading Exclusion Zones*

### Positive communication protocol

CPP has established slewing radius No-Go zone for all operating mobile plant and equipment, (spotters, safety observers are the exception) unless the following controls have been applied:

* Positive communications with the operator must be established.
* The operator must acknowledge the request to approach.
* The operator must lower attachments to the ground prior to authorising approach.
* The operator must advise workers when it is safe to approach.
* No light vehicles, heavy vehicles, other mobile plant or equipment or workers shall park or stand directly behind or in front of heavy vehicles, mobile plant, or equipment.

## Working at heights (WAH)

When planning work activities requiring working at heights, control measures shall first consider the hierarchy of controls with the aim of eliminating WAH if possible and then if not consider other controls to reduce the risk to ALARP:

* Work at ground level where practicable

CPP shall ensure where there is the potential risk of a worker falling from one level to another or when working at height is required, a risk assessment must be completed, and appropriate controls measures implemented to reduce the risk to ALARP. The following control measures shall be implemented as a minimum:

* Worker competencies must be verified.
* A working at height permit is not required when works are within the confines of an elevated work platform or scaffold.
* A working at height permit must be completed if fall arrest, prevention or restraint equipment is used as the main safety control (e.g., climbing structures).
* Drop and exclusion zones must be established, including spotter, flagging, bunting, bollard.
* A working at height rescue plan and resources must be prepared and in place.
* Fall arrest and restraint equipment must be inspected prior to use.
* All defective equipment must be quarantined “out-of-service” tag attached.
* Fall prevention equipment must be tested and tagged (RGBY).
* Workers must assess the structure’s condition prior to climbing.
* Workers must always remain attached to the structure during climbing activity.
* Attachment points are designed, certified, and regularly inspected by a qualified, competent SME.

Refer: FRM-S140 Work at Heights Permit

FRM-S122 Fall Protection Equipment Inspection

### Scaffolding

Once scaffolding has been constructed, CPP shall inspect scaffolding to ensure it has been built to design specifications prior to use in addition to ensuring:

* The inspection interval is facilitated every 30 days (unless any changes occur).
* Inspection occurs after an event likely to impact the stability of the scaffold.
* Records of inspections shall be recorded and filed.

The following scafftag system (or similar) shall be used to identify:

* The scaffold is safe to use.
* Do not use scaffold.
* Record the date of inspections.
* The scafftag system will be clearly identifiable at each access point of the scaffold.

The site manager shall be notified if the scafftag is missing, and an out of service tag shall be attached.

#### Under 4 metres

* Where the working height of the scaffold does not exceed 4m it must have handrails installed and be erected, altered, and dismantled as per the manufacturer’s specifications
* Scaffolds with handrails must be used instead of trestles.

#### Over 4 metres

* All scaffold workers must hold an appropriate High-Risk Work (HRW) license for scaffolding.

### Ladders – fixed and portable

* All ladders on site must be fit for purpose, made of fibreglass, and must be inspected prior to use when working in an electrical facility, substation, on transmission or distribution lines, including, but not limited to, ensuring:
* It is prohibited to work from a ladder unless it is a platform ladder.
* Ladder inspections shall occur at 6-monthly intervals.
* The ladder load rating must not be < 120kg (rating plate must be clearly visible).
* The ladder shall have a unique identifying number.
* Secured at the top or bottom against movement.
* Manufactured for industrial use.
* Used only for the designed purpose:
  + on a firm and stable surface
  + erected at a ratio of 4:1
  + extended at least one metre above a surface being accessed
  + < 6.1 metres for a single ladder.

Refer: FRM-S120 Ladder Inspection

## Confined space entry

Where workers are required to work in confined spaces, CPP shall ensure appropriate measures are undertaken to prevent the potential of harm to ALARP. All confined space entry work shall be risk assessed against and comply with the states confined space criteria, legislative and regulatory requirements.

Refer: FRM-S033 Confined Space Entry Permit

## Excavations, trenches and underground services

CPP shall ensure any ground disturbance >300mm in depth is treated as an excavation and or trench where the risks are minimised to ALARP, through implementing adequate controls including but not limited to ensuring:

* Engineering considerations must be made to ensure the excavation does not adversely affect any adjacent structures.
* A Before You Dig Australia (BYDA) enquiry shall be lodged to identify potential underground services that may be impacted by proposed excavation or trench works.
* An excavation PTW is valid for <30 days and shall be issued with the BYDA.
* A construction drawing highlighting the area to be excavated and water, soil and spoil controls must be attached to the PTW.
* A site survey is facilitated to locate and mark where the services are located with visual markers.
* Visually confirm and record the depth and location of services at regular intervals using non-destructive digging methods when services are identified within the proposed excavation area.
* All exposed high-risk services shall be protected with a physical protection barrier.
* Written approval is obtained prior to proceeding with any changes in the SoW.
* The services location information is effectively communicated to the operator and spotter, safety observer.
* A spotter / safety observer has been appointed where there is a risk of inadvertent contact with underground services.
* No workers or other persons are to enter an excavation greater than 1.5m deep unless a written Geotechnical Engineer approval has been issued or there is appropriate benching, battering, or shoring installed.
* Inspections shall be carried out daily by a competent worker as a minimum, when workers are required to access and egress open excavations.
* Excavations left overnight shall be adequately secured and protected to stop inadvertent falls and injury (workers, community members, wildlife, livestock, pets).

Refer: SOP-S116 Excavation

SOP-C007 Wind Farm Trenching and Cable Laying

FRM-S156 Daily Excavation Inspection

FRM-S041 Excavation Permit

## Working on or near electricity

* CPP shall ensure when installation and decommissioning electrical works are conducted on and working with or near electricity (substations, switchyards, transmission, or distribution lines) or when using portable electrical equipment, the following controls shall be implemented as required:
* The network owner’s safety rules must be adhered to at all times.
* All workers must be licenced electricians, licenced linesman or an approved apprentice or trainee.
* Fit for purpose PPE must be worn and maintained when working on or near electricity.
* All PPE and any insulated equipment must be tested and tagged in accordance with the electrical testing and or manufacturer’s requirements.
* Work must cease if lightning is within close proximity to the worksite (25km distribution, 30km substation, 50km transmission as a minimum) or as advised by network asset owners.

### Authority – Isolations

* Receive and hold high voltage field access authority.
* Work access permit issued - line dead.

### Safe Approach Distances

CPP shall ensure the network’s asset owners Safe Approach Distances (SAD) are maintained when facilitating works where there a potential to breach the network asset owner’s SAD rules.

* A spotter must be appointed if mobile plant and equipment or materials may encroach the SAD.
* Stringing works adjacent to existing lines must implement an earthing system to avoid inductance.

### Working on transmission or distribution infrastructures

CPP shall ensure all work activities planned to be facilitated on transmission or distribution lines are undertaken in accordance with the relevant asset owner’s electrical safety rules and CPP working on or near live electricity STKY requirements.

### Working in sub-stations and switchyards

* CPP shall ensure all work activities planned inside substations and or switchyards are undertaken in accordance with the relevant asset owner’s safety rules and CPP working on or near live electricity STKY requirements.
* Metal ladders and measuring tapes must not be used in substations and switchyards.
* Materials must not be carried above shoulder height.
* A minimum of two people shall carry long objects (below shoulder height).
* Two qualified electrical workers shall be scheduled when working on live panels or switching.
* Low voltage rescue kits must be available while working on live panels or switching.

### Earths

* Select and initiate safe application of conductor or earth wire grips:
* Only trained and competent personnel shall apply earths.
* Check conductor or earth wire running freely through sheaves.
* Only approved and rated earthing devices and methods to be used.
* Earth all mobile plant used in a live HV environment by using permanent network earth or independent temporary earth electrode.
* Hot sticks used for applying earths are to be in test date and cleaned prior to use.

### Fixed electrical equipment

* All construction wiring, including switchboards and wiring to relocatable structures, such as temporary site offices and compounds, must be installed, inspected, tested by a licensed electrician, and marked as “Construction Wiring” to ensure it meets the general requirements for electrical work to be conducted as per AS 3012.
* A licensed electrician must verify the results of the safety and compliance test by issuing a Certificate of Compliance—Electrical Work to the owner or Principal Contractor in charge of the electrical installation. If the Certificate of Compliance is not being issued to anyone, it will still be completed and retained on site as a record.

### Flexible cords / Extension leads

* All connection plugs shall be of a shrouded bonded type or made of transparent material.
* Power leads shall be suitably restrained, supported above ground level using either cable stands or standard lead restraining clip.
* Power leads shall not be routed along access ways, walkways or handrails unless supported by lead restraining clip/s.
* Portable RCD units shall be used to distribute power directly to power tools.
* Power boards with in-built RCDs may only be used in the office environment.
* Double adapters shall not be used at all.
* No portable generators are to be used on site without an inbuilt RCD.

## Working with cranes

CPP shall ensure crane lifting operations are managed in accordance with legislative and regulatory requirements to mitigate the associated risks to ALARP in addition to ensuring due consideration is given to the following subjects.

### Lift assessment

* CPP shall ensure free-fall devices must be rendered inactive throughout operational activities.
* A non-significant lift is required to have a basic lift plan in place.
* A lift assessment, study or plan must be prepared by the crane supplier when significant lifts or non-routine lifting operations are scheduled.
* All crane lifts shall be under 80% of the rated crane capacity, unless otherwise approved by HSE Manager.
* SWMS must be provided by the crane supplier or developed in consultation with the work crew prior to commencing lifting.
* All lifting equipment must be inspected prior to use.
* No workers are to work under a suspended load or in the line of fire (slewing radius).
* A spotter MUST be utilised to ensure contact between services, structures or workers are prevented and restrict access to exclusion zones.

### Significant crane lifts

* CPP shall request a lift plan for a lift involving equipment that is project-critical or replacement long lead time, regardless of load mass or crane capacity, CPP has defined significant crane lifts as lifts that:
* Exceed 10 tonnes
* Have load mass of > 75% rated capacity of the crane
* Are large or complex tilt up and precast concrete lifts
* Involves s multiple crane works / dual lifts
* Work near live overhead powerlines
* Lifts materials over live plant
* Is regarded as having a significant degree of difficulty
* Involves an item of equipment project critical or replacement long lead time (regardless of load mass or crane capacity).
* Lifts workers in work box or basket.

### Ground conditions and ground support for outriggers

* It is the responsibility of the crane operator to review drawings, ground conditions, marked services and the area set-up to determine if further support is required.
* Ground bearing conditions for all lifts on virgin ground, must be obtained from a geotechnical engineer.
* A BYDA and PTW must be completed, with existing services marked out prior to commencing work.

# Decommissioning and demolition

* CPP shall identify SoW limitations for decommissioning and demolition works during the initial risk workshop and document identified hazards in the risk register, including but not limited to ensuring:
* The subcontractor responsible for the decommissioning and demolition works shall obtain the demolition licence.
* The demolition licence shall be displayed in the project office.
* The subcontractor responsible for the decommissioning and demolition works shall prepare a demolition plan.
* The decommissioning and demolition plan must be submitted to CPP for approval:
  + The decommissioned assets shall be stored, transported as per the client’s instructions.
  + The assets condition shall be inspected and recorded prior to delivery, post-delivery and on handover to storage facility.
  + The disposal of the decommissioned and demolished assets shall be facilitated as per contractual requirements.

Refer: TMP-C042 Project Commissioning Management Plan

TMP-C003 Commissioning Plan - Minor Secondary Works

SOP-E301 Substation Commissioning Process