New Zealand DEFENCE FORCE
Te Ope Kātua O Aotearoa

C.H.E.S.S.

DEI Construction Health, Environment & Safety Specification

Volume 2 - Processes, Procedures & Templates

Version 2.0

June 2024

A FORCE FOR NEW ZEALAND

New Zealand Defence Force

Te Ope Kātua O Aotearoa

Headquarters
New Zealand Defence Force
34 Bowen Street
Wellington
New Zealand
Phone +64 4 496-0999
Facsimile +64 4 496-0869
NZDF Website: www.nzdf.mil.nz

Deputy Director – Health & Safety DEI
Rian Engelbrecht
Original Document Researchers and Writers
Brian Matthews: Technical Writer & Process Analyst
André Chatvick: Technical Writer & Policy Analyst

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TE OPE KĀTUA O AOTEAROA
DEFENCE FORCE

Chief of Defence Force
HEALTH & SAFETY STATEMENT

OUR SAFETY VISION:

Everyone in the New Zealand Defence Force is responsible for safety in everything we do.

MY COMMITMENT:

I am committed to keeping our people and the public safe. I am committed to resourcing and pursuing excellence in safety through our systems, procedures, collaboration, consultation and participation. I am committed to preventing harm from unacceptable behaviours such as sexual harassment and bullying. I cannot achieve this without your participation.

AM Kevin Short
Chief of Defence Force
8 August 2022

OUR SAFETY FOUNDATION:

Our NZDF core values are the foundation that supports our safety framework. They motivate us to do more than simply comply with all Health and Safety legislation. Everyone in the NZDF is to demonstrate:

- **Tū Kaha** | Courage to speak up when we see a situation that may cause harm;
- **Tū Tika** | Commitment to working in a safe way, from individual responsibility, to safety leadership, and respectful relationships;
- **Tū Tira** | Comradeship by looking out for each other's safety; and
- **Tū Māia** | Integrity by doing safety right, even when no one is watching.

WE WILL:

- Take action by minimising risk to ourselves and others as far as possible;
- Continuously improve our safety system through reporting safety events, concerns and subsequent actions; and
- Demonstrate our safety values at all levels wherever we work, train and operate.

HEI MANA MŌ AOTEAROA
A FORCE FOR NEW ZEALAND

Preface

The Defence Force's aim is zero deaths or injuries on its camp or base construction sites.

In the context of New Zealand's Construction sector this is a difficult challenge as time and financial pressures and inexperience causes contractors and workers to ignore or not apply safety measures. Managing busy worksites is hard, particularly when integrating specialised contractors and workers on short-term assignments into the worksite workforce.

NZDF leads by example, and health and safety leadership is no different. Government procurement rules define NZDF as a "Purchasing PCBU" and require it to set clear expectations for health and safety, to monitor health and safety performance and coordinate communications and activities across multiple sites, diverse locations and dozens of projects.

With this in mind, the DEI Health and Safety Team developed the *Construction Health, Environment and Safety Specification* (CHESS) as part of DEI's Health and Safety Management System and Framework. It sets out the health and safety policy and specifications for DEI construction sites and projects and states how DEI measures compliance with them.

CHESS is designed and informed by standard process, good practice, New Zealand and International research and hard-learnt lessons. CHESS aligns with ISO 45001, AS/NZ4801 and the (revoked) OHSAS 18001 health and safety standards.

CHESS assists contractors and FM Providers by providing evidence and documentation for prequalification schemes, external and internal company audits, and support demonstrating the *so far as is reasonably practicable* requirement of the Health and Safety at Work Act 2015. It sets out multiple sub-systems, templates and processes that contractors/FM Providers must adopt and integrate within their existing systems.

CHESS informs a contractor's safety plans and ensures that those plans reflect the project's scope. It also removes the problem of multiple site-specific safety plans for a single project. Under CHESS, the Contractor/FM Provider is responsible for ensuring all sub-contractors adhere to a single plan. Sub-contractors can focus on making their work method statements, job safety analysis and risk assessments function as intended.

Not all CHESS specifications apply to every project. While there is a sizeable mandatory section for contractor and construction activities, the larger part is only applicable to the scope of works being undertaken by the contractor e.g. if the Contractor/FM Providers is not using underwater remote vehicles on the worksite, that section is not applicable.

CHESS is a comprehensive resource for the many construction activities occurring on the Defence Estate, and it ensures contractors and Facility Management Providers develop robust safety management plans showing how safety is managed between all parties and how the Defence Force's expectations will be met.

DEI has designed the processes, procedures and templates to support the implementation of the CHESS specifications. They should be familiar to most construction workers, and each Contractor/FM Provider should have little trouble adapting to them to allow streamlined, coherent and standardised implementation, monitoring and recording of health and safety across the Defence Estate, in line with DEI and regulatory expectations.

Welcome to the team.

Rian Engelbrecht

Deputy Director Health and Safety

Defence Estate and Infrastructure

June 2024

New Zealand DEFENCE FORCE
Te Ope Kātua O Aotearoa

DEFENCE ESTATE & INFRASTRUCTURE

COMMITMENT TO WORKSITE HEALTH AND SAFETY

SAFE PLACE, SAFE PEOPLE, SAFE ESTATE

Mark Brunton
Head of Defence Estate and Infrastructure
October 2022

OUR COMMITMENT:

Defence Estate and Infrastructure (DEI) is committed to achieving excellence in safety through effective worksite safety systems and processes for of all our workers (staff and contractors).

To achieve that, DEI developed and implemented the CHESS system. It is an all-encompassing worksite safety management system incorporating policies and processes which provide assurance that all DEI construction activities are carried out safely and meet the highest levels of safety performance and industry best practice.

OUR OBJECTIVES:

- Support NZDF operational activities through the supply and maintenance of safe estate infrastructure.
- Provide and maintain safe systems of work for estate infrastructure construction activities.
- Reduce the risks arising from Defence Estate operations to a level that is as low as reasonably practicable.

WE WILL:

- Demonstrate, support and reinforce NZDF's Core Values in the operation of worksite safety systems
- Promote the benefits of improving worksite health and safety across DEI and the entire Defence Estate.
- Support DEI's worksite health and safety framework and clearly set out everyone's responsibility for worksite safety within DEI.
- Effectively resource DEI's health and safety personnel and systems.
- Minimise worksite risks by recognising current and future infrastructure hazards and the best ways of managing those risks.
- Apply DEI's health and safety by design system to all projects.
- Train DEI workers in health and safety hazard awareness and worksite risks.
- Inform our contractors and stakeholders of worksite hazards.
- Ensure contractors are competent to work safely.
- Empower our contractors to take necessary actions to minimise health and safety risks.
- Empower our contractors to stop work when they feel that the risks to health and safety are too great to continue.
- Investigate incidents thoroughly to learn from events and prevent reoccurrences.
- Report regularly and openly on our health and safety performance against our objectives and targets.
- Establish and operate a health safety review and ongoing improvement process.

EVERYONE GOES HOME SAFE AT THE END OF EVERY DAY

A FORCE FOR NEW ZEALAND

Stop Work Authority

The DEI Stop Work Authority is a reminder to all DEI staff and each Contractor/FM Provider that they have a legal right to refuse to undertake certain work as per section 83(1) of the Health and Safety at Work Act 2015. This section states:

"A worker may cease, or refuse to carry out, work if the worker believes that carrying out that work would expose the worker, or any other person, to a serious risk to the worker's or other person's health or safety arising from an immediate or imminent to a hazard"

A Stop Work Authority (SWA) can also apply where persons believe that others are placing themselves in a situation that exposes them, or others to hazards. It includes situations where incompatible work activities encroach upon or interfere with one another creating the potential for an incident. The SWA may affect Permitable works, Job Safety Analysis and other relevant documentation.

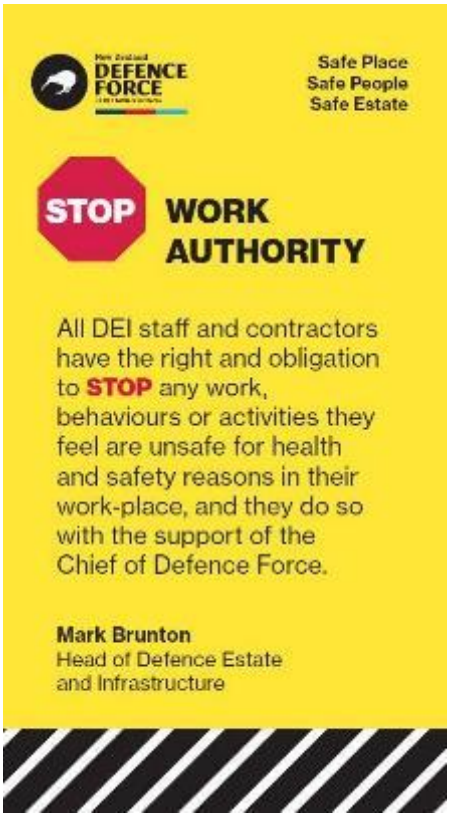
Each Contractor/FM Provider and their sub- and subordinate contractors must be issued the DEI Stop Work Authority card. The DEI SWA card is a reminder that speaking up about safety is a legal right and is encouraged by the Chief of Defence and Head of Defence Estate and Infrastructure's values and commitment to health and safety. Workers need not display or present the SWA card to any persons in order exercise a SWA. Each Contractor/FM Provider must encourage workers and sub-contractors to speak up with regards to health and safety, with no retribution, intimidation or disciplinary action exercised upon any person who uses the SWA in good faith.

DEI envisions that in most cases, workers would only exercise the SWA for minor events, and that supervisors will quickly return the situation to a safe state, or modify any unsafe behaviour. However, should the SWA not be minor in nature, each Contractor/FM Provider and their Site Managers must escalate the issue to a DEI Official at the earliest possible opportunity. Work is not to resume until the concerns raised in the SWA are appropriately addressed and the situation and hazard have been modified to a state that is safe, so far as is reasonably practicable. If the matter cannot be resolved with the worker's employer or the Contractor/FM Provider, the Contractor/FM Provider must escalate the SWA to the appropriate DEI Official.

Each Contractor/FM Provider must maintain records of SWA usage, including recording them in the NZDF Joint Assurance Reporting System (JARS). Site Managers and Team leaders must share any Stop Work Authority actions at the following daily prestart for the project/works

Key steps when using the DEI SWA are:

- Identify the unsafe situation, behaviour or uncontrolled hazard;
- Alert potential affected persons to the danger;
- Remove self and others away from the danger;
- Discuss the issue and agree to stop work until all parties involved agree it is safe to proceed;
- If a solution is not achieved, the Contractor/FM Provider must inform the DEI Official and a risk assessment must be conducted to determine if appropriate risk management is applied to the situation;
- When resolved the person raising the SWA should be recognised in a positive manner;
- The site Construction Safety Management Plans/Facility Management Safety Management Plan should be updated to capture the lessons learnt where applicable; and
- The SWA details shared at the next site Toolbox and/or prestart meeting.



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Glossary

Term	Definition
AIR	**A**cceptance **I**nspection **R**eport. A report sent to Site Managers informing them that an inspection was performed and no items were found to be below the standard required by DEI.
ALARP	**A**s **L**ow **A**s **R**easonably **P**racticable – the term used to indicate the level of risk is acceptable given cost and difficulty considerations.
Asbestos Removalist	A PCBU holding either a Class A or Class B license for asbestos removal, or an unlicensed PCBU that removes asbestos. A Class A license holder may remove any type or quantity of asbestos containing material (ACM) including any amount of friable asbestos or ACM and any amount of asbestos. A Class B license holder may remove asbestos contaminated dust or debris (ACD) associated with removing any amount of non-friable asbestos or ACM., Unlicensed asbestos removalists may remove bonded asbestos (non-friable) up to $10m^2$ pf non-friable asbestos or ACD associated with the removal of that amount of non-friable asbestos, cumulatively over the course of the removal project. ACD is not associated with friable or non-friable asbestos and is only a minor contaminant.
Audit	A regular formal audit of contractor systems and processes carried out by DEI officials. The project's Complexity Model score determines the frequency of audits.
BAU	**B**usiness **A**s **U**sual - BAU describes activities or processes undertaken in the course of normal business on the site or in the building.
Cancelled Permits	Cancelled permits are due to emergency or Non-conformance.
CAPEX	**Cap**ital **Ex**penditure
CDF	**C**hief of the **D**efence **F**orce
Cease Work / suspension of work	A "Cease Work" or suspension of work will be called in the event of an injury or notifiable event occurring, or when a permitable task or surrounding work area is considered unsafe, or could become unsafe. If additional hazardous activities or safety controls are required, the DOC, authorised DEI official, or FMPI may cancel the PTW and require a new one to be raised before the task can continue.
CHESS	**C**onstruction **H**ealth, **E**nvironment and **S**afety **S**pecifications
Collective Hazard	The product of worksite and/or Camp or Basecamp of base activities which individually are not a hazard, but when occurring concurrently create a hazard.
Complexity/Risk Model (CRM) Score	The Complexity Risk Model (CRM) Score sets the frequency of project inspections, spot inspections, audits, and project-related meetings. It is based on a range of project factors.
Confined Space	Defined as any activity occurring wholly or partly in a confined workspace as defined in AS 2865:1995 Safe Working in a Confined Space.
Consequence	A consequence is the result of a top event. The possibility or severity of a consequence may be mitigated by controls
CMP	**C**onstruction **M**anagement **P**lan. The overall construction project plan; the Construction Management Plan scales to the size of the project, and may involve managing a range of sub-projects to ensure movement of traffic, plant, materials, and work-site activities occur harmoniously without clashes.

CPM	**C**onstruction **P**roject **M**anager. The CPM is responsible for actively managing the construction project, including some health and safety elements, including: • Ensuring contractors produce and keep relevant project documentation; • Ensuring Contractors provide accurate and timely Lost Time Injury and Incident reports; • Discussing performance scores with Contractors, identifying any issues and taking appropriate action; • Ensuring the Contractor has accurately notified DEI and recorded hazards and risks on the site, through inspection of the project hazard register; • Performing regularly spot checks on the operation and worker compliance of Job Safety Analysis requirements and specifications; • Determining the frequency of inspections through the Construction Safety Monitoring Level (CSML) of specific projects; • Reviewing and endorsing/rejecting Contractor *Construction Safety Management Plans (CSMP)* and *Facilities Maintenance Safety Management Plans (FMSMP);* and • Assisting Contractors in the identification of on-site hazards. In the event of an incident occurring, the CPM is responsible for: • Assisting any injured staff and ensuring the safety of other personnel in the vicinity affected by the incident; and • Ensuring the Contractor has notified WorkSafe New Zealand of the incident, if required, and informing the DEI Regional Health and Safety Specialist (RHSS).
Construction Stages	Construction Stages are periods during which broadly aligned activities occur, e.g. site preparation, excavation, horizontal works, foundations, vertical works, roofing, cladding, internal fit out, commissioning, decommissioning etc.
Contract Administrator (Engineer to Contract)	The professional engineer, architect, surveyor, or other one natural person named or identified in the 3910 Special Conditions or such other natural person as may be subsequently appointed by the Principal (NZDF) under (NZS 3910:2023) to act as Contract Administrator (Engineer to the Contract). The Contract Administrator shall not be a body corporate or firm.
Contractor, the	A *PCBU* as defined in Section 17 of the Health and Safety at Work Act 2015, and the Contractor on a NZDF worksite primarily responsible for delivering the project and hiring and managing sub-contractors for it.
Control	Controls are designs, systems, methods or procedures used to minimise or eliminate the risk of injury or damage from hazards.
Corrective Actions	Corrective measures that may include: a. Eliminating the hazard; b. Engineering alternative outcomes to lower the risk; c. Minimising the risk; d. Improving risk management measures; and **e.** Providing worker training to reduce the risk.
CSML	The **C**onstruction **S**afety **M**onitoring **L**evel. A scoring model that sets the frequency of DEI inspections and audits. A range of project factors form the base of CSML Scores and are reassessed and reset at the beginning of construction stages and/or as required depending on the works.
CSMP	**C**onstruction **S**afety **M**anagement **P**lan. The document required by DEI through a variation to NZS 3910:2013. It is the companion of the CMP, and follows the same timeline as the CMP. It assists the Contractor to manage health and safety on the worksite/s, with the purpose of ensuring worksite activities occur within a set of safety parameters, as well as ensuring actions on one part of the worksite do not endanger activities on another part of the worksite.

Dangerous Goods	Substances that have explosive, flammable, toxic, infectious, corrosive or environmentally hazardous properties and containers that have held dangerous goods. Class 1 – Explosive materials Class 2 – Gases Class 3 – Flammable Liquids Class 4 – Flammable Solids Class 5 – Oxidising Substances and Organic Pesticides Class 6 – Toxic and Infectious Substances Class 7 – Unallocated Class 8 – Corrosive Materials Class 9 – Miscellaneous
DD	**D**eputy **D**irector
DDMS	**D**efence **D**ocument **M**anagement **S**ystem
Defence Estate	NZDF camps and bases, including NZDF land managed from individual camps and bases.
DEI	**D**efence **E**state & **I**nfrastructure – NZDF Branch responsible for creating, maintaining and upgrading NZDF properties, bases and infrastructure.
DHSMP	**D**EI **H**ealth and **S**afety **M**anagement **P**lan. A health and safety management plan prepared to manage the hazards and risks, including collective hazards. It is associated with multiple projects occurring on a Camp or Basecamp of base. Depending on circumstances, the *DHSMP* may supplement or be replaced by a SIMOPS.
DEI Official	The DEI employee monitoring the worksite. The official's roles may include conducting NZDF/DEI inductions, issuing Permits to Work, inspecting and auditing the worksite's plant, equipment, activities, and workers and contractor processes and procedures, and any other duties required by CHESS and DEI. May include Deputy Directors Delivery, Project Managers, Project Officers, and Regional Health and Safety Specialists, or DEI Officers of Compliance.
Demolition	Total or part destruction and removal of a building or structure.
DOC	**D**efence **O**fficer of **C**ompliance. DEI Officers of Compliance have overall responsibility and accountability the evaluation, consultation and issuing of Permits to Work on the Defence Estate. DEI Officers of Compliance are responsible for: • Reviewing Permit to Work applications for appropriate risk mitigation controls and evidence of competent work practices; • Issuing and holding electronic and hard copies of each live and suspended *Permit to Work*; • Consulting with SIMOPS and other stakeholders to ensure permits will not conflict with other permits, site activities or Camp/Base activities; • Receiving and recording closed, cancelled and suspended permits; • Facilitating weekly NZDF induction training for contractors and their workers; • Assisting Contractors in the identification of on-site hazards; and • Assisting EDDs to maintain oversight of compliance schedules.
EDD	**E**state **D**eputy **D**irector – The DEI staff member managing construction or maintenance performed at a camp or base or other Defence sites. For the purposes of this procedure, EDD also refers to any delegate of the EDD or the Project office.
ERP	**E**mergency **R**esponse **P**lan - An ERP is a detailed plan that is executed in the event of an emergency. It includes processes and procedures relating to fire and earthquakes, and evacuation processes and meeting points. Some tasks may require amendments to the site/base ERP.
Estate Deputy Director	**(EDD)**. DEI manager managing each NZDF Camp or Basecamp of base's structures and facilities. The EDD is responsible for organising and overseeing construction and maintenance activities.

FLOC	Functional Location Object Code (FLOC) system enables identification of the location and the purchase, maintenance history and likely replacement date of individual assets.
FM Provider	A company contracted by NZDF to provide and manage Facilities Management activities on NZDF Camps and Bases. Companies employed by NZDF to provide to manage some CAPEX but mostly OPEX work on NZDF Camps and Bases. FM work encompasses: a. Planned Maintenance Project (PMP); b. Unscheduled maintenance work; c. Low value works; and **d.** Minor new works.
FMPI	**F**acilities **M**aintenance **P**ermit **I**ssuer. FM Compliance Officers have overall responsibility and accountability for the evaluation, consultation and issuing of Permits to Work for FM Provider capital projects, PMP works, and scheduled and unscheduled maintenance tasks undertaken by the FM Provider on behalf of NZDF. FMPIs may conduct FM worksite inductions and compliance checks.
FMSMP	**F**acilities **M**aintenance **S**afety **M**anagement **P**lan – FM Providers act as the Contractor for a range of works on NZDF camps and bases, including work sub-contracted to 3rd party contractors and contractors directly employed by the camp or base. As the work may range from minor to major, based on the value and complexity of the work, the FM Provider must prepare and maintain an overarching FMSMP which sub-contractors must adhere to when working for the FM Provider.
GFCI	**G**round **F**ault **C**ircuit **I**nterrupter. A type of circuit breaker that shuts off power when it senses an imbalance between the outgoing and incoming current.
GM	**G**eneral **M**anager
Good Practice	Range of legal requirements, approved codes of practice, other recognised/approved safety guidelines and accepted professional/industry practices and standards collectively providing for health and safety in the construction industry.
Hazard	**A thing or process that can cause harm.** A **hazard** is anything that is a potential source of harm or damage to people, plant, equipment or environment.
HDEI	**H**ead **D**efence **E**state and **I**nfrastructure
High Pressure	Hazards involving pressures higher than normal atmospheric pressure. This includes pressurised gases, cryogenic liquids and pressurised liquids.
Hot work	Defined as any work where the temperatures generated are likely to ignite surrounding materials, e.g. cutting and welding, metal grinding, blow lamps and other equipment producing sparks, heat or a naked flame
ICE	**I**nspection **C**hecklist and **E**valuation
Incident	In this document, an incident is an event that occurs on the worksite and includes: a. Workplace injuries and fatalities; b. Other health and safety incidents; c. Accidental damage or destruction of assets/plant; and d. Near misses that could have caused any of the above.
Inspection	Undertaken by contractors, inspections check worksite activities and sub-contractor and subordinate contractor systems and processes, plant, and equipment. The project's Complexity Model score determines the required frequency of inspection. Contractors may inspect at any time or at any frequency in addition to that required by the Complexity Model Score. Contracted third parties may undertake inspections on behalf of the Contractor.
Issue	To issue a PTW means to approve or authorise it.

JARS	**J**oint **A**ssurance and **R**eporting ***S***ystem. JARS is the primary tool for DEI engaged contractors to record details of incidents, inductions and PTWs for work that occurs on the Defence Estate.
JSA	**J**ob **S**afety **A**nalysis. - Job Safety Analysis is a procedure which helps integrate accepted safety and health principles and practices into a particular task or job operation. A JSA breaks a task into its basic steps, identifies potential hazards and their risks associated with each step and recommends the safest way to do the job. Also referred to as a Job Hazard Analysis (JHA) or a Task Analysis (TA).
Key Performance Indicators	Measures of progress toward specific health and safety goals and of trends enabling allocation of resources to support improvements.
Lagging Indicators (after the loss)	Measures which provide an overview of performance, such as tracking injury statistics, exposure incidents, and regulatory fines. E.g. • Total Recordable Injury Rate • Lost time frequency • Severity • Number of days restricted • Compensation for losses for workers • Near miss reporting
Leading Indicators	**Passive** – strategies and actions established prior to the initiation of a project that serve as predictors to the project's safety performance – not alterable after the project begins. **Active** – Measured and adjusted during the construction stage enabling positive responses that improve safety and allow monitoring and measures which enable prediction of future performance results, e.g. **a. Number of audits performed;** **b. Number and types of findings and observations;** **c. Timeframe required to close action items;** **d. Training completed;** **e. Near miss incidents;** **f. Timely preventative maintenance tasks performed; and** **g. Safety committee meetings.**
Legal Privilege	Principle which ensures the confidentiality of communication between a solicitor and a client. It also applies to communication between a party to a proceeding and any other person and communication between the party's legal advisor and any person. It also applies to information compiled or prepared by, or at the request of, the party or the party's legal advisor.
LOTO	**L**ock **O**ut, **T**ag **O**ut. A Health and Safety procedure where hazardous items, for example power switchboards, are locked and have a tag added to them, describing their hazardous elements and why they have been locked.
Maintenance	Care and/or upkeep that is planned, routine or urgent that keeps a building or structure in a proper condition or working order. It is incidental work that can be done relatively quickly and safely with relevant health and safety control measures.
Major Non-Conformance	Breach of Health and Safety at Work Act 2015, other health and safety legislation, and associated regulations, approved codes of practice, and relevant Defence Force Orders and Defence Force Instructions
Manual Handling	Any activity requiring a person to lift, lower, push, pull, carry, throw, move, restrain, hold or otherwise handle any animate or inanimate object and can generate serious back injuries and other musculoskeletal disorders.
Minor Non-Conformance	Breaches of WorkSafe New Zealand Guidance documents, relevant standards and CHESS instructions.
Monitoring	The process for tracking the implementation of risk control measures, and measuring their effectiveness.

Must and Should	'Must' refers to requirements that are mandatory for compliance with legislation and CHESS requirements. 'Should' refers to matters that are recommended.
NCN	**N**on-**C**onformance **N**otification. A notification sent to site managers providing a summary of inspection items that did not meet the standards set out by DEI.
NCR	**N**on-**C**onformance **R**eport. A document completed by a Site Manager or Contractor detailing proposed actions to be taken to ensure non-conformance items are rectified.
Non-Conformance Notification	Where an inspection, spot inspection or an audit identifies a non-conformance, the inspector or auditor will issue a Non-Conformance Notification. The other party must then prepare a Non-Conformance Report.
Non-Conformance Report	A report prepared by the Contractor or DEI officials after a contract non-conformance is identified and notified to the at-fault party. It identifies the reasons for the non-conformance and sets out remedial actions the at-fault party must undertake before the non-conformance is closed.
Non-Conformity	A failure to meet a requirement set in statute, statutory instrument or contract arrangement.
NZDF	**N**ew **Z**ealand **D**efence **F**orce
OIC	The commanding officer of the NZDF camp or base.
PCBU	**P**erson(s) **C**onducting a **B**usiness or **U**ndertaking
PDL	**P**latform **D**amage **L**evel
Penetrating ground or structural works	a. Defined as any work requiring ground or structural penetration of any depth, with any device, for the purpose of: **a. Altering a structure;** **b. Fixing a structure or object in place;** **c. Testing ground stability for foundations;** **d. Stabilise slopes;** **e. Recovering a resource e.g. water, or** **f. Disposing of any substance.**
Permit to Work	A *Permit to Work* system is a written permission designed to manage potentially hazardous work and reduce the opportunity for human error. The system constitutes a clear and standardised approach to identifying tasks, risk assessments, permit task duration, supplemental or simultaneous activity and control measures. DEI requires a Permit to Work to be issued and displayed for any hazardous tasks on Defence Estate.
Permitable tasks/work	In this document, any work requiring a Permit to Work, as defined by the DEI Permit to Work Process, is 'permitable work'.
PHRH	**P**otential for the **H**azard to **R**elease **H**arm
PIL	**P**ersonal **I**njury **L**evel
Pipe works	Defined as any activity connected to the installation, maintenance, or repair of pipes and pipelines, fittings, plant or equipment relating to reticulated water, petroleum products, or other liquids or gases (not natural gas, CNG or LPG).
PMP	*Planned maintenance projects.*
PPE	**P**ersonal **P**rotective **E**quipment – Equipment, clothing and protective gear used to protect and shield individuals from hazards.
Prescribed Risk Management Process	As set out in Regulations 5-8 in the *Health and Safety at Work (General Risk and Workplace Management) Regulations 2016*.

Project Manager	The DEI official responsible for managing the construction project. This may be the Deputy Director Delivery or the FM manager.
Project Officer	A specialist project manager working for a Deputy Director Delivery to manage a specific DEI project of projects on a Camp or Basecamp of base.
PtD	**P**revention **t**hrough **D**esign. The process of designing a system in such a way that risks are removed or reduced to minimal levels without human intervention.
PTW	**P**ermit **t**o **W**ork
PTW Register	The PTW register is used to record details of each Permit to Work issued on site. This may be a spreadsheet or software controlled system. The PTW register is to be distributed daily across all relevant stakeholders.
Refurbishment	Carrying out work in a building or structure with the emphasis on changing and/or upgrading it.
Regional Health & Safety Specialist	A DEI official based in the regions providing health and safety oversight, inspection, audit, investigative and advisory services to DEI projects and Facility Maintenance by DEI engaged contractors. RHSS' also mentor and advise Docs and may be authorized to evaluate applications for and issue Permits to Work. RHSS are responsible for: • Performing scheduled and spot inspection checks of Health and Safety requirements and specifications on DEI engaged Contractor and FM Providers work sites. • Reporting non-conformance inspection items to the Contractor and FM Providers as Non-Conformance Notifications. • Reviewing corrective or preventative actions indicated by Non-Conformance Reports and notifying the Contractor or FM Providers of the CHIPS resulting score. • Reviewing corrective or preventative actions resulting from significant events and/or major non-conformance items within thirty days and again at six months to ensure conformance. • Assisting Contractors and FM Providers in the identification of on-site hazards. • Reviewing and endorsing Specification Amendment (SPA) requests.
Regular	A frequency of activity determined by a project's Complexity Model score.
Regulation	A rule or directive made and enforced by a legally empowered entity.
Residual Risk	The probability and severity of a consequence, after safety controls have been put in place.
Revalidation	The reassessment of the worksite and permit conditions to determine if work can continue safely for another set period of time.
RHSS	**R**egional **H**ealth and **S**afety **S**pecialist
Risk	The likelihood of an incident or event occurring and the extent of injuries it causes.
Safe	Meaning 'safe, so far as is reasonably practicable'.
Safety Meeting	Formal worksite meeting – usually used to update workers on project, notify them of health and safety issues, and announce any other worksite matters activities impacting on their duties.
Satisfactory	The condition whereby an expectation or need has been met acceptably.
SDS	**S**afety **D**ata **S**heet - Also referred to as the Material Safety Data Sheet (MSDS), an SDS should be available for all hazardous materials present on any worksite. An SDS includes information relating to the composition, hazard classification, safe storage

	and handling, flammability, health risks, and first aid exposure measures relating to the material.
SFAIRP	**S**o **F**ar **A**s **I**s **R**easonably **P**racticable. The term used to indicate the level of risk is acceptable given cost and difficulty considerations.
SIMOPS	**Sim**ultaneous **Op**eration**s**. Simultaneous Operations (SIMOPs) are multiple independent operations that occur on a location at the same time. Events of any one operation may impact the safety of personnel or equipment of another operation (i.e. construction, welding, or working at heights).
SPA	**Sp**ecification **A**mendment request. A request by a contractor to vary or deviate from specifications laid out in CHESS. This deviation may be short term or permanent, depending on circumstances.
SPA Request	Requesting a change to a CHESS policy requirement, process or procedure - when a contractor determines that an alternate approach will provide a more appropriate output or outcome according to the circumstances, the Contractor applies to DEI to make the requisite change.
Spot Inspection	An irregular inspection occurring outside the frequency set by the project's Complexity Model score undertaken by a DEI official solely or in company of a contractor representative. Contracted third parties may undertake spot-inspections on behalf of DEI.
Sub-Contractor	PCBUs hired by a contractor to deliver specific tasks on a worksite.
Subordinate Contractor	PCBUs hired by sub-contractor to undertake specific tasks on a worksite. Subordinate Contractor encompasses many layers of sub-contractor relationships below the sub-contractor layer.
Supervision	The process by which an entity with authority and accountability monitors the activities, practice and performance of other entities.
Suspended permit	The temporary invalidation of a permit certificate for a period during which the subject work has or is stopped. The Permitted work cannot start until it is revalidated by the issuer.
Systematic Risk	A risk created by the confluence of process or system elements.
Task	Any discrete activity on a worksite, e.g. erecting scaffolding, installing a window, laying a concrete floor
Team Leader	A worker designated as a team leader in normal work circumstances as well as in emergencies.
Threat	A threat is a trigger (or cause) of a top event. It may be possible to use controls to minimize the possibility of a threat.
TMP	**T**raffic **M**anagement **P**lan. A TMP is a detailed plan to manage traffic around or through a work site. It may include the installation of barriers, lights or flagmen (traffic controllers).
Tool box meeting	Refresher training on high risk tools e.g. grinders, skills saws, scaffolding, ladders, harness use or activity/process. Recorded as worker training.
Training	The process by which people develop new or improved skills.
Top Event	*The event describing a loss of control. Hazards may cause a top event to occur, resulting in consequences.*
Unit	Military unit
USM	**Un**scheduled **M**aintenance.
Work Supervisor	A person managing one or more worker teams.
Worker Team	A basic unit of workers responsible for performing a task.

Worksite Management Team	The person or persons responsible for the overall management of the worksite.

1 About This Guide

1.1 What this Guide is for?

1. This guide provides step-by-step procedures for processes defined in the Construction Health Environment and Safety Specifications (CHESS) for work carried out on the Defence Estate.

1.2 Who this Guide is for?

2. This guide is for Contractors/FM Providers and NZDF staff undertaking construction and maintenance tasks on the Defence Estate.

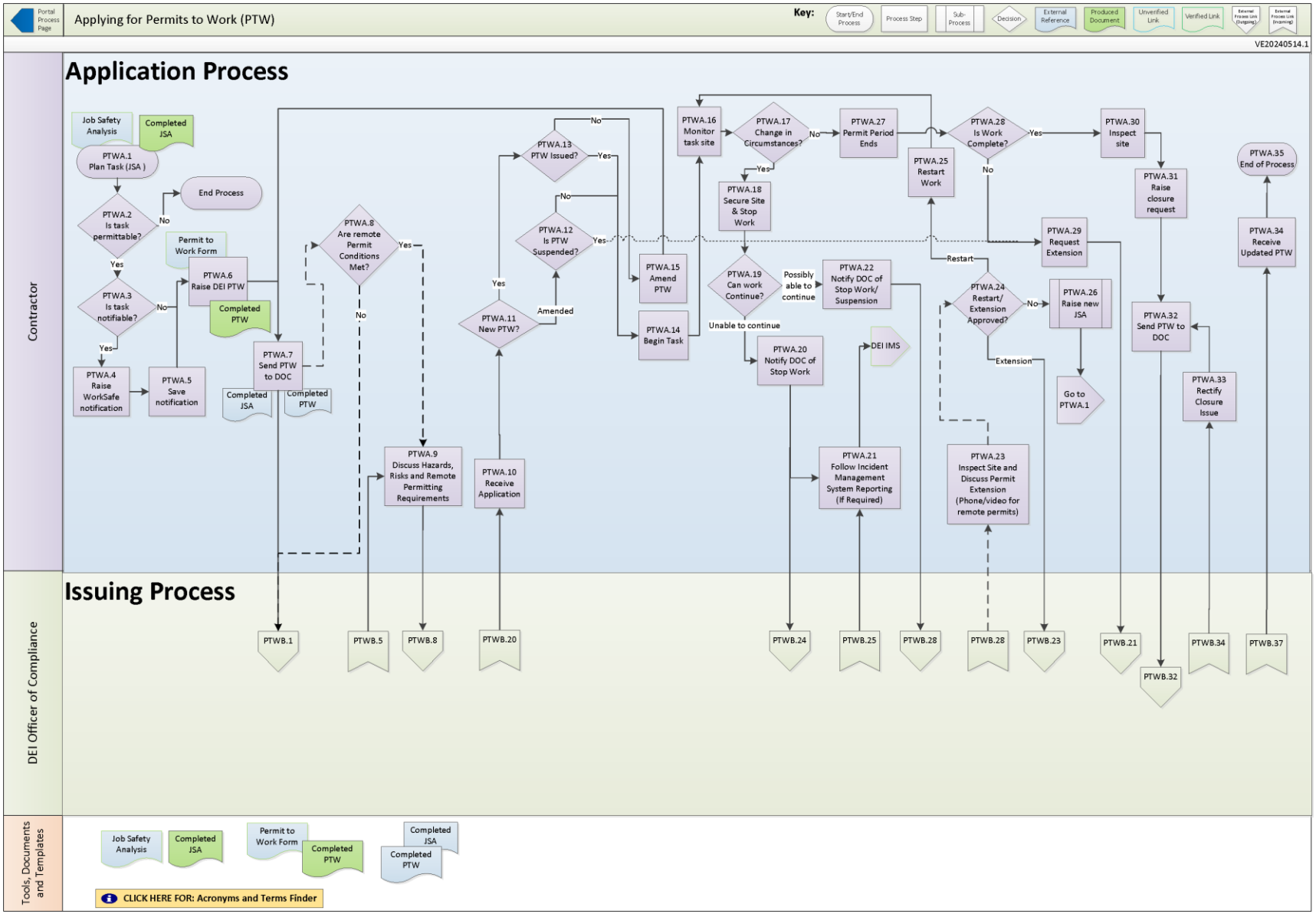
1.3 What if I find a mistake in the Guide or have a suggestion?

3. If you find a mistake in this guide, please contact the DEI Health & Safety Coordinator at DEIH&S@nzdf.mil.nz.

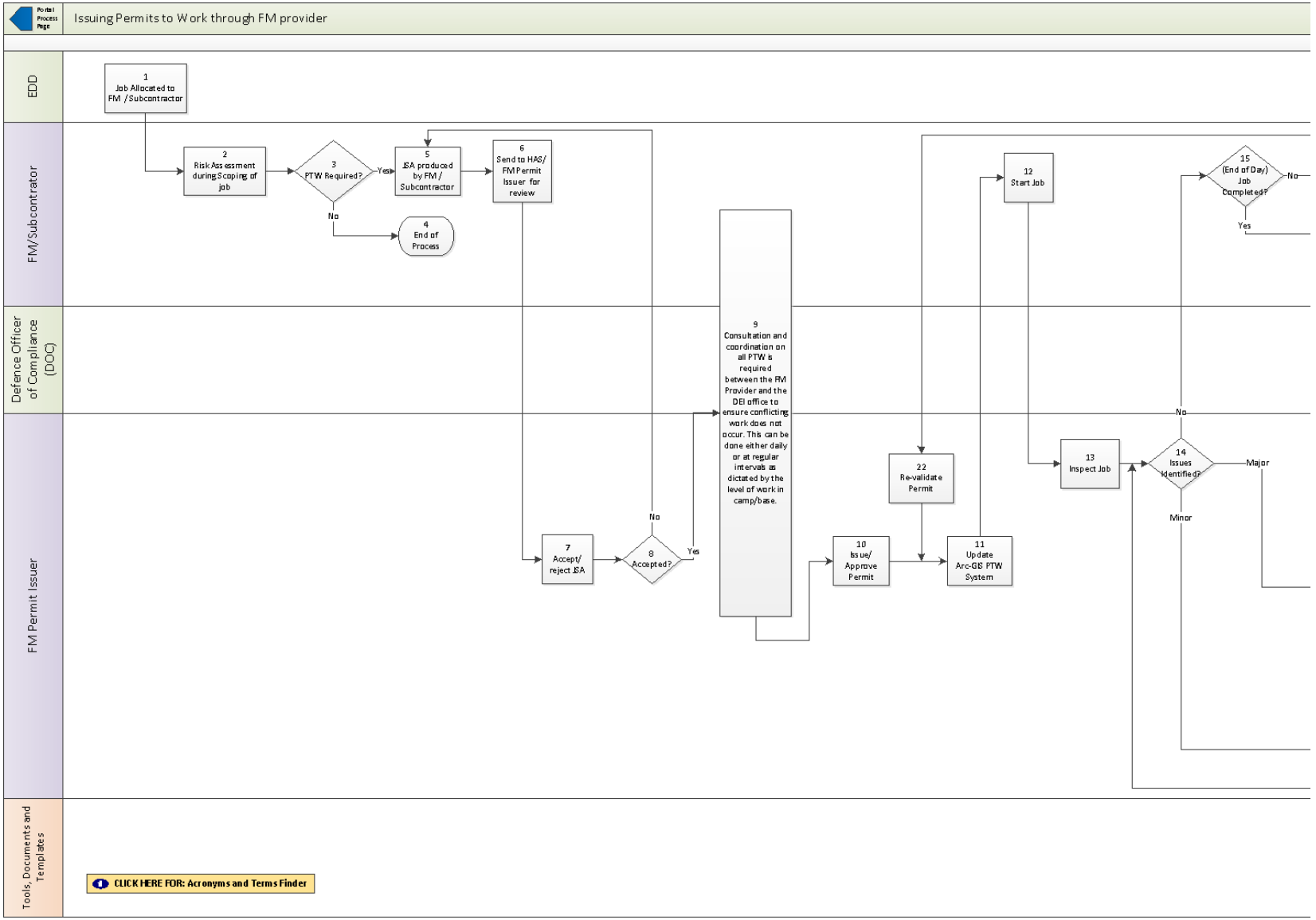
2 Process Maps

4. All processes incorporated into CHESS have been mapped to assist in determining the flow of each process and procedure.
5. Use these maps as a summary to the procedure and to assist in determining the flow of the process.
6. This document provides the follow process maps and procedures for Contractors/FM Providers:
    - **PTWA-Permit to Work - Application Process Map**
    - **PTW-C: Permit to Work - Issuing a PTW for Facilities Maintenance Projects**
    - **DEI Job Safety Analysis Process Map**
    - **ICE-A Contractor/FM Provider Non-Conformance Reporting Process Map**
    - **DEI Incident Management System – Contractor/FM Provider Incident Response Process Map**
    - **SPA Specification Amendment Request Process Map**

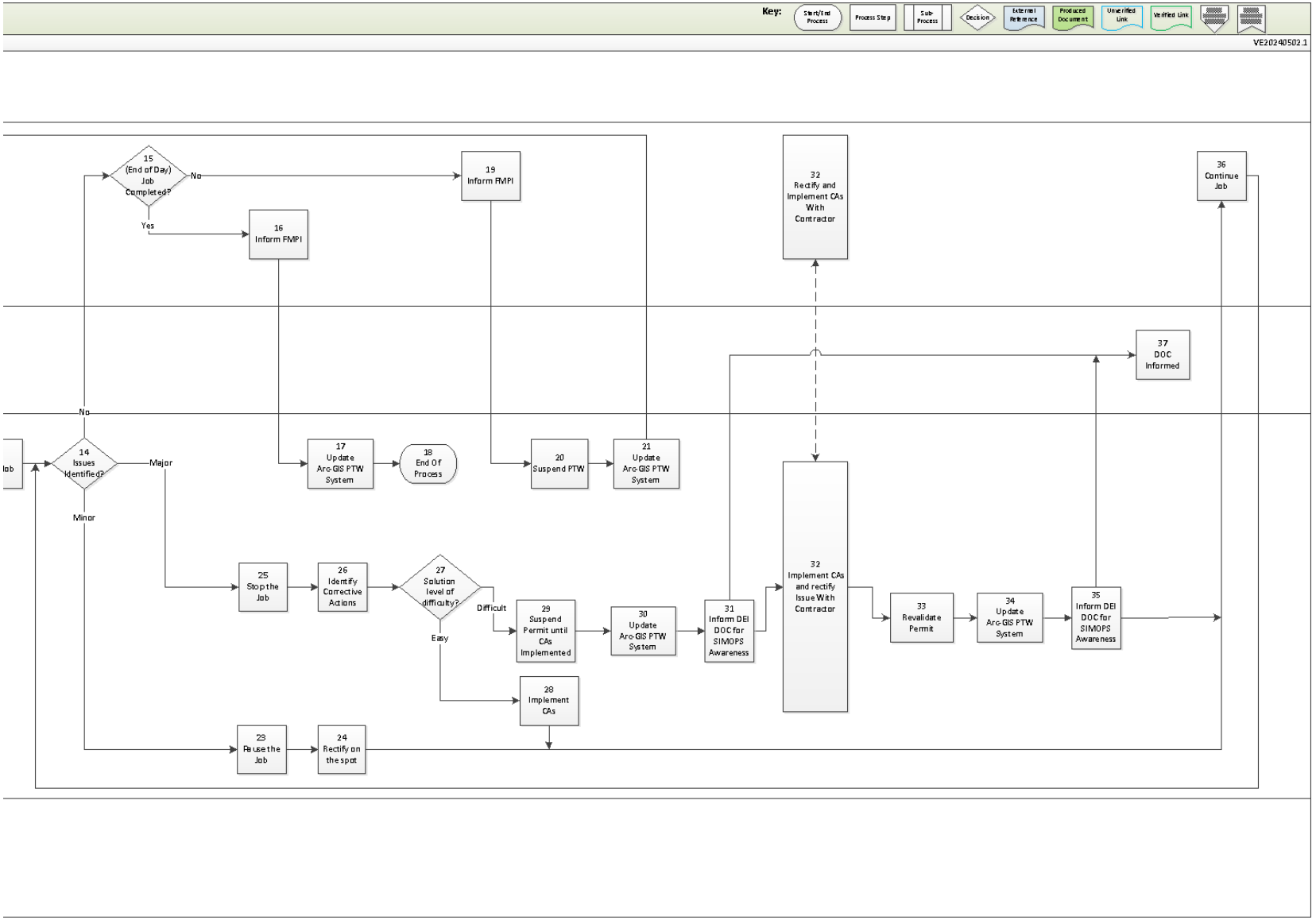
2.1 PTWA-Permit to Work - Application Process Map



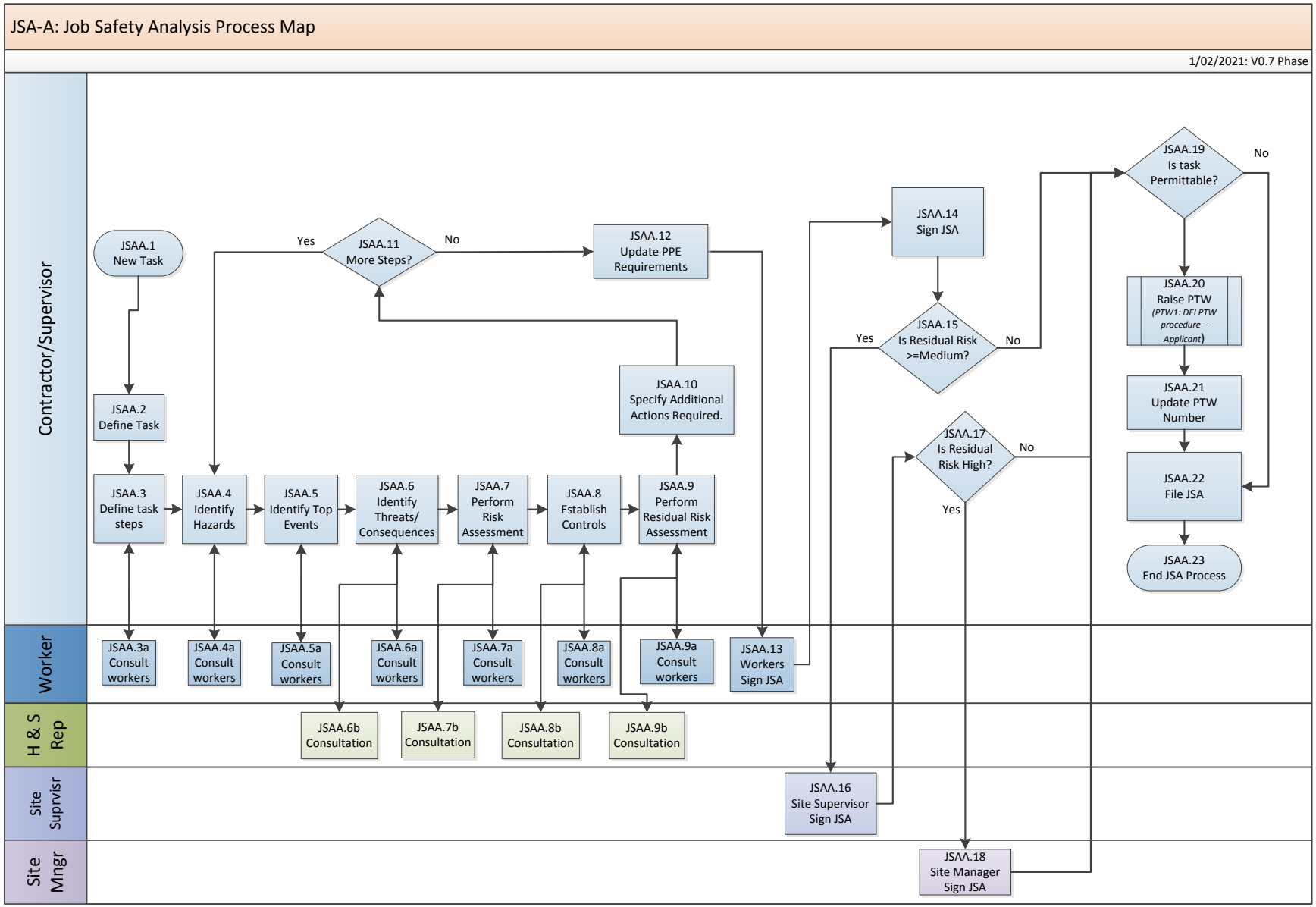
2.2 PTW-C: Permit to Work - Issuing a PTW for Facilities Maintenance Projects (1/2)



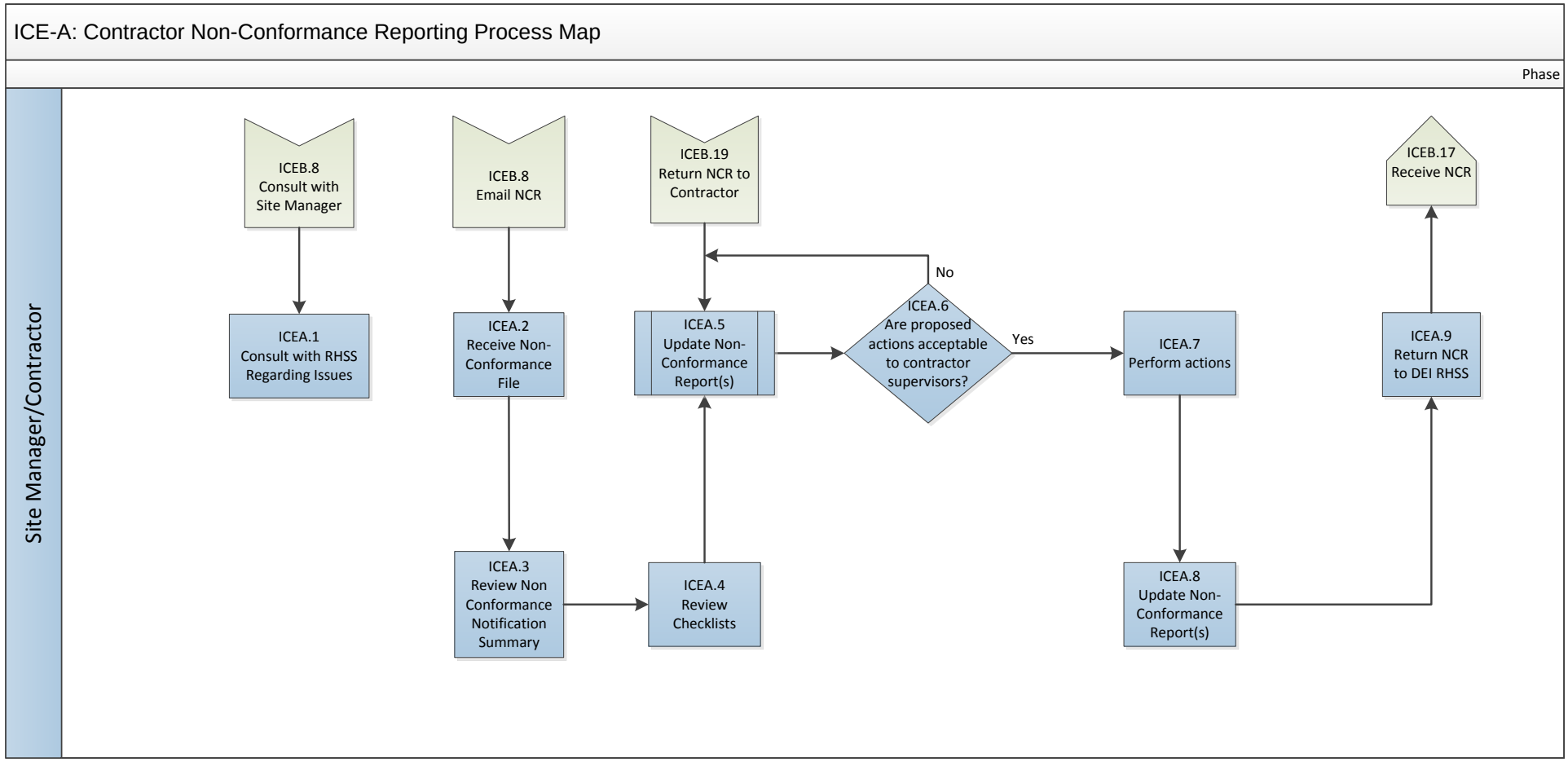
PTW-C: Permit to Work - Issuing a PTW for Facilities Maintenance Projects (2/2)



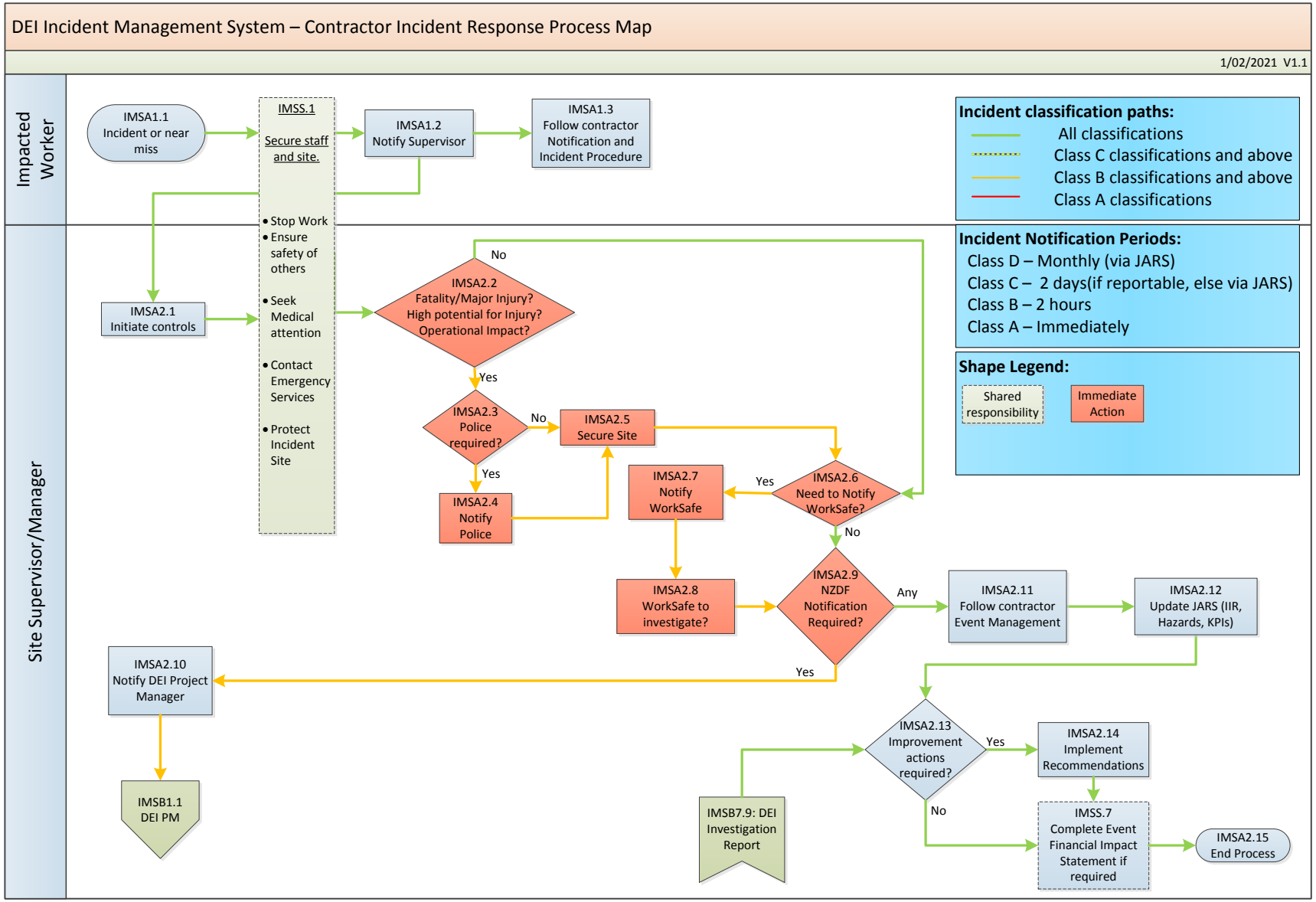
2.3 DEI Job Safety Analysis Process Map



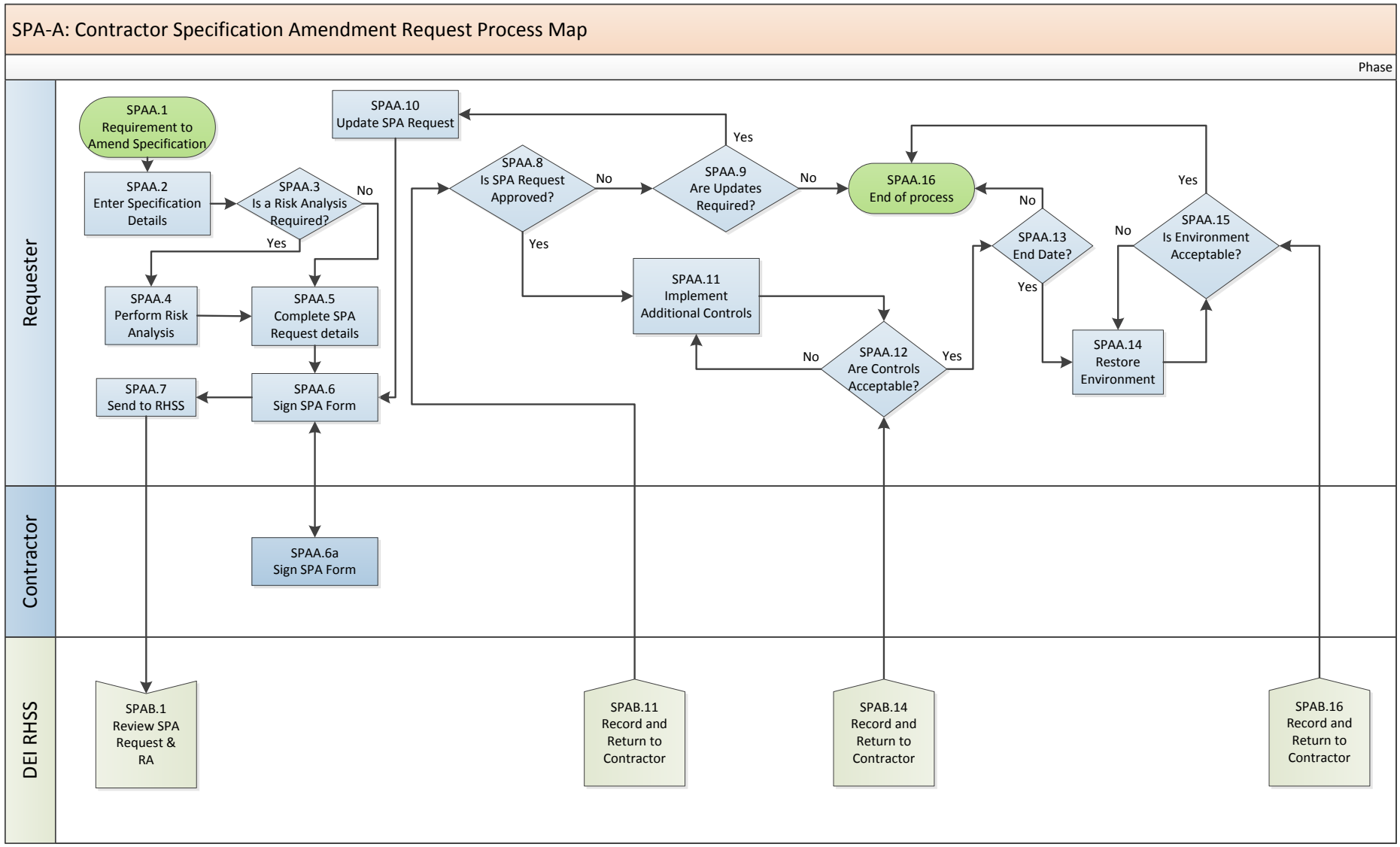
2.4 ICE-A Contractor/FM Provider Non-Conformance Reporting Process Map



2.5 DEI Incident Management System – Contractor/FM Provider Incident Response Process Map



2.6 SPA-A Contractor/FM Provider Specification Amendment Request Process Map



3 STANDARD OPERATING PROCESSES AND PROCEDURES

7. This manual lists the contractor processes and procedures referenced in the DEI Construction Health, Environment & Safety Specification (CHESS) document.

1. **Permit to Work (PTW) Procedure**
2. **PTWC: Permit to Work – FM Permit Issuing Procedure**
3. **Job Safety Analysis (JSA) Procedure**
4. **Inspection Checklist and Evaluation (ICE) Contractor/FM Provider Non-Conformance Procedure**
5. **Incident Reporting Procedure (Incident Management System)**
6. **Specification Amendment (SPA) Request Procedure**

3.1 PTW-A: Permit to Work - Application Procedure

3.1.1 Introduction

WHAT THIS PROCEDURE IS FOR?

8. This guide provides a step-by-step procedure for completing and submitting a *Permit to Work* application for tasks carried out on the Defence Estate.

WHO THIS PROCEDURE IS FOR?

9. This guide is for Contractors/FM Providers and NZDF staff needing to apply for a *Permit to Work* for construction and maintenance tasks.

3.1.2 General Overview

10. A *Permit to Work* system is a written permission designed to manage potentially hazardous (Permited) work and reduce the opportunity for human error. The system constitutes a clear and standardised approach to identifying tasks, risk assessments, permit task duration, supplemental or simultaneous activity and control measures.

11. The Contractor/FM Provider. or NZDF member responsible for permitable worksite activities may apply for a *Permit to Work*. Contractors/FM Providers may need to apply for more than one *Permit to Work* for a worksite task.

12. *PTWA: Permit to Work Application Procedure* assists PTW applicants in providing the DOC, authorised DEI official, or FMPI with enough information to allow them to assessing worksite hazards, and schedule permits around potential conflicts with other camp or base activities. DOC, authorised DEI official, or FMPI must receive permit applications at least 24 hours prior to the time the permit is required, except in extraordinary circumstances and when approved by the EDD.

13. The DOC, authorised DEI official, or FMPI, must issue a PTW before contractors or NZDF personnel can perform *permitable* tasks on Defence Estate.

14. A ***Permit to Work*** is only valid for a period of one working shift, and for a specific task. The Contractor/FM Provider must apply for, and be issued, a new PTW for each shift or allocated time when *permitable* work is occurring. This ensures circumstances have not changed between work periods, and all workers are aware of all PTWs in force during their work period.

15. If the work/task exceeds the one shift or allocated time, the permit is suspended and must be revalidated by the DOC, authorised DEI official, or FMPI before any work continues. The permit may be revalidated a maximum of four times before a new permit must be issued.

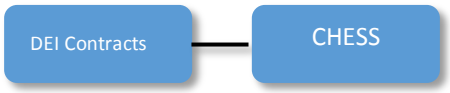
16. Issued PTWs are delivered (or collected) daily and signed by the Contractor/FM Provider.

17. The PTW must be discussed in the morning site meeting, prior to the work commencing, to ensure all workers on-site are aware of the PTW and its locations. All workers must be made aware of the subsequent hazards and precautions required around the task being performed.

18. On receipt of an issued PTW, the Contractor/FM Provider must display it in a prominent place on the worksite. The Site Manager, supervisors or leaders must also discuss issued PTWs at the pre-work site meeting prior to permited work commencing to ensure all workers on-site are aware of the hazards and controls required for the permited activities involved in the worksite task.

19. Contractors must return the PTW to the DOC, EDD or DEI Project Office at the end of each work period.

DEI Processes and Policies



CHESS Sub-processes and Procedures

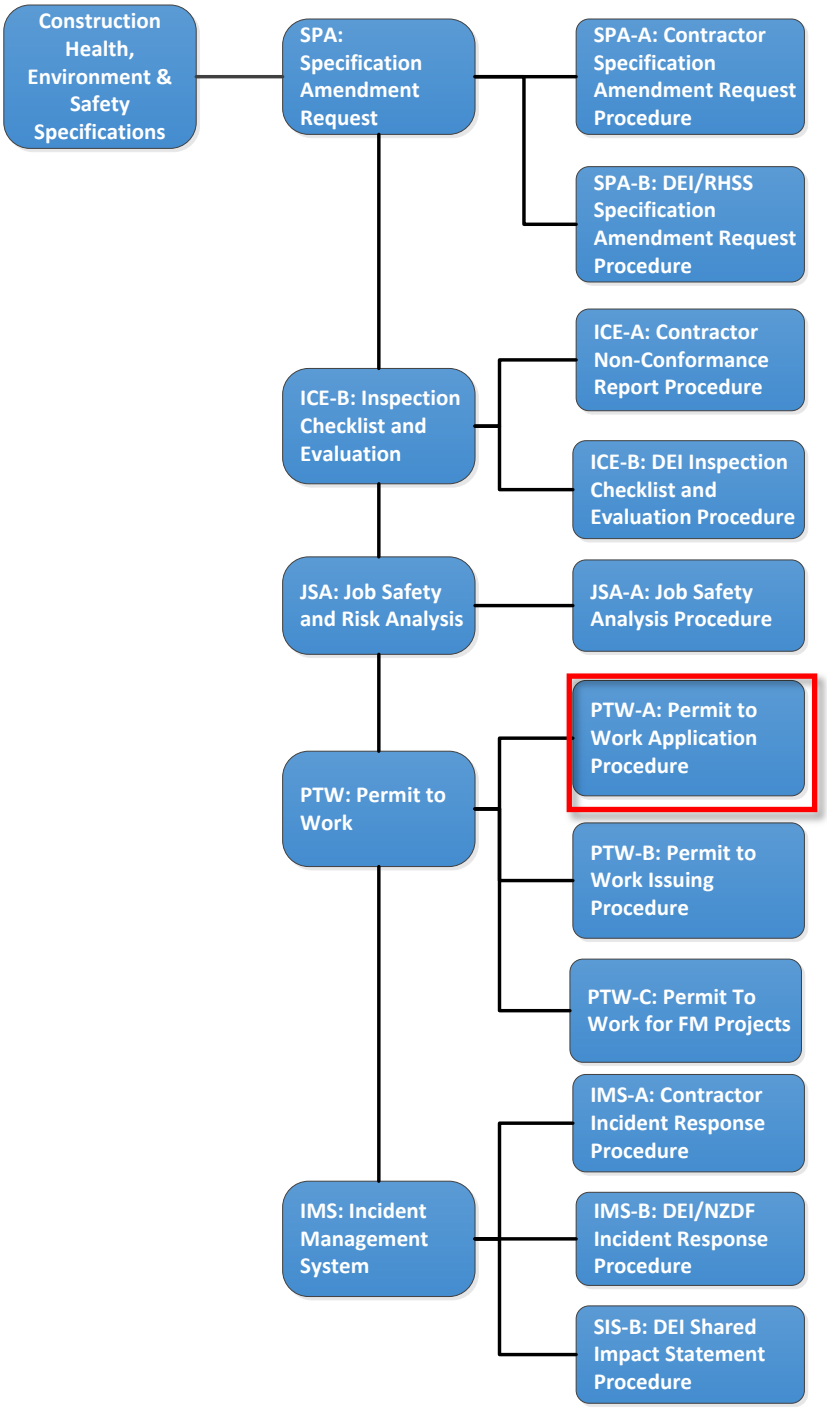


Figure 1. *CHESS Procedures and Sub-Procedures: PTW-A*

Related Procedures

PTW-B: Permit to Work - Issuing Procedure. Assists NZDF staff to review, schedule and issue a *Permit to Work* on NZDF Estate.

3.1.3 Permit Types

Hard Copy Permits

20. Issued PTWs are delivered (or collected) daily, and signed by the Contractor/FM Provider. Remote hard copy permits must be returned to the DOC, authorised DEI official, or FMPI at the end the worksite task as soon as possible.

Soft Copy Permits

21. If the PTW is sent via email to a location without printing capability, the permit must be held on a device that remains on site and is accessible on request. It must be retained by the Contractor/FM Provider and a duplicate will be held in hard form by the DOC, authorised DEI official, or FMPI.

3.1.4 About The Permit To Work Form

22. The *DEI Permit to Work* form is an Adobe form, providing editable fields to describe *permitable* tasks. While users can print and complete it manually, when completed online, the form automatically updates as the user enters details. Android and iPhone devices can complete the form with Adobe, but Windows based systems are preferred, as other devices may not save and execute the scripting code behind the fields.

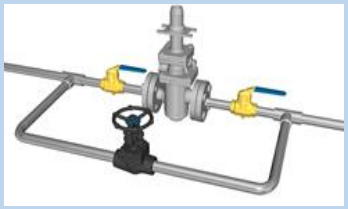
23. When saved correctly, the details on the completed form can be exported to a spreadsheet or database for record keeping and statistical analysis.

3.1.5 When Is A Permit Required?

24. A PTW is required at all times for all activities described in the *DEI Permit To Work Process (refer Chapter 4.3 CHESS Policy and Specification)*, and must include a DEI Job Safety Analysis (JSA) and any other supporting certificates and/or documentation.

25. The table below describes *permitable* work:

Table 1. Permitable Work Types

Work Type	Description
Asbestos	Any work involving the disturbance of asbestos. ***Note:*** *An approved Asbestos Removal Control Plan (ARCP) can take the place of a JSA for the Asbestos Permit.* 
Compressed Gas	Where there is a requirement to charge or refill a cylinder(s) or conduct a repair to cylinder(s) on site. Cylinders are defined as: refillable compressed gas containers designed to carry gas at pressures above normal atmospheric pressure used for storing and transporting compressed gases, includes cryogenic liquids.  ***Note:*** *This does not include fire extinguishers or aerosol dispensers. Permits will not be required where gas can be isolated such as for heat pump works, or works on infinity hot water systems.*
Confined space *(AS/NZS 2865:2009)*	Any activity occurring in a confined space. A confined space:  • Is an enclosed or partially enclosed space and, • Is not intended or designed primarily for human occupancy and, • May present a risk from one or more of the following at any time: - Unsafe concentration of harmful airborne contaminants - Unsafe concentration of flammable substances - Unsafe levels of oxygen - Substances that can cause engulfment • May have controlled means of entry and exit (as defined in *WorkSafe New Zealand: Confined spaces; planning entry and working safely in a confined space.)* This includes: - Manhole risers or tank sumps - All underground and above ground tanks and vessels - Excavations >/= 1.5 metres - Storm water management systems, and - Any water or waste-handling systems large enough for human entry. ***Note:*** *Crawl spaces beneath buildings and roof voids are controlled access only. Valid risk assessments must be in place with rescue plans.*
Control Bypass	Involves overriding or disabling a safety-critical device and/or system, including alarms and warning lights, or leaving a site operating with a disabled safety-critical device and/or system.  ***Note:*** *Routine compliance testing and monitoring can be performed under a SOP.*

Diving	Any work involving the complete submersion of a worker in a liquid. 
Electrical	Modifications and/or alterations to energised conductors within switchboards: • All work on electrical lines and equipment where the line is energised • All work on electrical lines and equipment designed to carry voltages of 1000V or more • All works encroaching Minimum Approach Distances (MAD)  ***Note:*** *Does not include energising equipment and/or circuits for testing. Refer to local provider to confirm MAD.*
Explosives	Any work involving the use, movement or disturbance of explosive substances. 
Gas Lines	Installing connections or repairs on 'Live' gas lines and equipment (Hot Tapping) for either pipeline or storage tank work. Used when a gas network or line cannot be isolated. 
Ground Disturbance	Defined as any work requiring ground penetration of any depth, with any device, such as: • Cutting the ground • Conducting ground sampling or testing (not including firing range backsplash areas) • Ground works to expose services or utilities • Any trench excavation • Recovering a resource e.g. ground drilling  ***Note:*** *Non-permit tasks include: like for like replacements such as replacing fence posts in existing holes or routine gardening tasks within the existing garden beds. Replacement items must not exceed the current dimensions.* *Backfilling excavations or reopening those backfills is not a permitable task.* This requirement is to ensure all legacy pipe, gas, cable and water infrastructure is identified prior to work commencing. NZDF has a history of services and other hazards not being detected before work commences, and all ground works must follow a scan, check, verify (by potholing or similar) approach.

Hazardous Substances	The use or handling of acutely toxic (class 6.1A and 6.1B) substances, fumigants and vertebrate toxic agents or substances that require a certified handler or filler according to WorkSafe New Zealand rules and the *Health and Safety at Work (Hazardous Substances) regulations 2017*. This includes work involving the clean up or removal of hazardous substances or remediation work which may create hazardous dusts or vapours, such as lead based contaminates, or paint. 
Hot Work *(AS/NZS 4781:1973)*	Defined as any work where the temperatures generated are likely to ignite surrounding materials, e.g. cutting and welding, metal grinding, blow lamps and other equipment producing sparks, heat or a naked flame. This includes: • Blow-torches • Flame cutting • Any work involving an open flame  ***Note:*** *The following are not permitted activities unless a risk assessment defines them as HIGH risk tasks:* • *Asphalt work* • *Sparking form jack hammers or concrete saws, drilling* • *Use of portable electric heaters* • *Operation of internal combustion engines* • *Vinyl iron and Vinyl welding works*
Lifting	Work using any lifting appliance where the appliance has to lift a mass of **500 kilograms** or more **AND** a **vertical distance of five metres** or more. The requirement excludes excavators and forklifts.  Permited lifts include: • Crane lifts involving more than one crane • Lifts over operating facilities posing a risk to workers, public or property • Lifts within minimum approach distance (MAD) over or adjacent to power lines • Lifting of any personnel via an approved lifting method • Lifts near the maximum rated loads of the lifting equipment • Other lifts classified as HIGH RISK as determined from a risk assessment, e.g. Notice to Airmen (NOTAM)
Other	Any other activities rated as high risk or above, according to the JSA risk assessment.
Penetrating Structure	Any penetration of an existing building, structure or wall that requires: • Penetration through a passive fire system (fire walls, fire doors or fire barriers) • Penetration through insulated sandwich panels and/or any wall constructed of two metal faces bonded to a fully insulating core of polystyrene (or other flammable synthetic product)  • Alterations that create an opening of any size that makes **a void through** that building, structure, wall, floor, etc. This is to ensure unseen hazards such as asbestos, gas or electrical cables are identified prior to work being performed.

	Note: *Minor alteration work (e.g. moving a power point) or additions (e.g. fitting a shelf to a wall)* ***MAY*** *be done under a SOP*
Pipe works	Work on 'Live' reticulated water mains or petroleum networks. Used when the relevant network or line cannot be isolated during the repair or new works. 
Tree Felling	Any felling of trees that are 200mm at the stump, or posing a risk of "hang-up" post fell. *Note: Some pruning activities may require a permit if they are considered to be HIGH RISK work due to the size or location of the branches.* Refer to Ground Disturbance requirements for tasks involving stump grinding. 
Work at Height	Any work performed at a height exceeding 1.8 metres when measured from the lowest point of the workers body (i.e. fall distance of 1.8 metres+), including tower and/or mobile scaffolding and erecting/dismantling scaffolding. *Note:* *1. No Permit is required where work is undertaken from properly erected and certified scaffold structures, scissor lifts or boom lifts that meet the regulatory requirements and have fall protection permanently engineered into the plant/equipment.;* *2. Does not include additions to the scaffolding that do not require re-certification that can be added from the existing work platform (e.g. closing a gap between a structure and the existing certified scaffold).* 

3.1.6 Working with Lead-Based Paint

26. The Contractor/FM Provider removing or managing lead-based paint must comply with the NZDF Lead Based Management Plan. It sets out the criteria and practices required to remove or otherwise manage lead based paint.

27. Before determining whether to apply for a Permit to Work to remove or manage lead based paint, the Contractor/FM provider must apply the Management Plan's Workflows risk assessment method. Where the method determines a Permit to Work is required, the Contractor/FM Provider must apply for a Permit to Work.

28. The Contractor/FM Provider must prepare a NZDF Lead Pain Removal Control Plan and submit it with the JSA attached to the Permit to Work application for the lead based paint removal or mitigation activities.

3.1.7 Working with Asbestos

29. The Contractor/FM Provider removing or managing asbestos must consult the Environmental Officer for information on the type, condition, location, risk and management requirements of asbestos on the Defence Estate prior to commencing work. This includes reviewing the NZDF National Asbestos Register.

30. Contractors must ensure that any work involving asbestos follows the requirements set out in the Defence Estate Asbestos Management Plan, including work involving:

b. Investigation and survey for asbestos in accordance with the Good Practice Guidelines for Conducting Asbestos Surveys, WorkSafe New Zealand,2016;

c. Removal, abatement or remediation or asbestos; and

d. Asbestos related work i.e. work that may disturb asbestos.

31. The local DEI Regional Health and Safety Specialist or Project Manager will supply the NZDF Asbestos Management Plan and arrange consultation with an Environmental Officer and DEI Asbestos Manager.

32. Before removing asbestos from the Defence Estate, an Asbestos Removal Control Plan (ARCP) must be completed and submitted with the JSA and Permit to Work Application. For licenced asbestos work, an Asbestos Pre-Work Checklist must also be completed and attached to the Permit to Work application.

33. No work involving the planned disturbance of asbestos must proceed without written approval from the DEI Asbestos Manager.

3.1.8 Self Permiting

34. No Contractor/FM Provider or NZDF staff member can issue a permit to themselves. This is because the main objectives of a PTW is to identify and manage the safety controls for a permitable task, and the role of the DOC, authorised DEI official, or FMPI is to independently review the permitable task conditions and assess the effect of the controls the Permit Receiver has identified for the permitable task.

3.1.9 Remote Permiting Controls

CONSTRAINTS

35. Face-to-face communication is important to the engagement between the DOC, authorised DEI official, or FMPI and the Permit Receiver and critical to ensuring a common understanding on the risk and controls associated with the activity. Given the importance of these face-to-face discussions**, remote permitting should a last resort for permitable activity.**

36. Remote Permits to Work are only issued if the following criteria are satisfied:

a. Visiting the site is not possible due to its remoteness or the relevant , or DOC, authorised DEI official, or FMPI is unavailable;

b. The DOC, authorised DEI official, or FMPI knows the site or has reliable worksite data;

c. The DOC, authorised DEI official, or FMPI has a detailed knowledge of the task and activities to be granted a permit;

d. The Contractor/FM provider has prepared a JSA for the activity and submitted it to the DOC, authorised DEI official, or FMPI in good time;

e. The Contractor/FM provider has received a PTW from DEI previously;

f. The Permit Receiver reviews the specific on-site conditions and confirms their understanding of the conditions and their ability to comply with the work permit requirements by signing the permit; and

g. The DOC, authorised DEI official, or FMPI has confirmed via video or voice that the requirements for safe work are met.

REMOTE PERMITS THAT REQUIRE REVALIDATION/EXTENSION TO THE FOLLOWING DAY

37. Permits may only be revalidated for a maximum of five consecutive calendar days (not including Saturday and Sunday) through discussion with a DOC, authorised DEI official, or FMPI daily. This ensures the permit does not expire but ensures changing site conditions are captured and discussed.

38. It is expected that works/tasks may run over time or run longer than one shift. Where that occurs, at the completion on the allocated permit time the Permit Receiver must contact the DOC, authorised DEI official, or FMPI to request a Permit extension. The Permit Receiver will send the soft copy to the DOC, authorised DEI official, or FMPI, who will suspend the Permit. The DOC, authorised DEI official, or FMPI may request either a image or video of the worksite to verify that it is safe and not posing any subsequent risks.

39. The following day the Permit Receiver must verify that worksite conditions remain the same as previously stated. The DOC, authorised DEI official, or FMPI amend the relevant section of the permit form, email the permit to the Permit Receiver and revalidate the Permit in ArcGIS.

40. Due to the remoteness of some worksites, revalidation notification may occur by phone.

REMOTE LOCATIONS WITHOUT / LIMITED COMMUNICATIONS.

41. For locations that have limited or no communications a permit must be issued on site. Revalidation/Extensions must be discussed on site to ensure the management of risks.

REMOTE PERMIT CLOSE OUT

42. At the completion of the permit or task the DOC, authorised DEI official, or FMPI must verify by phone, emailed photos or video conferencing that the site conditions are safe and controlled. The DOC, authorised DEI official, or FMPI can request video or photos of the locations prior to the closure of the permit. Once the site is confirmed as safe and to and in an acceptable condition the following must occur.

a. If images are made are taken, the GPS location on any imaging device must turned **off** and there must not be anything identifiable in the background. The images must be just of the specific area or task.

b. If a new build, trunking or anything with a Protective Marking within, then the images must not contain any Protective Markings.

3.1.10 After Hours Permiting

43. Due to the challenges and constraints regarding resourcing the management of permits after hours, on weekends, and on public holidays, the following rules apply to the Permiting process during these times.

- Permits for after hours, extended hours, or weekend work may be issued on the previous day by the DOC, authorised DEI official, or FMPI, especially for the more routine or ongoing high risk activities.
- All related documentation, as described in the permit to work process, must still be checked and approved, by the DOC, authorised DEI official, or FMPI, for adequacy.
- For these periods, the contractor / permit receiver will be in charge of the works as documented in the permit, including ensuring all agreed and relevant required control measures stipulated in the documentation are in place for the duration of the works.
- The DOC, authorised DEI official, or FMPI is not required to call the contractor on the morning of the permit, or to 'open' the permit in ArcGIS, nor follow up at the end of the permit. Generally the contractor will undertake the work, complete the task and hand the documentation to DEI as arranged.
- As a PCBU in their own right, the contractor is best placed to manage the task's risk/s during these hours, and by engaging with them and communicating about the works (through the documentation), NZDF has performed reasonable due diligence with the resources available.
- Where numerous permits are issued per day, or where a contractor would wish to start a job earlier than normal work hours, the DOC, authorised DEI official, or FMPI may issue some permits the previous day so as not to delay work, or to reduce some of the morning pressure. On arrival the DOC, authorised DEI official, or FMPI would then inspect the sites as they normally would have.
- An example of exceptions would be confined space entry, where the DOC, authorised DEI official, or FMPI would issue it on the same day due to the high level of risk.

44. Refer to CHESS Policies and Specifications Vol1 – *After Hours Permits* for more detailed information.

3.1.11 Roles and Responsibilities – Who Does What?

RESOURCING

45. Resources assigned to the roles listed in this section may differ from real life, depending on the structure of the associated departments.

46. The Contractor/FM Provider/Task Supervisor is responsible for:

    a. Raising and applying for a Permit to Work;
    b. Notifying WorkSafe New Zealand of any notifiable work;
    c. Ensuring appropriate safety controls are implemented and in place;
    d. Ensuring work is performed by suitably qualified workers;
    e. Informing DEI Estate Director Delivery /DOC, authorised DEI official, or FMPI of delays or issues relating to the Permit to Work;
    f. Informing DEI Estate Director Delivery/DOC, authorised DEI official, or FMPI of when permitable tasks are suspended or complete; and
    g. Requesting extensions to a Permit to Work.

47. The **DOC, authorised DEI official, or FMPI** or their delegates are responsible for:

    a. Ensuring all known hazards are identified and communicated;
    b. Reviewing applications for appropriate Health and Safety controls;
    c. Scheduling Tasks and resolving work site task conflicts;
    d. Issuing a Permit to Work;
    e. Maintaining a Permit to Work register;
    f. Updating Permits when suspended, cancelled or closed; and
    g. Publishing PTW activities to all stakeholders

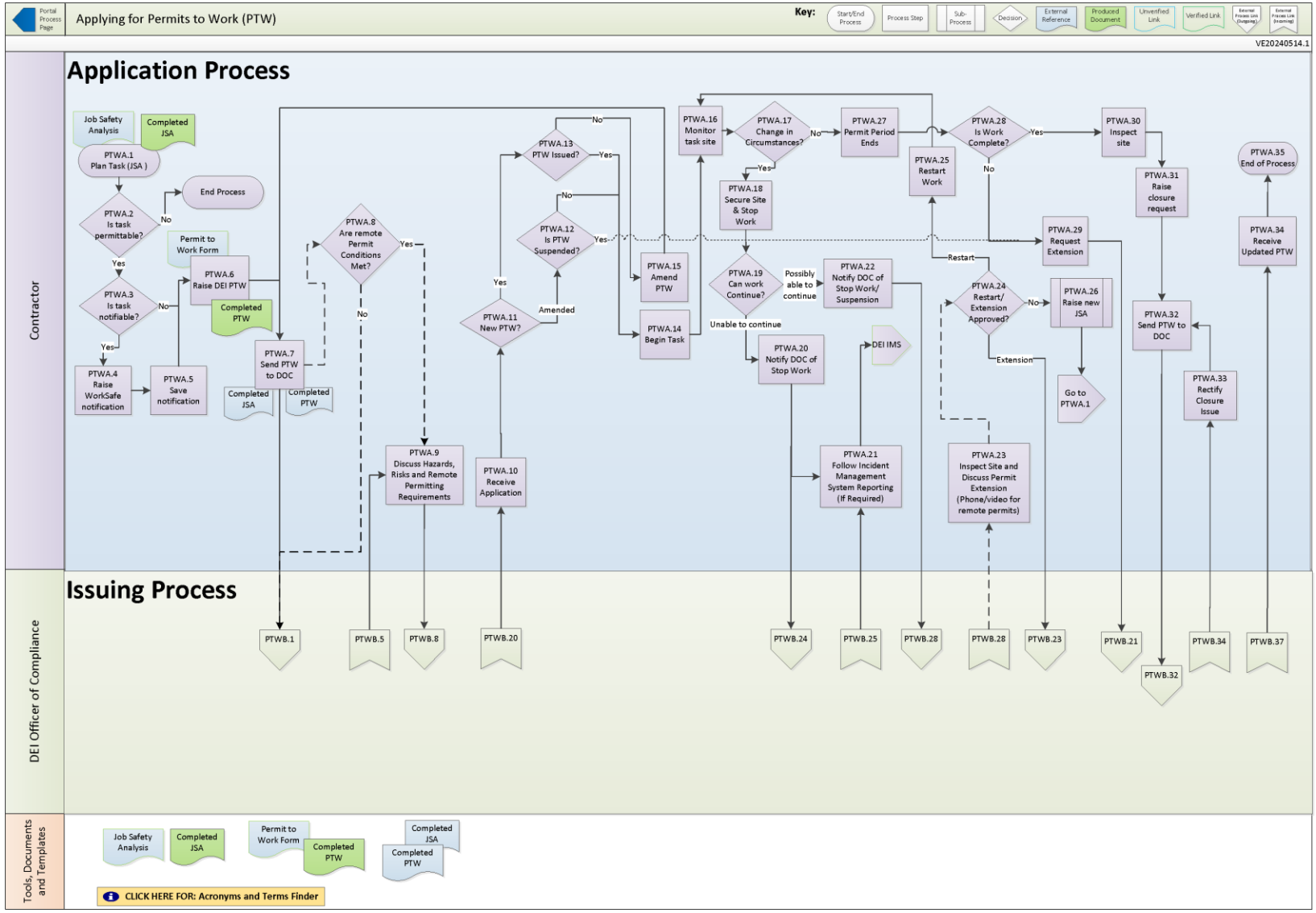
Note: All staff responsible for issuing a *Permit to Work* must have successfully completed Permit to Work – Issuer (NZQA Unit Standard 17590) and Permit to Work – Receiver (NZQA Unit Standard 17588) training.

PERMIT TO WORK REGISTER.

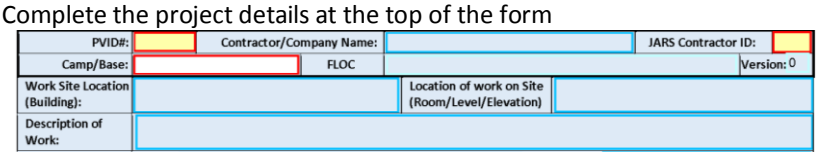
48. The PTW register on Arc GIS allows the Estate Director Delivery, Project Officer, DOC, authorised DEI official, or FMPI and Site Managers to view all active and suspended PTWs in a single place. This assists in the scheduling and issuing of permits, by determining where conflicts may exist between PTWs.

49. The PTW register is available in ArcGIS to all authorised parties daily, to ensure all active tasks are visible across the Camp/Base.

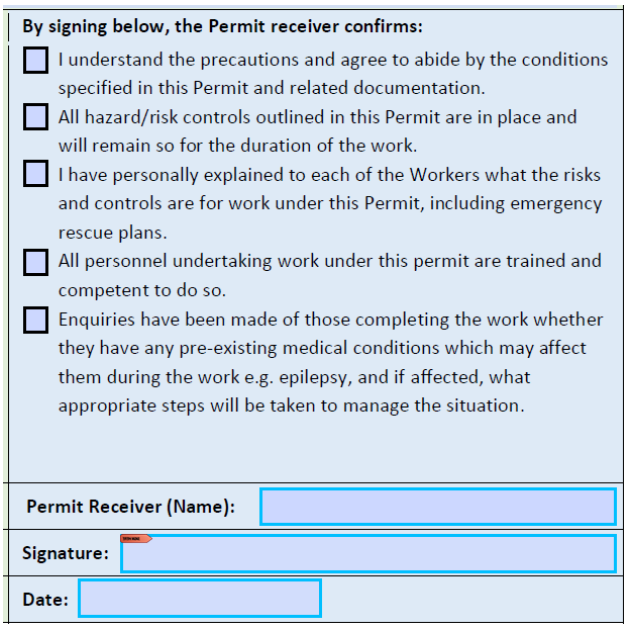
3.1.12 PTWA: Permit to Work – Application Process Map

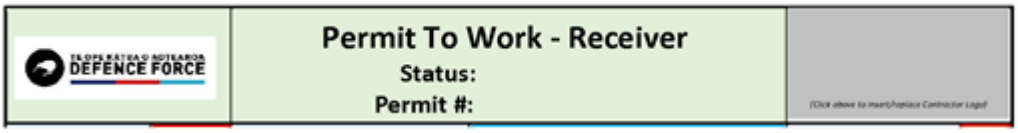


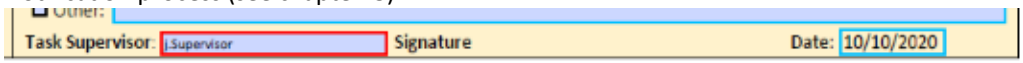
3.1.13 PTWA: Permit to Work – Application Procedure

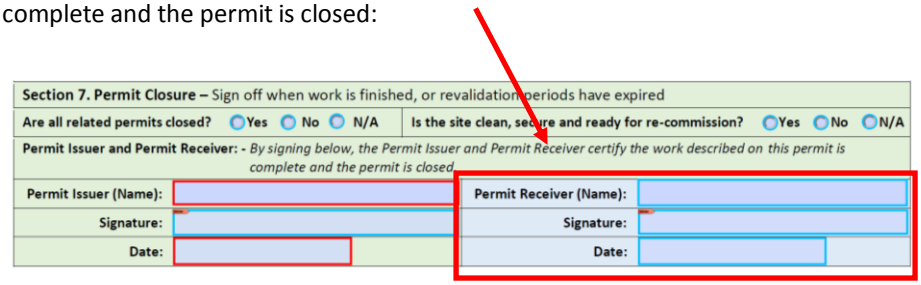
Step	Description	
PTWA.1 – Plan Task (Job Safety Analysis)	Perform a Job Safety Analysis (JSA) of the task and produce the JSA document to attach to the PTW. An example of the DEI JSA is included in the Contractor induction pack.	
PTWA.2 – Permitable Task?	Check to see if task to be performed is on the permitable work list in **Error! Reference source not found.** Is the task "*permitable*"? If Yes: go to step *Error! Reference source not found.* If No: End of Process	
PTWA.3 – Is work notifiable?	Determine if there are any tasks that classify as work that is notifiable to WorkSafe New Zealand. (see CHESS Vol 1, par 169, HSE Regulations 1995**Error! Reference source not found.**) Are any of the tasks notifiable? If **Yes**: Go to ***PTWA.4 – Raise WorkSafe New Zealand notification*** If **No**: Go to ***PTWA.6 – Raise DEI PTW****Error! Reference source not found.*	
PTWA.4 – Raise WorkSafe New Zealand notification	Raise and submit a notification to WorkSafe New Zealand using the ***Particular Hazardous Work Notification Form*** available on the WorkSafe New Zealand website.	
PTWA.5 – Save notification	When complete, save a PDF copy of the notification to attach to the PTW.	
PTWA.6 – Raise DEI PTW	Open the DEI *Permit To Work* form (download from https://jars.nz/chess.html).	
	(a) Project details	Complete the project details at the top of the form  Include the following: ***PVID#*** - The Planview Project Work ID (for FM work where no PVID exists, enter the FM provider). ***Company name*** - Enter the name of the company/Contractor/FM Provider requesting the PTW. ***JARS Contractor ID*** – Enter the ID if the Contractor/FM Provider as defined in JARS. ***Camp/Base*** - Select the base/building ***FLOC*** – Enter the Functional Location (FLOC) of the task (if not known, consult a DEI representative) **Work Site Location** – Enter free form text describing the site location of the task (building; Area: etc.). **Location of Work on Site** – Enter free form text describing where on the site the work or task is being performed. **Description of Work** – Enter a description of the task that is being undertaken.

	(b) Permit Receiver	Complete the contact details for the permit receiver (applicant Contractor/FM Provider, company, or NZDF member) responsible for performing the associated work order Permit Receiver: Name: Email: Phone/Mob:
	(c) Date/Time	Specify the preferred start date and time and the expected date and time the task and any associated clean-up should be completed. ***A PTW cannot be issued for the period longer than a single working shift.*** Date/Time Start Date: Start Time: End Date: End Time: **Note:** Applications for Permits must be made at least 24 hours prior to the required start time, except in extraordinary circumstances and only with approval from the EDD.
	(d) Section 1. Identify Work to be completed	Indicate which Permit Certificate is required by ticking the box(es) that best describes the type of work being performed. ☐ (1) Confined Space ☐ (2) Ground disturbance ☐ (3) Hot Work ☐ (4) Lifting ☐ (5) Gas ☐ (6) Penetrating Structure ☐ (7) Asbestos ☐ (8) Pipe works ☐ (9) Work at Height ☐ (10) Tree Felling ☐ (11) Compressed gas ☐ (12) Hazardous Substances ☐ (13) Electrical ☐ (14) Explosives ☐ (15) Control Bypass ☐ (16) Diving ☐ Other: Inspections may be performed by the DOC, authorised DEI official, or FMPIDOC, authorised DEI official, or FMPI before Permit Certificates are issued.If a site map is available, indicate where the task is being performed on the site map and attach it with the application.
	(d) Section 2. Identify Hazards Involved in the Permited Work	Tick the appropriate boxes that indicate which hazards may be present during this task. ☐ Oxygen deficiency ☐ Sources of ignition ☐ Falling ☐ Power tools ☐ High pressure ☐ Contamination ☐ Hot environment ☐ Falling objects ☐ Electrical ☐ Eye hazards ☐ Chemical exposure ☐ Cold environment ☐ Uneven surface ☐ Limited access ☐ Loud noise ☐ Acids/caustics ☐ Hot/cold surfaces ☐ Mechanical lifting ☐ Heavy lifting ☐ Repetitive motion ☐ Asbestos ☐ Severe weather ☐ Excavation ☐ Pinch points ☐ Sharp objects/edges ☐ Stored energy ☐ Other: ☐ SDS reference:
	(e) Section 3. Supplementary Documentation	Indicate which supplementary documents have been included in the permit request. ☐ **Permit certificate** – A Permit Certificate must be used in conjunction with the Permit form to provide assurance that all reasonable and practicable steps have been taken to mitigate risks. ☐ **WorkSafe notification** – Is this work notifiable to WorkSafe? – If so, when were they notified? Date: ☐ **Amended Emergency Response Plan** – If the Work interferes with existing Emergency Response Plans, amendments to the plan must be included ☐ **Emergency Rescue Plan** – Emergency Rescue Plans MUST be included when working at height or in confined spaces, and must list rescue equipment ☐ **Job Safety Analysis** – Include a completed and signed JSA to indicate risk assessment and mitigation processes ☐ **Traffic Management Plan** – Provide a TMP if the work may disrupt or noticeably increase traffic on the Camp/Base ☐ **Asbestos Removal Control Plan** – An Asbestos Removal Control Plan is required whenever work involves the removal of asbestos. ☐ **Asbestos pre-work checklist** – An asbestos pre-work checklist is required whenever work may involve handling or disturbing Asbestos ☐ **Sitemap** – Maps/drawings/GPR results. ☐ **Site Alert (24 hrs Notice)** – Is a site alert required to inform the Camp/Base and other sites of the Permited work? ☐ **Training/Certification Confirmation** – Where Hazard specific or operational training is required by workers, submit confirmation of training to the permit Issuer ☐ **Other** The DOC, an authorised DEI official, or FMPI may request additional documentation not supplied
	(f) Section 4. Worker Sign Off	All staff working on the permited task must sign the permit on the day the task is to be performed, while on site. This ensures they are fully aware of the hazards involved and have had the opportunity to ask any questions they may have. Name / Signature / Date

	(g) Page 2/ Section 5. Confirm Conditions and Sign Form.	It is the responsibility of the DOC, authorised DEI official, or FMPIDOC, authorised DEI official, or FMPI to complete and sign the first part of this section indicating they have ensured the site is safe and all appropriate controls are in place for the permit, on the day the permit is issued. The Contractor/FM Provider (receiver) must also indicate all practicable and required controls are in place and their workers have been informed of their reaponsibilites. The contractor (receiver) must sign the permit on the day of issuing.  **By signing below, the Permit receiver confirms:** ☐ I understand the precautions and agree to abide by the conditions specified in this Permit and related documentation. ☐ All hazard/risk controls outlined in this Permit are in place and will remain so for the duration of the work. ☐ I have personally explained to each of the Workers what the risks and controls are for work under this Permit, including emergency rescue plans. ☐ All personnel undertaking work under this permit are trained and competent to do so. ☐ Enquiries have been made of those completing the work whether they have any pre-existing medical conditions which may affect them during the work e.g. epilepsy, and if affected, what appropriate steps will be taken to manage the situation. **Permit Receiver (Name):** **Signature:** **Date:**
PTWA.7 – SEND PTW TO DOC, AUTHORISED DEI OFFICIAL, OR FMPI	Save the completed PTW and email it along with WorkSafe notification evidence, site maps, SDSs and any other relevant documents, to the DOC, authorised DEI official, or FMPI.	
PTWA.8 – ARE REMOTE PERMIT CONDITIONS MET?	In exceptional circumstances, the DOC, an authorised DEI official, or FMPI may determine it is acceptable to issue the permit remotely (see ***Remote Permiting Controls*** for a list of conditions required for Remote Permiting). Conditions for this may also include video or online virtual meetings streamed to provide evidence of appropriate controls being in place. Have Remote Permit conditions been met? If **Yes**, go to ***PTWA.9 - Discuss hazards and remote permitting requirements*** If **No**, go to ***PTWA.10 - New PTW?***	
PTWA.9 – DISCUSS HAZARDS AND REMOTE PERMITTING REQUIREMENTS	If a remote permit is to be issued, the DOC, authorised DEI official, or FMPI will require a meeting to discuss the conditions of the remote permit and the evidence the Receiver must meet to provide assurance controls are in place to mitigate Hazards and Risks associated with the task.	
PTWA.10 – RECEIVE PTW	The DOC, authorised DEI official, or FMPI will review and issue the new or amended PTW if they are satisfied no changes are required, and return it on the day of issue for signing. Alternatively, the DEI Official may return a rejected or suspended PTW via email.	

	 When rejecting a PTW, the DEI Official will provide reasons and any additional requirements via email. This may include changed dates/times or additional safety controls for unreported hazards.
PTWA.11 – NEW PTW?	The returned PTW may be either a new one, or one that has been amended, cancelled or suspended. Is this a new PTW? If **Yes**, go to ***PTWA.13 PTW Issued*** If **No**, go to ***PTWA.12 Received Amended PTW***
PTWA.12 – IS PTW SUSPENDED	Has the existing PTW been suspended? If **Yes,** Go to step *Error! Reference source not found.* ***Extension*** If **No,** Go to step *Error! Reference source not found.* ***Task***
PTWA.13 – PTW ISSUED?	The PTW may be either Issued or Cancelled. Has the PTW been issued? If **Yes,** Go to step *Error! Reference source not found.* ***Task*** If **No,** Go to step *Error! Reference source not found.*
PTWA.14 – BEGIN TASK	Sign and display a copy of the issued PTW at a key point onsite. Begin task at the approved date/time.
PTWA.15 – AMEND PTW?	Amend the PTW to align with concerns and/or requirements of the DOC, authorised DEI official, or FMPI. Go to ***PTWA.7 – Send PTW to DOC, authorised DEI official, or FMPI***
PTWA.16 – MONITOR SITE	Monitor safety and risks on the worksite. Monitor the site for safety issues and delays that will affect the PTW or its schedule.
PTWA.17 – CHANGE IN CIRCUMSTANCES ?	Monitor the worksite for a change in circumstances involving: • A reportable incident; • A Cease Work order; • A suspended PTW; • Unexpected hazards; • A change in the work environment; or • A delay in task completion. Has a change in circumstances occurred? If **Yes**, go to ***PTWA.18 – Secure Site and stop work***. If **No**, go to ***PTWA.27 – Permit Period Ends***
PTWA.18 – *SECURE SITE AND STOP WORK*	In the event of a change in circumstances, secure the site, place appropriate safety controls in place and stop work immediately. Put all necessary controls in place to ensure the worksite is safe.

PTWA.19 – *CAN WORK CONTINUE?*	After securing the site, analyze the situation to determine if adequate controls are in place to mitigate any additional risks or hazards and possibly allow work to continue. If work could possibly continue, go to ***PTWA.22 - Notify DOC, an authorised DEI official, or FMPI of Stop Work/Suspension.*** If work is unable to continue safely, go to ***PTWA.20 - Notify DOC of Stop Work.*** After making the site
PTWA.20 – NOTIFY DOC, AUTHORISED DEI OFFICIAL, OR FMPIOF STOP WORK	Notify the DOC, authorised DEI official, or FMPIDOC, authorised DEI official, or FMPI of the Stop Work situation and possible remediation solutions.
PTWA.21 – FOLLOW INCIDENT MANAGEMENT SYSTEM REPORTING	In the event of an injury or notifiable event occurring, follow the Incident Management System Notification process (see chapter 3). 
PTWA.22 – NOTIFY DOC, AUTHORISED DEI OFFICIAL, OR FMPI OF STOP WORK	Notify the DOC, authorised DEI official, or FMPIDOC, authorised DEI official, or FMPI of the Stop Work/Permit suspension situation.
PTWA.23– INSPECT SITE AND DISCUSS PERMIT EXTENSION	Inspect the site with the DOC, authorised DEI official, or FMPI and discuss remediation actions and the possibility of restarting or extending the permit. In the instance of a remote permit being issued, it may be necessary perform the inspection over the phone of video conferencing.
PTWA.24 – IS A PERMIT RESTART/ EXTENSION APPROVED?	Has a restart or extension to the permit been approved? Has the PTW been suspended? If **Restart is approved**: go to ***PTWA.25 – Restart work*** If **Permit has been cancelled**: go to ***PTWA.26 - Raise new JSA*** If **Permit Extension is approved:** Go to ***PTWA.10 – Receive PTW*** .
PTWA.25 – RESTART WORK	If a restart of the permit has been approved, restart the work. Go to ***PTWA.16 – Monitor Task Site***.
PTWA.26 – RAISE NEW JSA	As the Permit has been cancelled, a new Job Safety Analysis must be completed before raising a new Permit. Once complete, go to ***PTWA.1 – Plan Task***
PTWA.27 – PERMIT PERIOD ENDS	Permits are only valid for a single shift but may be suspended and revalidated up to 5 times.
PTWA.28 – IS THE WORK COMPLETE?	Has the work described by the permit been completed? If **Yes**: go to ***PTWA.30 – Inspect Site*** If **No**: go to ***PTWA.29 – Request Extension***

PTWA.29– REQUEST EXTENSION	If an extension is required, contact the DOC, authorised DEI official, or FMPI. Go to ***PTWA.10 – Receive PTW***
PTWA.30 – IS INSPECT SITE	Inspect the site to ensure all permited work is complete and the site is safe.
PTWA.31 – RAISE CLOSURE REQUEST	Request the DOC, authorised DEI official, or FMPI close the PTW.
PTWA.32 – SEND PTW TO DOC, AUTHORISED DEI OFFICIAL, OR FMPI	Sign section 7 of the Permit to work form certifying that the work described on the permit is complete and the permit is closed:  **Section 7. Permit Closure –** Sign off when work is finished, or revalidation periods have expired **Are all related permits closed?** Yes No N/A **Is the site clean, secure and ready for re-commission?** Yes No N/A **Permit Issuer and Permit Receiver: -** *By signing below, the Permit Issuer and Permit Receiver certify the work described on this permit is complete and the permit is closed.* **Permit Issuer (Name):** **Permit Receiver (Name):** **Signature:** **Signature:** **Date:** **Date:** Then return the permit to the DOC, authorised DEI official, or FMPI.
PTWA.33 – RECTIFY CLOSURE ISSUES?	The DOC, authorised DEI official, or FMPI will inspect the site and may identify issues that need remediation. In this event, rectify the identified issues then go to ***PTW.32 – Send PTW to DOC, authorised DEI official, or FMPI.***
PTWA.34 – RECEIVE UPDATED PTW ?	Receive the signed copy PTW from the DOC, authorised DEI official, or FMPI and file it with other Project documents.
PTWA.35 – EOP	***End of Process***

3.2 PTW-C: Permit to Work - Issuing a PTW for Facilities Maintenance Projects

3.2.1 Introduction

WHAT THIS PROCEDURE IS FOR?

50. This guide provides a step-by-step procedure for issuing and receiving a *Permit to Work* for Facilities Maintenance (FM) jobs and projects on the Defence Estate.

WHO THIS PROCEDURE IS FOR?

51. This guide is for FM Providers and their Subcontractors needing to apply or issue a *Permit to Work* for Scheduled and unscheduled maintenance tasks.

3.2.2 General Overview

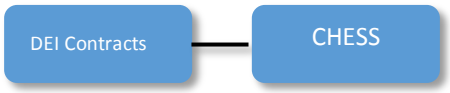
52. A *Permit to Work* system is a written permission designed to manage potentially hazardous (Permited) work and reduce the opportunity for human error. The system constitutes a clear and standardised approach to identifying tasks, risk assessments, permit task duration, supplemental or simultaneous activity and control measures.

53. The preferred option is to conduct permit issuing on site, but due to the unique areas and/or circumstances across the estate it may not always be achievable. **FM Project Permitting** is required from time to time were works are undertaken by FM Providers for scheduled or unscheduled maintenance on sites across the estate and it is impractical for DEI DOCs to issue permits. The option to allow FM Providers to issue permits for FM projects sits with the DOC or their absence, the RHSS.

54. The PTW must be discussed in the morning site meeting, prior to the work commencing, to ensure all workers on-site are aware of the PTW and its locations. All workers must be made aware of the subsequent hazards and precautions required around the task being performed.

55. Generally, this process is similar to the standard Permit to Work process used for CAPEX projects, but allows qualified and authorised Facilities Maintenance personnel to issue permits for facilities maintenance projects.

DEI Processes and Policies



CHESS Sub-processes and Procedures

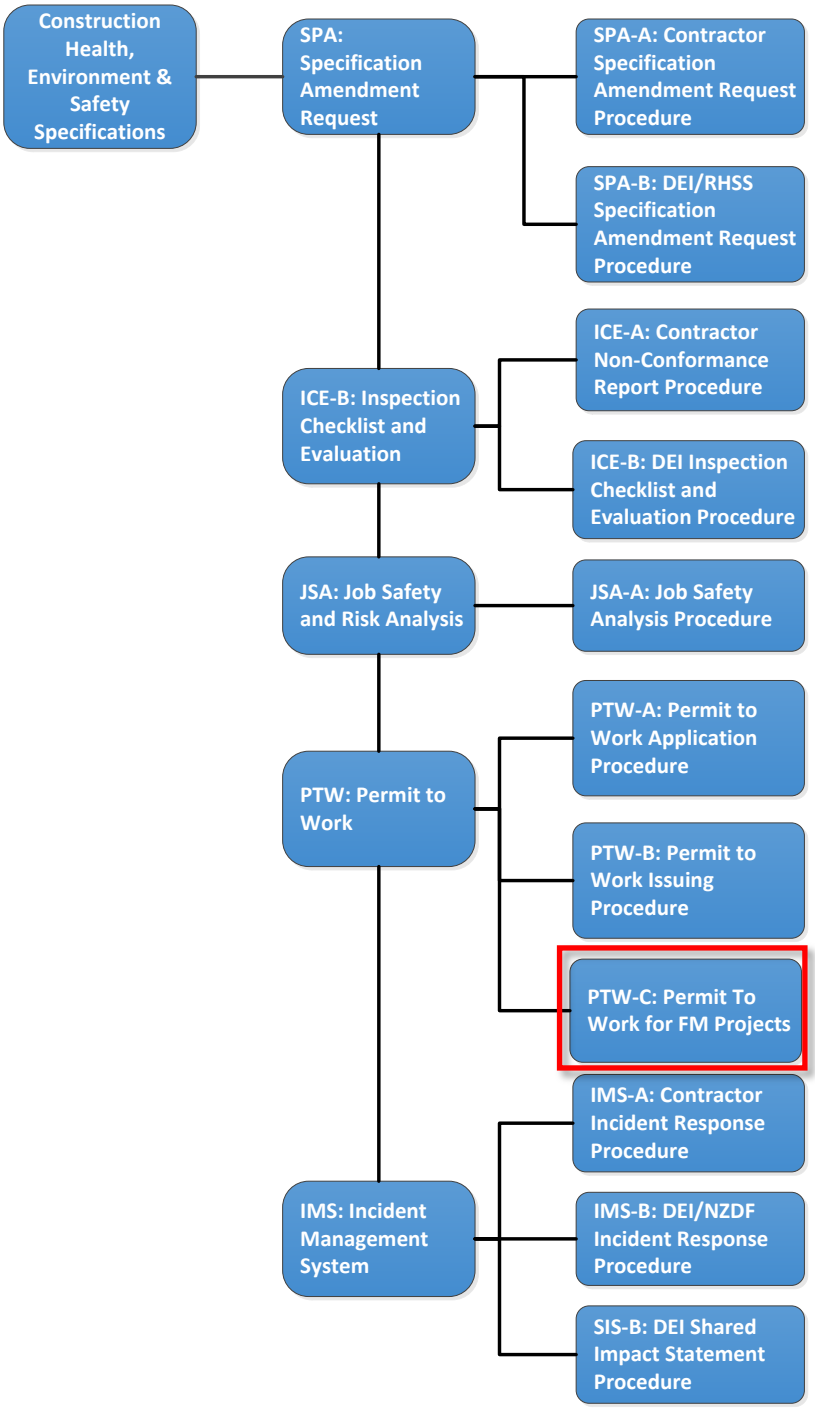


Figure 2. *CHESS Procedures and Sub-Procedures: PTW-C*

RELATED PROCEDURES

***PTW-A: Permit to Work - Receiving Procedure*.** Assists NZDF staff to apply for and receive a *Permit to Work* on NZDF Estate.

3.2.3 When Is A Permit Required?

56. A PTW is required at all times for all activities described in the *DEI Permit To Work Process (refer Chapter 4.3 CHESS Policy and Specification)*, and must include a DEI Job Safety Analysis (JSA) and any other supporting certificates and/or documentation.

57. The table on page 35 describes *permitable* work

Resources assigned to the roles listed in this section may differ from real life, depending on the structure of the associated departments.

3.2.4 Roles and Responsibilities – Who Does What?

58. The Contractor/Task Supervisor is responsible for:

    a. Raising and applying for a Permit to Work Min 24 hrs in advance;
    b. Notifying WorkSafe of any notifiable work;
    c. Ensuring appropriate safety controls are implemented and in place;
    d. Ensuring work is performed by suitably qualified workers;
    e. Informing Permit Issuer of delays or issues relating to the Permit to Work.
    f. Requesting extensions to a Permit to Work though the Permit issuer (DOC)

59. The **FMPI** is responsible for:

    a. Ensuring all known hazards are identified and communicated;
    b. Reviewing applications for appropriate Health and Safety controls;
    c. Issuing a Permit to Work;
    d. Maintaining a Permit to Work register
    e. Updating Permits when suspended, cancelled or closed.
    f. Informing the DOC of any issued Permit or the change of status of any issued permit

60. **Note**: All staff responsible for issuing a Permit to Work must have successfully completed Permit to Work – Issuer (NZQA Unit Standard 17590) and Permit to Work – Receiver (NZQA Unit Standard 17588) training.

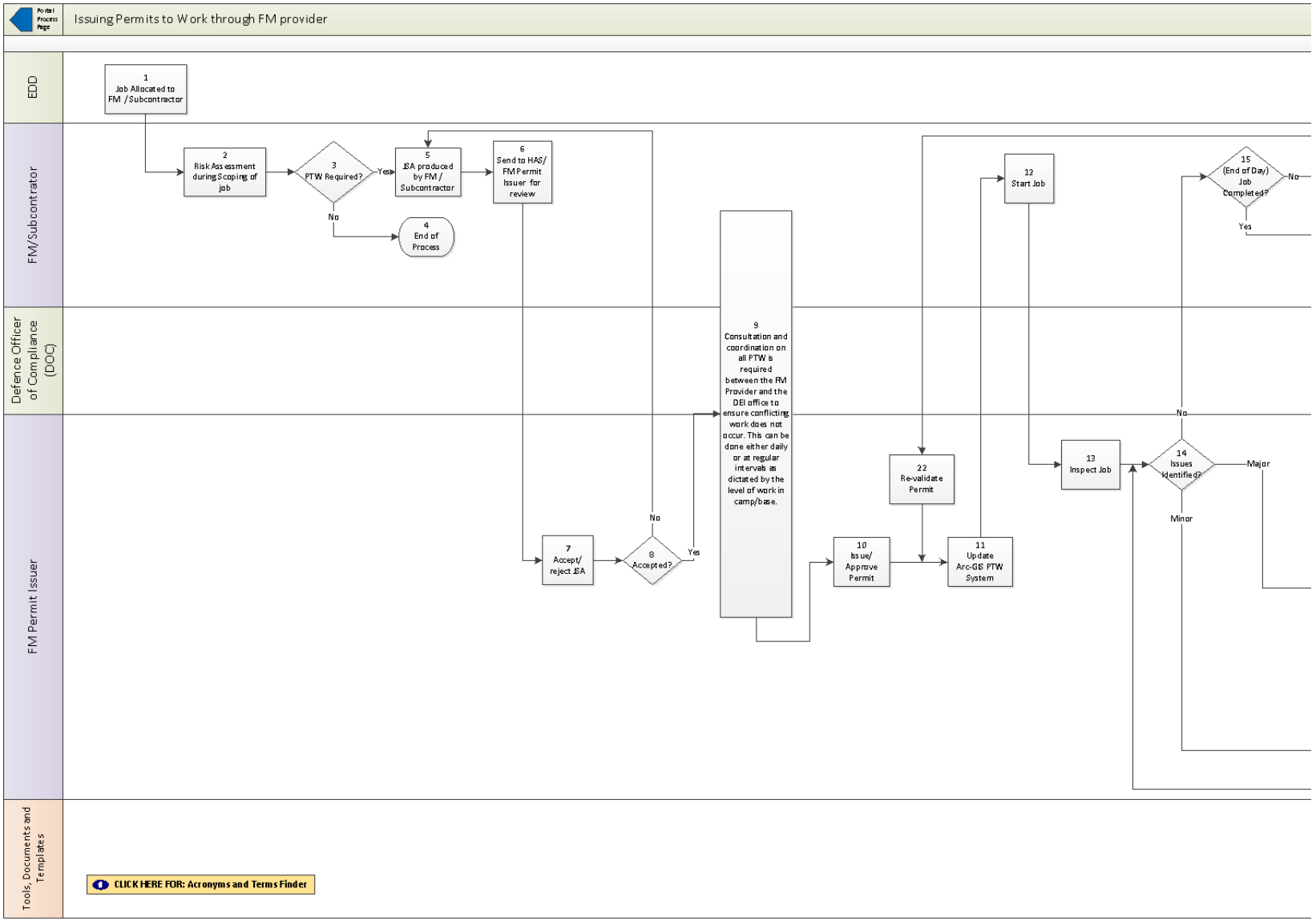
61. The **DOC** is responsible for:

    a. Communicating with the FMPI to identify all open Permits;
    b. Updating SIMOPS on the status of FM Permits.

62. The **HSA** is responsible for:

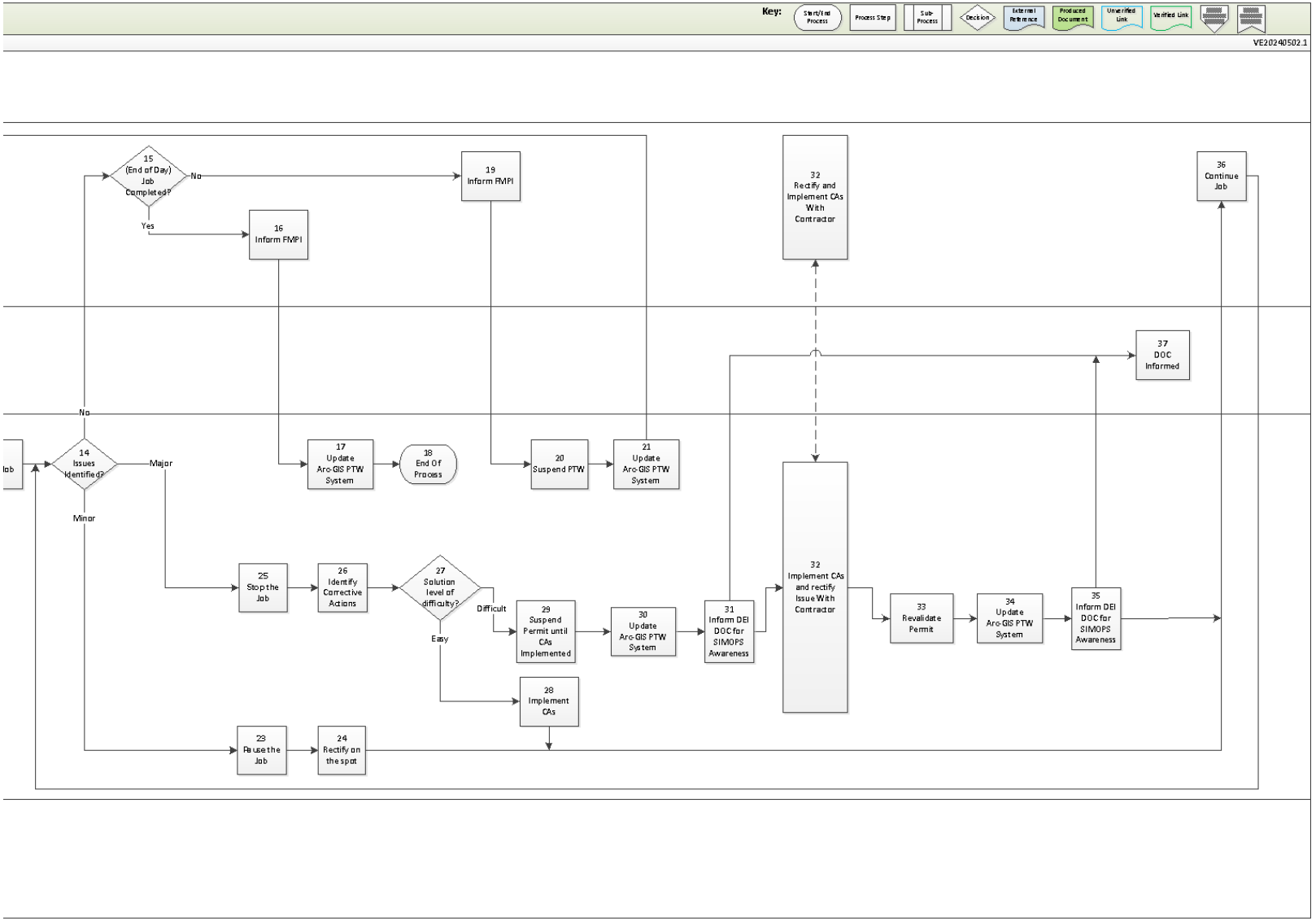
    a. Ensuring Job Safety Analysis (JSA) from Subcontractors are complete, accurate, and correctly identify hazards and controls;

3.2.5 PTWA: Permit to Work – Issuing a PTW for Facilities Maintenance Projects Process Map (1 of 2)



1 of 2

PTWA: PERMIT TO WORK – ISSUING A PTW FOR FACILITIES MAINTENANCE PROJECTS PROCESS MAP (2 OF 2)



2 of 2

3.2.6 PTWC: Permit to Work – FM Permit Issuing Procedure

Step	Description
EDD	
PTWC.1 – JOB ALLOCATED TO FM PROVIDER/SUB-CONTRACTOR	The EDD will allocate Estate maintenance projects as required to FM providers. These, in turn, may allocated to subcontractors
FM Provider/Subcontractor	
PTWC.2 – RISK ASSESSMENT DURING SCOPING OF JOB	Perform a Job Safety Analysis (JSA) of the task. This should also include a Risk assessment of any hazards involved in the job/project.
PTWC.3 – PTW REQUIRED?	Do the inherent hazards require a Permit to Work? If **Yes**: go to Step 5 – Complete PTW form. If **No**: go to next step
PTWC.4 – END OF PROCESS	Start project - ***End of Process***
PTWC.5 – JSA PRODUCED BY SUBCONTRACTOR	Produce the JSA document to attach to the PTW. An example of the DEI JSA is included in the Contractor induction pack.
PTWC.6 SEND TO HSA FOR REVIEW	Send the JSA to the Health& and Safety Advisor/ FM Permit Issuer for review and acceptance.
Health and Safety Advisor/FM Permit Issuer	
PTWC.7 – ACCEPT/REJECT JSA	Review the JSA and either accept or reject it.
PTWC.8 – ACCEPTED	Is the JSA Accepted?. If **Yes**: go to Next Step - Consultation. If **No**: Return to step 5
FM Permit Issuer/DOC/Subcontract (as required)	
PTWC.9 – CONSULTATION	Consultation and coordination on all PTWs is required between the FM Provider and the DEI office to ensure conflicting work does not occur. This can be done either daily or at regular intervals as dictated by the level of work in camp/base.
FM Permit Issuer	
PTWC.10 – ISSUE/APPROVE PERMIT	Produce the JSA document to attach to the PTW. An example of the DEI JSA is included in the Contractor induction pack.
PTWC.11 – UPDATE ARCGIS PTW SYSTEM	Update ArcGIS with permit status. Ensure DOC is included in notifications.

FM Provider/Subcontractor	
PTWC.12 – START JOB	Start work on the job/project.
FM Permit Issuer	
PTWC.13 – INSPECT JOB	Inspect the job site (as required) for adherence to the Permit conditions and overall safety.
PTWC.14 – ISSUES IDENTIFIED	Have any issues been identified? If **Minor**: go to Step 23 – **Pause the Job**. If **Major**: go to Step 25 – **Stop the Job**. If **No**: go to next step
FM Provider/Subcontractor	
PTWC.15 – (END OF DAY) JOB COMPLETED?	At the end of the day, Has the job/project been completed? If **Yes**: go to next step – **Inform FMPI** If **No**: go to Step 19 – **Inform FMPI**
PTWC.16 - INFORM FMPI	Inform the FMPI that the job/project has finished..
FM Permit Issuer	
PTWC.17 – UPDATE ARCGIS PTW SYSTEM	Update ArcGIS with permit status. Ensure DOC is included in notifications.
PTWC.18 – END OF PROCESS	Process completed.
FM Provider/Subcontractor	
PTWC.19 - INFORM FMPI	Inform the FMPI that the job/project has finished.
FM Permit Issuer	
PTWC.20 – SUSPEND PERMIT	Suspend the permit for review and consideration.
PTWC.21 – UPDATE ARCGIS PTW SYSTEM	Update ArcGIS with permit status. Ensure DOC is included in notifications.
PTWC.22 – RE—VALIDATE PERMIT	On the following day revalidate Permit if appropriate. Go to Step 11 – **Update ArcGIS PTW System**
PTWC.23 – PAUSE THE JOB	Pause the job to review and discuss the minor issue, and possible resolutions.
PTWC.24 – RECTIFY ON THE SPOT	In conjunction with the Subcontractor, rectify the issue on the spot. Go to Step 36 – **Continue Job**
PTWC.25 – STOP THE JOB	Stop all work related to the permit or around the affected site.
PTWC.26 – IDENTIFY CORRECTIVE ACTIONS	With the Subcontractor, identify what corrective actions could be taken to rectify the issue.

PTWC.27 – SOLUTION LEVEL OF DIFFICUTLY?	How difficult is it to implement the selected solution to the issue? If **Easy**: go to next step – **Implement CAs** If **Difficult**: go to Step 29 – **Suspend Permit until CAs Implemented**
PTWC.28 – IMPLEMENT CAS	Implement Agree corrective actions. Go to Step 36 – **Continue Job**
PTWC.29 – SUSPEND PERMIT UNTIL CAS IMPLEMENTED	Suspend the Permit until all agreed corrective actions are implemented.
PTWC.30– UPDATE ARC-GIS PTW SYSTEM	Update ArcGIS with permit status. Ensure DOC is included in notifications.
PTWC.31 – INFORM DEI DOC FOR SIMOPS AWARENESS	Inform the local Defence Officer of Compliance (DOC) of the suspension to ensure SIMOPS are aware of the issue (if not informed by ArcGIS).
FMPI/FM Provider/Subcontractor	
PTWC.32 – IMPLEMENT CAS AND RECTIFY ISSUE WITH CONTRACTOR	With the subcontractor, ensure the appropriate corrective actions have been implemented to to rectify the issue.
FM Permit Issuer	
PTWC.33 – REVALIDATE PERMIT	Revalidate the permit to all work to continue.
PTWC.34– UPDATE ARC-GIS PTW SYSTEM	Update ArcGIS with permit status. Ensure DOC is included in notifications.
PTWC.35 – INFORM DEI DOC FOR SIMOPS AWARENESS	Inform the local Defence Officer of Compliance (DOC) of the suspension to ensure SIMOPS are aware of the issue (if not informed by ArcGIS).
FM Provider/Subcontractor	
PTWC.36 – CONTINUE JOB	Continue with Job/project. Go to Step 14 – **Issues Identified?**
Defence Officer of Compliance	
PTWC.37 – DOC INFORMED	The DOC has been informed of the permit status for SIMOPS purposes.

Appendix A Permit To Work Form - Page 1 (Example Only)

TE OPE KĀTUA O AOTEAROA DEFENCE FORCE

Permit To Work - Receiver

Status:

Permit #:

(Click above to insert/replace Contractor Logo)

PVID#:		Contractor/Company Name:		JARS Contractor ID:	
Camp/Base:		FLOC		Version:	0
Work Site Location (Building):		Location of work on Site (Room/Level/Elevation)			
Description of Work:					
Permit Receiver:	Name:		Phone/Mob:		
	Email:				
Date/Time	Start Date:	Start Time:	End Date:	End Time:	

Reset form

Section 1. Identify work to be completed

Indicate which Permit Certificate is required by ticking the box(es) that best describes the type of work being performed.

☐ (1) Confined Space	☐ (2) Ground disturbance	☐ (3) Hot Work	☐ (4) Lifting	☐ (5) Gas
☐ (6) Penetrating Structure	☐ (7) Asbestos	☐ (8) Pipe works	☐ (9) Work at Height	☐ (10) Tree Felling
☐ (11) Compressed gas	☐ (12) Hazardous Substances	☐ (13) Electrical	☐ (14) Explosives	☐ (15) Control Bypass
☐ (16) Diving				
☐ Other:				

Section 2. Identify the Hazards Involved in the Permited Work

Indicate which hazards will be present during the Permited work.

☐ Oxygen deficiency	☐ Sources of ignition	☐ Falling	☐ Power tools	☐ High pressure
☐ Contamination	☐ Hot environment	☐ Falling objects	☐ Electrical	☐ Eye hazards
☐ Chemical exposure	☐ Cold environment	☐ Uneven surface	☐ Limited access	☐ Loud noise
☐ Acids/caustics	☐ Hot/cold surfaces	☐ Mechanical lifting	☐ Heavy lifting	☐ Repetitive motion
☐ Asbestos	☐ Severe weather	☐ Excavation	☐ Pinch points	☐ Sharp objects/edges
☐ Stored energy	☐ Other:		☐ SDS reference:	

Section 3. Supplementary Documentation

Indicate which supplementary documents have been included with the Permit request.

☐ **Permit certificate** – A Permit Certificate must be used in conjunction with the Permit form to provide assurance that all reasonable and practicable steps have been taken to mitigate risks.	☐ **WorkSafe notification** – Is this work notifiable to WorkSafe? – If so, when were they notified? Date:	☐ **Amended Emergency Response Plan** – If the Work interferes with existing Emergency Response Plans, amendments to the plan must be included	☐ **Emergency Rescue Plan** – Emergency Rescue Plans MUST be included when working at height or in confined spaces, and must list rescue equipment
☐ **Job Safety Analysis** – Include a completed and signed JSA to indicate risk assessment and mitigation processes	☐ **Traffic Management Plan** – Provide a TMP if the work may disrupt or noticeably increase traffic on the Camp/Base	☐ **Asbestos Removal Control Plan** – An Asbestos Removal Control Plan is required whenever work involves the removal of asbestos.	☐ **Asbestos pre-work checklist** – An asbestos pre-work checklist is required whenever work may involve handling or disturbing Asbestos
☐ **Sitemap** – Maps/drawings/GPR results.	☐ **Site Alert (24 hrs Notice)** – Is a site alert required to inform the Camp/Base and other sites of the Permited work?	☐ **Training/Certification Confirmation** – Where Hazard specific or operational training is required by workers, submit confirmation of training to the permit Issuer	☐ **Other**

Section 4. Worker Sign Off

Worker: - By signing this document, I confirm I have read and understood the Permit requirements and shall adhere to any relevant supplementary documentation submitted. By signing this document on site and on the day, it confirms that I have been given the opportunity to ask the Permit Receiver questions about the risks, hazards, and controls of this work.

Name	Signature	Date

Document Name: DEI Permit to work form background 41.docx Classification: Unclassified

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***Figure 3**. Permit To Work Form - Page 1*

Permit To Work Form - Page 2 (Example Only)

TE OPE KĀTUA O AOTEAROA DEFENCE FORCE	**Permit To Work - Issuer** **Status:** **Permit #:**	

Section 5 - Permit Authorisation – *The permit is not valid until signed by both parties (unless issued remotely) and is current for one day only (9 hours) but may be revalidated*

Are there conflicts with other PTWs? ◯ Yes ◯ No **Conflicting PTW #s:**

Conflict Resolution:

By signing below, the Permit Issuer confirms:	**By signing below, the Permit receiver confirms:**
☐ I have personally inspected the worksite (remote Permits excepted). ☐ All NZDF DEI requirements for undertaking this work, as outlined in CHESS, have been appropriately addressed. ☐ The Permit Receiver has shared all information in relation to the hazards, risks, and controls relevant to the site as known to NZDF DEI currently. ☐ Isolation of Plant is completed (as required – task specific). ☐ Emergency Plan is appropriate for the risks. ☐ Adequate controls are included in the JSA. ☐ All workers under the Permit have signed onto the Permit. ☐ Work can commence (following the implementation of any outstanding hazard controls). ☐ Base Command and all affected site projects have been notified and consulted for possible conflicts.	☐ I understand the precautions and agree to abide by the conditions specified in this Permit and related documentation. ☐ All hazard/risk controls outlined in this Permit are in place and will remain so for the duration of the work. ☐ I have personally explained to each of the Workers what the risks and controls are for work under this Permit, including emergency rescue plans. ☐ All personnel undertaking work under this permit are trained and competent to do so. ☐ Enquiries have been made of those completing the work whether they have any pre-existing medical conditions which may affect them during the work e.g. epilepsy, and if affected, what appropriate steps will be taken to manage the situation.
Permit Issuer (Name):	**Permit Receiver (Name):**
Signature:	**Signature:**
Date: **Permit #**	**Date:**

Section 6 - Permit Suspension and Revalidation – Only the Permit Issuer can suspend and revalidate the Permit. Work can be revalidated for up to a maximum of five consecutive days.

The Permit Issuer Certifies:	Circumstances on site including the Permit Receiver remain unchanged. Work can re-commence (following the implementation of any outstanding hazard controls)
The Permit Receiver Certifies:	Following ceasing of work under this permit, a site inspection has been undertaken and circumstances on site remain unchanged. All personnel undertaking work under this permit are trained and competent.

Suspended by:	**Date/Time:**	**Revalidated by:**	**Date/Time**
Suspended by:	**Date/Time:**	**Revalidated by:**	**Date/Time**
Suspended by:	**Date/Time:**	**Revalidated by:**	**Date/Time**
Suspended by:	**Date/Time:**	**Revalidated by:**	**Date/Time**
Suspended by:	**Date/Time:**	**Revalidated by:**	**Date/Time**

Section 7. Permit Closure – Sign off when work is finished, revalidation periods have expired, or the permit is cancelled.

The Permit has been: ☐ Closed ☐ Cancelled

Are all related permits closed? ◯ Yes ◯ No ◯ N/A **Is the site clean, secure and ready for re-commission?** ◯ Yes ◯ No ◯ N/A

Permit Issuer and Permit Receiver: - *By signing below, the Permit Issuer and Permit Receiver certify the work described on this permit is complete and the permit is closed.*

Permit Issuer (Name):	**Permit Receiver (Name):**
Signature:	**Signature:**
Date:	**Date:**

Document Name: DEI Permit to work form background 41.docx Classification: Unclassified

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Figure 4. *Permit To Work Form - Page 2*

Appendix B Notifiable and Restricted Work

63. **Notifiable Work** - Health and Safety in Employment Regulations 1995 – consisting of:

a. Commercial logging or tree felling operations;

b. Construction work involving one or more of the following;

i. Work in which a person may fall five metres or more, other than (the following exclusions):

a) Work in connection with a residential building up to and including two full storeys;

b) Work on overhead telecommunication lines and overhead electric power lines;

c) Work carried out from a ladder only;

d) Maintenance and repair work of a minor or routine nature.

ii. The **erection or dismantling or scaffolding** from which any person may fall five metres or more;

iii. Work **using a lifting appliance** where the appliance has to lift a mass of 500 kilograms of more a vertical distance of five metres or more, other than work using an excavator, a fork-lift, or a self-propelled mobile crane;

iv. Work in any **pit, shaft, trench, or other excavation** in which any person is required to work in a space more than 1.5 metres deep and having a depth greater than the horizontal width at the top;

v. Work in any **drive, excavation, or heading** in which any person is required to work with a ground cover overhead;

vi. Work in **any excavation** in which any face has a vertical height of more than five metres and an average slope steeper than a ratio of one horizontal to two vertical;

vii. Work in which **any explosive** is used or in which any explosive is kept on site for the purpose of being used;

viii. Work in which **any person breathes air that is compressed** or a respiratory medium other than air.

64. **Restricted Work** - Health and Safety at Work (Asbestos) Regulations 2016 consisting of:

c. Work involving asbestos, if the asbestos is friable, and is or has been used in connection with thermal or acoustic insulation, or fire protection, in buildings, ships, structures, or vehicles;

d. Work involving asbestos, if the asbestos concerned is friable and is or has been used in connection with lagging around boilers, ducts, furnaces, or pipes;

e. The demolition of maintenance of anything, including a building or a part of a building, containing friable asbestos;

f. The encapsulation of materials containing friable asbestos;

g. The use, on asbestos cement or other bonded product containing asbestos, of:

i. A power tool with any kind of cutting blade or abrasive device, except when it is used with dust control equipment; or

ii. Any other equipment whose use may result in the release of asbestos dust, except when it is used with dust control equipment.

iii. Dry sanding of floor coverings containing asbestos.

3.3 Job Safety Analysis

3.3.1 About This Procedure

WHAT THIS PROCEDURE IS FOR?

65. This procedure provides a descriptions and a step-by-step procedure to perform a Job Safety Analysis in preparation for a Permit to Work application, for tasks carried out on New Zealand Defence Force (NZDF) Estate.

WHO THIS PROCEDURE IS FOR?

66. This procedure is for Contractor/FM Providers and NZDF staff needing to analyse and determine risk assessments and controls for construction and maintenance tasks.

3.3.2 General Overview

67. Risk assessment of individual hazards is essential for effective hazard management. Understanding and performing risk assessment and implementing appropriate control measures to mitigate risk, is vital to both protecting workers and business.

68. A Job Safety Analysis (JSA) is a procedure which helps integrate accepted health and safety principles and practices into a specific task or job. A JSA breaks a task into its basic steps, and identifies potential hazards and their risks associated with each step.

69. JSA's are prepared in relation to a Scope of Work/Method Statement setting out the overall worksite activity that explains the context for the JSA and the Permit to Work application. The Scope of Work/Method Statement must be supplied with the JSA as part of the supporting documentation for the Permit to Work application.

WHEN IS JSA REQUIRED?

70. On the Defence Estate, a JSA is required for all activities described in the DEI Permit to Work Process (see Notifiable and Restricted Work, and Permitable Work (see *Table 1 – Permitable Work*) described above.

71. A JSA is also required for any tasks that are not part of a current Standard Operating Procedure (SOP) and have a "Medium", "High" or "Extreme" risk assessment prior to implementing controls (according to the DEI Construction Hazard Risk Matrix).

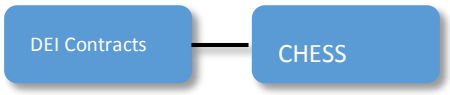
72. In addition to supplying information for a *Permit to Work* application, a JSA can be useful in:

    a. Correcting unsafe conditions and processes;
    b. Training; and
    c. Accident investigation.

73. The Contractor/FM Provider must use a JSA when conducting a toolbox talk prior to commencing the task so as to ensure:

    a. All members of the work team are aware of the risks and control measures required to perform the task safely;
    b. Roles and responsibilities for implementing controls are assigned and understood;
    c. The scope of the task has not changed; and
    d. No additional hazards have been introduced.

3.3.3 DEI Processes and Policies



CHESS SUB-PROCESSES AND PROCEDURES

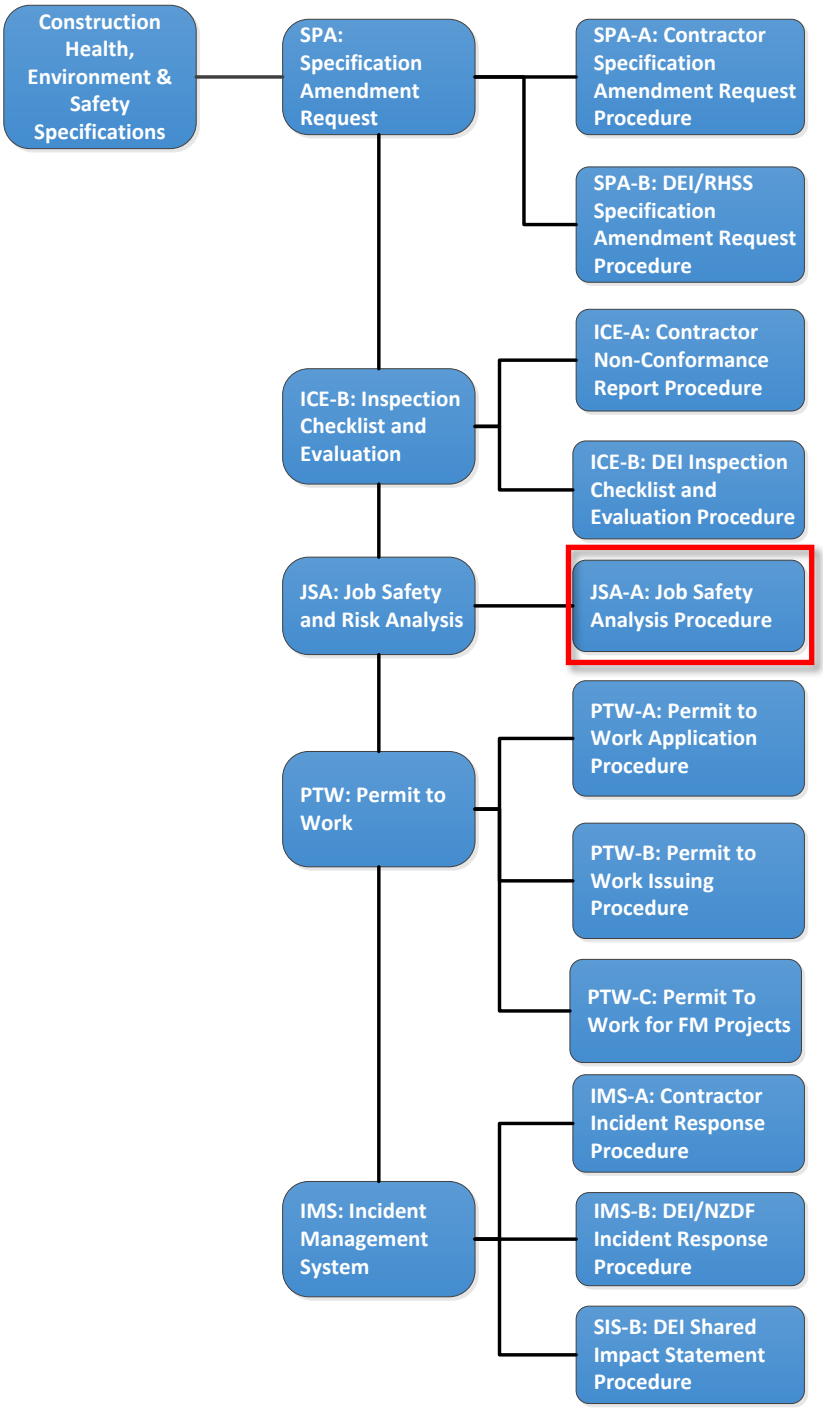


Figure 5. *CHESS Procedures and Sub-Procedures*

RELATED PROCEDURES

PTW-A: Permit to Work Application Procedure. Assists applicants in providing NZDF with enough information to allow them to check for hazards, and schedule permits around potential conflicts with other activities on the Estate.

PTW-B Permit to Work - Issuing Procedure. Assists authorised Issuers to review, schedule and issue a *Permit to Work* on Defence Estate.

3.3.4 Creating a JSA

74. The five basic steps of a JSA are:

    a. Select the task to be analysed;
    b. Break the task into a sequence of steps;
    c. Identify the potential hazards of each step;
    d. Identify the risk levels for each step; and
    e. Determine controls to mitigate the hazards and risks.

75. It is common practise to create and use a JSA as a basis for a Safe Work Method Statement (SWMS). The DEI Job Safety Analysis procedure and associated form combines the two processes into one concise document.

SELECT THE TASK TO BE ANALYSED

76. The Contractor/FM Provider Site Supervisors must complete a JSA for any permitable task before it is undertaken on the Defence Estate, to ensure safety and proper implementation of safety controls. The scope of defined tasks should not be too broad (such as "build a house") or too small (such as "turn on a light switch"). Typically, tasks will be of a scope that would be the responsibility of an individual or small team to undertake in the course of a single shift.

77. It is good practice to create a JSA on all tasks. This will help ensure Supervisors do not miss hazards or opportunities to lower the risks to workers performing tasks.

78. Where work has a low risk, unwritten or verbal hazard analysis processes may be used in the form of job-site discussions or personal hazard analysis. The Contractor/FM Provider and sub- or subordinate contractors may have implemented their own Personal Hazard Assessment processes, such as "Take 5".

BREAKING THE TASK INTO A SEQUENCE OF STEPS

79. Supervisors often create a JSA for repetitive tasks by observing a worker performing the task, and recording each step and potential hazards as they go.

80. When creating a JSA, the entire team tasked with performing the task should be involved and consulted. This provides a larger pool of experience and helps promote acceptance of the resulting work procedure.

81. Breaking the task into a sequence of steps assists in identifying individual hazards as the potential source of harm to people or the environment. While some steps may not involve any hazards, others may involve more than one.

82. Describe each step as an action, not how to perform the step. For example, describe the step as "Weld hinge to the door" rather than "Switch the welder on and create an even weld 3 cm long to secure the hinge to the door".

IDENTIFY THE POTENTIAL HAZARDS

83. Risks to health and safety must be eliminated or at least minimised as far as is reasonably practicable.

84. They arise from people being exposed to anything that is the source of harm (i.e. hazards) and can be broken down into two components:

    a. How likely it is harm will occur; and
    b. The degree of consequences or harm if an incident occurs.

85. *Before performing a risk assessment, it is essential to understand the difference between a 'hazard' and 'risk'.*

    a. A hazard is the potential source of harm, while;
    b. A risk is the likelihood and severity of that harm occurring.

86. For instance, an uneven surface is a **hazard** as someone may trip on it, lose balance and fall. The likelihood and extent of injuries caused by the fall is the **risk**.

87. Consideration should also be given to hazards to flora and plant, as well as personal hazards.

88. In addition, it is important to know and identify a number of other terms used when assessing hazards and analysing risks.

Table 2. Hazard and Risk Assessment Terms.

Term	Description
Top Event	A top event is the event describing a loss of control. Individual hazards may be the source of multiple top events. For example, when working at height, gravity (a hazard) may be the source of a number of top events, including: a. Loss of balance; or b. Dropped tools.
Threat	A threat is a condition or action that may directly result in a top event. For example, a top event may be "dropping tools". Some threats that could cause this event are: a. Wet tools (allowing tools to slip from grasp) b. Slippery gloves (allowing tools to slip from grasp) c. Tired hands (from holding or using tools for long periods, causing the hand muscles to tire).
Consequence	The consequences of dropping tools may be: • Injury to people below, hit by the tool; or • Damage to structure or equipment.
Controls	Controls are put in place to eliminate or minimise the probability of a threat occurring, or the severity of a consequence.
Residual Risk	The assessed risk after controls have been implemented.

IDENTIFY THE RISK LEVELS FOR EACH STEP

89. There are six basic steps to performing a risk assessment.

a. Identify the hazards;
b. Identify the associated top events;
c. Identify the threats and consequences;
d. Assess the risk of threats and consequences;
e. Decide on control measures; and
f. Determine residual risk.

Step 1: Identify the hazards

90. Many tasks will involve one or more potential hazards. Consult the HAZID Register developed at the beginning of the project or the FM Risk Register, and assess the worksite's environmental factors, physical conditions particularly where they do not align with the HAZID Register or FM Risk Register, or actions and behaviours, that may react in an unplanned manner, and could seriously harm the health or safety of workers and public while performing the task.

91. CHESS uses 14 hazard categories. The Hazard Category Reference Table (pages 62-63) lists the hazard classes.

Step 2: Identify the Top Event

92. A top event is the event that occurs when there is a loss of control over the hazard. Individual hazards may be the source of multiple top events. Examine the hazards present in each step and determine what top events may occur when control is lost.

93. Events can happen immediately (like a fall), or can occur slowly over a long period (like asbestosis). Engage with experienced workers about the worksite, as they are best placed to advise on the hazards existing in the worksite.

94. Top events could include:

    a. Loss of balance;
    b. Dropped tools;
    c. Ignition.

Step 3: Identify the threats and consequences.

95. Examine the identified top events to determine and list the threats that may cause them to happen. Multiple threats may be the cause of a top event. For example, threats to a "loss of balance" event may include:

    a. Tripping on an uneven surface;
    b. Over-extending reach from a platform.

96. Examine and list the possible consequences of an event occurring. These might include:

    a. Injury from a surface fall;
    b. Injury or death from a fall from height.

Step 4: Assess the risk

97. After identifying threats and consequences, determine the probability of them occurring.

98. Apply the DEI Construction Hazard Risk Matrix, *(*describes the four levels of risk used by DEI calculate the level of risk that is inherent in each item). It is this rating that will indicate the actions that are required to be taken, and when monetary costs could be considered.

Step 5: Select risk control measures

99. After identifying the threats and consequences, and assessing their risks, review available control options for mitigating the risks. Focus on managing the hazards with the most significant risks first before managing less serious risks. Risks can either be:

    a. Eliminated completely;
    b. Substituted for a lower risk work method, machine or product; or
    c. Minimised by either Isolation, Engineering Controls, Administrative Controls, PPE, or a mixture of these to reduce the likelihood of harm to an acceptable level (see Hazard Control Hierarchy).

100. Elimination or substitution are the preferred methods of mitigating risks.

101. For example, controls for the threats and consequences may be:

    a. Wet tools – use tool lanyards; provide towels to dry tools; provide covered work areas;
    b. Slippery gloves – provide non-slip gloves;
    c. Tired hands – require five minute breaks every 30 minutes to avoid muscle fatigue;
    d. Injury to people below hit by tools – provide safety nets below workers;
    e. Damage to structure or equipment – remove vital equipment below workers;
    f. Over-extending reach from a platform – provide fixed barriers to stop over-reaching;
    g. Injury or death from a fall from height – provide solid barriers to prevent falls from platforms.

102. It is also best practice to involve an appropriate manager, H&S Representative and/or a group of workers who may be exposed to the identified hazard in the risk assessment process. This ensures appropriate experience in selecting the controls to mitigate specific risks.

Step 6: Determine Residual Risk

3.3.4.1.1.1 Low Risk Tasks

103. After implementing the risk mitigation controls, re-assess each item, and calculate its new risk level using the DEI Construction Hazard Risk Matrix/FM Construction Risk Matrix. The aim of control measures is to lower the risk level to *Low* wherever possible.

3.3.4.1.1.2 Medium, High and Very High Risk Rated Tasks

104. Tasks with a residual risk level of High requires consultation and collaboration with relevant parties on the camp or base through a forum such as SIMOPS.

105. Activities with a residual risk level of Medium or higher requires approval from the Site Health and Safety Adviser before work can commence on the task. No work is to commence if the residual risk rating is at *Very High*.

106. All new tasks must undergo a JSA to determine any risk mitigation that may be required, and their residual risk. Should a task become a regular activity, and risks are assessed as Low, the Contractor/FM Provider may develop a Standard Operating Procedure (SOP) to ensure consistency and safety in the task's execution.

107. Record and implement the assessment process and agreed controls on-site.

JSA Reviews

108. As few workplaces are constant or static, review JSAs:

a. Every seven days;
b. When a change in the work activity occurs;
c. When a new hazard is identified; or
d. When a Stop Work Authority halts the task.

109. The higher the risk rating, the more frequent reviews should be undertaken. Always record when a review was undertaken, who was involved, and have all participants sign the reviewed JSA.

JSA Recording and Management

110. Each JSA must have a document reference number assigned by the creator. JSAs must be accessible and/or kept onsite in a weatherproof environment with any supporting documentation. If a task requires a Permit to Work (PTW), attach a copy of the JSA and the Scope of Work/Method Statement to the Permit application. When tasks are complete, archive the JSA and PTW (if applicable) for future reference.

Training

111. Staff participating in the development of a JSA must have completed the DEI induction training prior to participating in any activity covered by the JSA.

3.3.5 Hazard Control Hierarchy

112. Implementing controls to mitigate the risks of hazards in the workplace is the fundamental method of protecting workers. Worksite planners and supervisors use a hierarchy of controls as a means of deciding how to implement feasible and effective control solutions.

113. The diagram below represents a traditional hierarchy of controls.

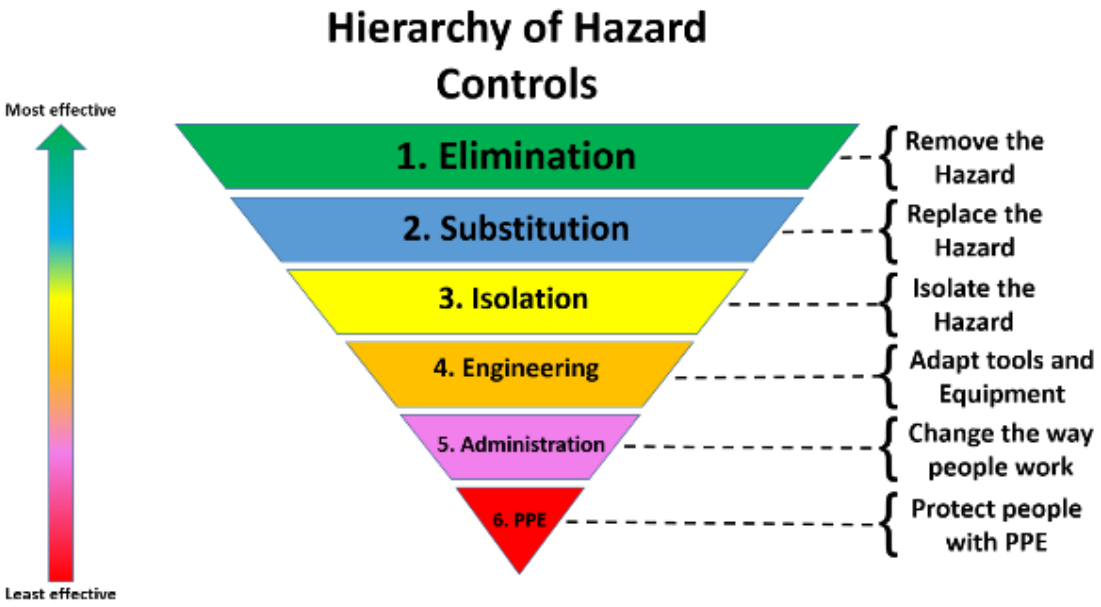


***Figure 6**. Hierarchy of Controls Pyramid.*

114. This hierarchy identifies control methods at the top of an inverted pyramid which are inherently more effective and protective than those at the bottom. Implementing the top controls first will normally reduce the risks that are present in a task, and lead to inherently safer systems.

ELIMINATION AND SUBSTITUTION

115. Although the most effective, elimination and substitution are the most difficult controls to implement in an existing process, as they may require expensive and difficult changes in equipment and procedures. For new processes and ones in the development stage, elimination and substitution of hazards may be more viable methods of mitigating the risks to workers, as they can be built into a system.

ISOLATION AND ENGINEERING CONTROLS

116. Isolation (barriers etc.) and engineering controls should be used over administrative processes and personal protective equipment (PPE), as they remove (or lower) the human error factor present in many incidents. By removing (or mitigating) the hazard at the source, the worker is no longer exposed or has contact with the hazards in the workplace. Effectively designing engineering controls may be costly in some instances, but can be highly effective in protecting workers, are usually offset by the lower requirement for PPE and more importantly, reduce numbers of incidents. In some cases, lower operating costs can provide cost savings over the long term.

117. Removing or minimising interactions between the worker and the hazard provides a much higher level of protection and safety than changes to procedures or additional PPE.

ADMINISTRATIVE CONTROLS AND PPE

118. Administrative controls and PPE have proven to be less effective than other control measures, requiring significant effort by the affected workers. However, they are often inexpensive to establish and are frequently used with existing processes, where hazards are not particularly well controlled.

3.3.6 Choosing Controls

119. Effective controls:

    a. Protect workers from workplace hazards;
    b. Help avoid injuries, illnesses, and incidents;
    c. Minimize or eliminate safety and health risks; and
    d. Help employers provide workers with safe and healthy working conditions.

120. The removal or avoidance of a hazard is always preferable to the implementation of controls that rely on human memory or compliance to mitigate risks.

121. To effectively control and prevent hazards:

    a. Involve workers, who often have the best understanding of the conditions that create hazards and insights into how to control them;
    b. Identify and evaluate options for controlling hazards, using a "hierarchy of controls";
    c. Use a hazard control plan based on the project's HAZID Register or the FM Risk Register to guide the selection and implementation of controls, and implement controls according to the plan;
    d. Develop plans with measures to protect workers during emergencies and non-routine activities;
    e. Evaluate the effectiveness of existing controls to determine whether they continue to provide protection, or whether different controls may be more effective; and
    f. Review new technologies for their potential to be more protective, more reliable, or less costly.

122. Always implement the highest possible level of control (where 1 is high and 6 is low) for the best safety and protection of workers and the public.

3.3.7 Roles and Responsibilities

INTRODUCTION

123. Resources assigned to the roles listed in this section may differ, depending on the structure of the associated departments. It is the Contractor/FM Provider's responsibility to identify the roles and accountability within their Construction Safety Management Plan.

124. The **Contractor/FM Provider** is responsible for:

a. Performing and completing a Job Safety Analysis (JSA) for tasks not part of a current Standard Operating Procedure (SOP) and have an initial risk level of Medium or above;
b. Ensuring workers and experienced personnel are consulted in the development and review of JSAs;
c. Ensuring all identified controls are in place; and
d. Consulting with appropriate managers, H&S Representative and/or a groups of workers to determine the most appropriate controls to be implemented.

125. The **Site Manager** is responsible for:

a. Ensuring a Job Safety Analysis (JSA) has been completed for tasks not part of a current Standard Operating Procedure (SOP) and have an initial risk level of Medium or above;
b. Consulting and collaborating with relevant parties on the camp or base through a forum such as SIMOPS for any tasks that have a residual risk level of High;
c. Ensuring the residual risk is minimised to ALARP;
d. Reporting incidents and near misses; and
e. Required and appropriate PPE is available to all workers.

126. The **Site Supervisor** is responsible for:

a. Ensuring a Job Safety Analysis (JSA) has been completed for tasks not part of a current Standard Operating Procedure (SOP) and have an initial risk level of Medium or above;
b. Ensuring the residual risk is minimised to as low as reasonably practical (ALARP); and
c. Auditing and monitoring compliance with the JSA.

127. The **Task Supervisor** is responsible for:

a. Ensuring a Job Safety Analysis (JSA) has been completed for tasks not part of a current Standard Operating Procedure (SOP) and have an initial risk level of Medium or above;
b. Ensuring workers and experienced personnel are consulted in the development and review of JSAs;
c. Ensuring all identified controls are in place;
d. Approve new and revised JSAs;
e. Ensure all workers performing the task are informed of the hazards, risks, and controls to be used for tasks;
f. Ensuring workers are qualified, competent, and sufficiently trained to perform their assigned roles; and
g. Verifying all workers are using and implementing required PPE and controls.

128. The Site Health and Safety Adviser is responsible for:

a. Managing health and safety on the worksite;
b. Ensuring a Job Safety Analysis (JSA) has been completed for tasks not part of a current Standard Operating Procedure (SOP) and have an initial risk level of Medium or above;
c. Ensuring the residual risk is minimised to as low as reasonably practical (ALARP);
d. Reviewing and Authorising any tasks that have a residual risk level of Medium or higher; and
e. Auditing and monitoring compliance with the JSA.

129. **Workers** are responsible for:

a. Ensuring they are aware of the hazards, risks, and controls to be used for a task;
b. Ensuring all identified controls and PPE are in place and used;
c. Ensuring they are capable of performing their assigned roles;

d. Notifying Task and Site Supervisors when new hazards are identified; and
e. Signing the JSA to signify they have read and been involved in the creation of the JSA.

3.3.8 Hazard Category Reference Table

Table 3a. Hazard Category Reference Table 1/2

Potential Top Event Examples						
Exposure to (resulting in Inhalation / Ingestion / Skin Contact)	Over stresses / Over-exertion / Poor Technique	Contact With / Loss of containment / Exposure to	Loss of Containment / Loss of control	Contact With	Loss of grip / Structural Failure / Loss of Balance	Contact With / Loss of Integrity / Structural Failure
Biological	Biomechanical	Chemical	Ecological	Electrical	Gravity	Mechanical
Airborne fibres/ particulates e.g. Asbestos Bacteria Blood Bourne Pathogens Contaminated Soil Contaminated Water Fungi/ mould Hygiene concerns Insect/ Animal bites or stings Vapours/ Dust/ Fumes/ Exhausts Viruses Water immersion	Body position, uncomfortable position Eye strain Muscular overexertion/ manual handling Repetitive operations Working Posture	Chemical transfer activities Contamination dust, chemicals, sediment, effluent non segregated waste Corrosives Depleted oxygen Explosives Flammable vapours/ materials Gasses (Oxygen, Carbon Monoxide/ Dioxide/ Hydrogen Sulphide/ Ammonia) Piping/ tanks containing chemicals Potential for trapped gases (Pockets of gas) Pyrophoric materials (ignites in Oxygen) Toxic gases/ carcinogens Unapproved chemical	Equipment dropped to water Soil contamination Spill/ Chemical to water Windblown litter	Compressors and transformer Exposed energized systems Lighting and batteries Overhead power lines Portable electrical equipment Static Electricity Underground/ buried electrical cables Unguarded or exposed electrical equipment	Anchor point/ lifting equipment (chains/ slings/ harness) Cave–In Converging/ sloping/ slippery surfaces Fall from height /climbing Inadequate/ constrained entry & exit Moving/ dropped/ falling objects Roof/ walkway/ platform/ handrails Scaffolding /Elevated Work Platform/ Roof Collapse Shifting Loads/ Materials Structural collapse (incl adjacent) Suspended in harness Uneven ground/ same level fall	Equipment Failure (Brakes, lights, pumps, valves and tools) Equipment under tension e.g., springs Exposed drive belts/ conveyors Exposed Rotating Machinery/ Rollers/Screw conveyors

Table 4b. Hazard Category Reference Table 2/2

Potential Top Event Examples						
Contact With / Caught by / Exposure to	Exposure To	Loss of containment / Loss of Pressure / Release of Stored Energy	Exposure to / Loss of Concentration	Exposure To / Contact With	Exposure To / Contact with	Exposure To
Motion	Noise	Pressure	Psychosocial	Radiation	Temperature	Vibration
Aircraft transportation Anchoring / deck lines / ropes Congested Work Area Ejected debris/tool parts Equipment/ Crane Overloading Excavation Equipment Foreign body in eye Line of fire & Pinch points - Hands/ fingers/ feet/ legs Line of fire -Body position -Shifting and swinging loads Marine vessel transportation Moving Vehicles/ Plant Road conditions Vehicle/Plant turnover Water ingress	Equipment noise e.g. grinding, chipping, engines High-pressure release Impact noise Sirens and alarms	Cylinders/ Tanks/ Vessels Exposed piping Hoses Pneumatic/ Hydraulic Underground piping	Aggression, violence Bullying, harassment Heavy workload Human factors (Fatigue, lapses in focus) Lone worker Low resource/ inadequate skills Monotonous tasks Poor communications Stress Unpleasant tasks	Ionising - X-Ray (Sources) Ionising- Lasers Ionising- Radon Non-ionising - Radio frequency and microwaves Non-ionising- Crack detection equipment Non-ionising- Lasers Non-ionising- Power Lines Non-ionising- Radiant heat Non-ionising- UV e.g. Sun, lighting, water treatment Non-ionising - Welding arc	Cooking and heating appliances Exposure to extreme weather conditions (wind, rain, fog) Flammable/ Combustible material (incl vegetation) Friction (Ignition Source) Hot/ Cold Surfaces Ignition Sources (Process/ Tools/ Vehicles) Steam Thermal discomfort	Whole body vibration Hand/arm vibration

Table 4a. DEI Construction Hazard Risk Matrix

3.3.9 DEI Construction Hazard Risk Matrix

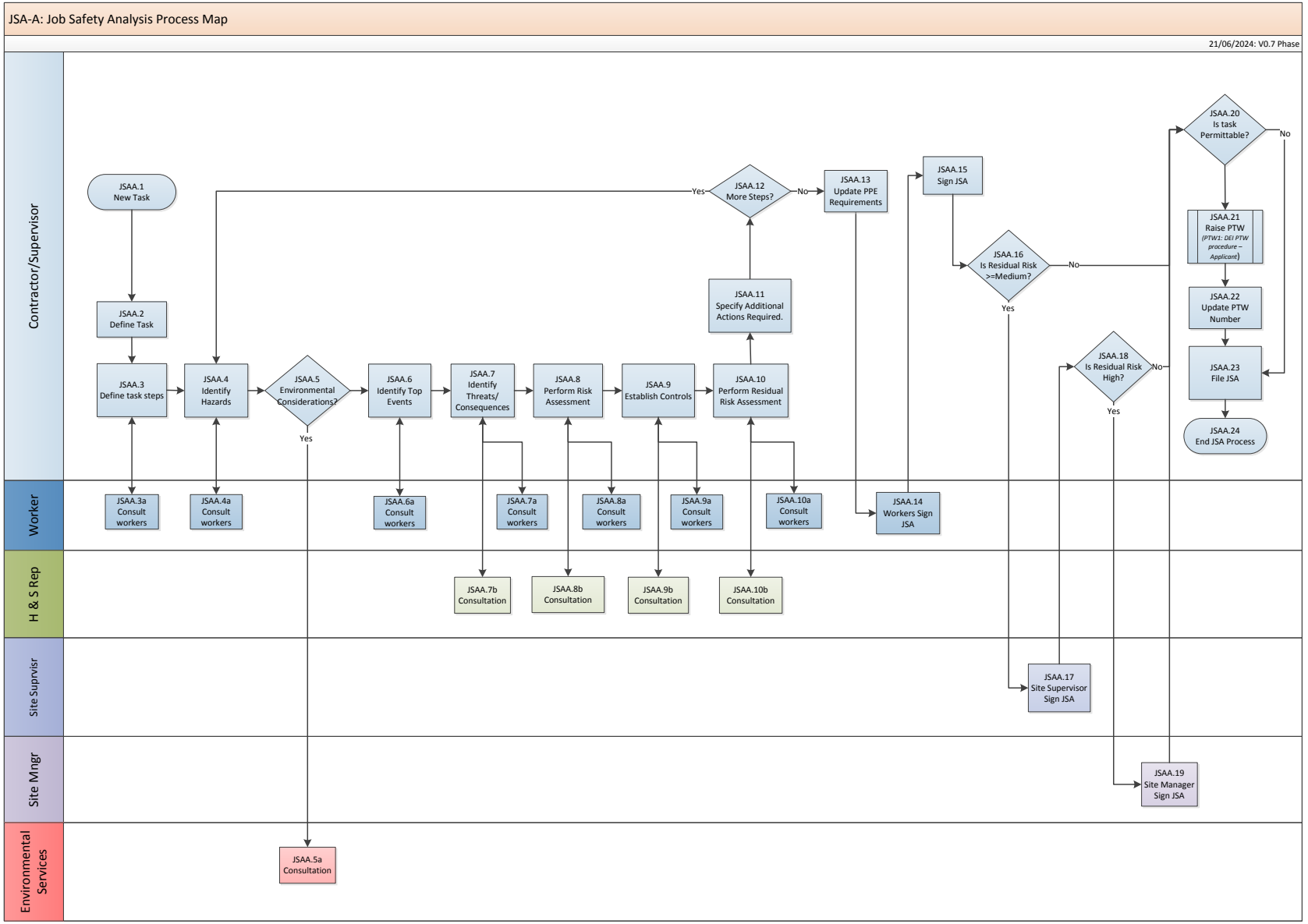
(e.g. Risk rating VERY HIGH (3,5), where "3,5" indicates impact level 3 (Major) and likelihood level 5 (Almost Certain)).

		IMPACT →			
	Environment	Temporary damage contained within Defence Estate; short-term, local detrimental effect.	Localised damage with some impact on external environment; serious detrimental effect that requires remedial action.	Extensive or serious damage to the environment; long term detrimental effect requires immediate remedial action.	Extensive, irreversible damage to the environment; extensive long term detrimental impact.
	People/ Health & Safety	First aid injury. Minimal lost time. Temporary partial disability. No long term effects.	Medical attention required. Short term lost time. Permanent partial disability. Medium to long term effects.	Fatality. Serious injury/illness/mental harm. Long term lost time. Permanent total disability. Long term effects.	Multiple fatalities. Multiple instances of serious physical or mental incapacity or ill health. Multiple cases of long term lost time. Multiple permanent total disability. Long term effects.
		Minor	**Moderate**	**Major**	**Extreme**	
Likelihood ↑	Could be expected to occur in most circumstances. — **Almost Certain**	**MEDIUM** (1,5)	**HIGH** (2,5)	**VERY HIGH** (3,5)	**VERY HIGH** (4,5)	**5**
	Could probably occur in most circumstances. — **Likely**	**LOW** (1,4)	**HIGH** (2,4)	**VERY HIGH** (3,4)	**VERY HIGH** (4,4)	**4**
	Could occur at some time. — **Possible**	**LOW** (1,3)	**MEDIUM** (2,3)	**HIGH** (3,3)	**VERY HIGH** (4,3)	**3**
	Could occur at some time, but is improbable. — **Unlikely**	**LOW** (1,2)	**MEDIUM** (2,2)	**MEDIUM** (3,2)	**HIGH** (4,2)	**2**
	Could occur in exceptional circumstances. — **Rare**	**LOW** (1,1)	**LOW** (2,1)	**MEDIUM** (3,1)	**HIGH** (4,1)	**1**
		1	**2**	**3**	**4**	

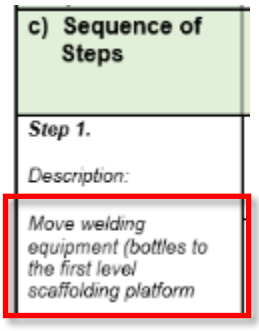
Table 4b. DEI Construction Hazard Risk Matrix

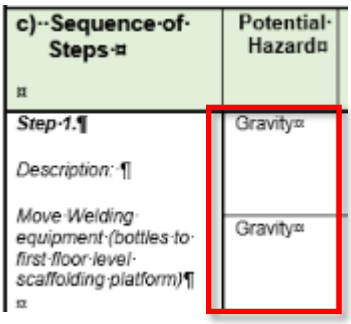
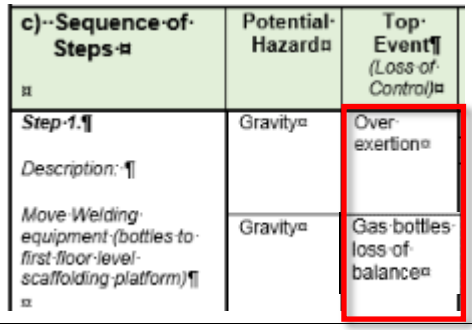
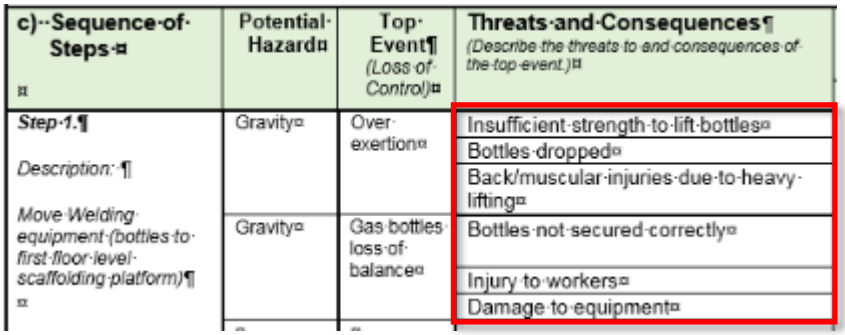
VERY HIGH **Intolerable**. Further treatment required as matter of priority. ***Action required:*** Develop treatment strategies or introduce appropriate controls, with the objective of reducing the risk to a lower level. Activities with a residual risk level of *VERY HIGH* **m**ust not proceed. Review at least monthly or if a significant change occurs.	**HIGH** **Generally Intolerable.** Further treatment required to be identified as matter of priority. **Action required:** Develop treatment strategies or introduce appropriate controls, with the objective of reducing the risk to a lower level. Activities with a residual risk level of High requires consultation and collaboration with relevant parties on the camp or base through a forum such as SIMOPS and approval of the designated Site Manager.	**MEDIUM** **Generally Tolerable.** Further treatment may be required where practicable. **Action required:** Develop treatment strategies or introduce appropriate controls, with the objective of reducing the risk to a lower level. Activities with a residual risk level of Medium or higher require approval from the Site Health and Safety Adviser before work can commence on the task.	**LOW** **Tolerable.** Unlikely to require further treatment. **Action Required:** The risk may be able to be managed by routine procedures. Minimal resource allocation or management effort required. In most cases these risks need no special precautions or actions, other than periodic monitoring of controls to ensure that the level of the risk has not changed.

3.3.10 JSA1: Job Safety Analysis Process Map



3.3.11 Job Safety Analysis (JSA) Procedure

Step #	Description Detail
JSAA.1 – NEW TASK	For all new tasks, create a Job Safety Analysis (JSA) to encourage dialog amongst workers and provide a focus for health and safety on the worksite. Many tasks may be determined as having few or negligible health and safety implications however this cannot be determined without proper analysis. Create a JSA for any tasks which are: – Notifiable to WorkSafe New Zealand; – Permitable, according to the DEI Permit to Work Policy; or – Have an initial risk rating of medium or above. A JSA must accompany all Permits to Work. A primary function of a JSA is to encourage a health and safety dialogue among the people that are performing the task. Print the blank JSA and record the outcomes by hand while consulting staff regarding the best processes to follow.
JSAA.2 – DEFINE TASK	***Section a)*** Specify the creation date of the JSA, the location of the task, a description of the task and its outcome. The review date should be 7 days after the creation date.  a) Date: 27/11/2018 Camp/Base/Building: Ngataringa Bay (NGA) Site: Drilling Site A Location: Additional Requirements Permit to Work required? DEI Permit #: Task Description: (Enter a description of the task to be performed and its desired outcome) Review Date: 4/12/2018 Weld metal struts to wall supports from the 1st floor scaffolding, for fixed tables. Struts must be in place before tables can be bolter to the wall.
JSAA.3 – DEFINE TASK STEPS	***Section b)*** Consulting workers familiar with the task, list each logical step required to complete the task. Typically, tasks may take up to eight or nine steps to complete. Copy and add additional pages to the JSA, as required. If a task has more than 15 steps, consider breaking it up into more than one task. Each step should be an action, not a description of how to perform the step. Specify the step number and description of each step.  c) Sequence of Steps *Step 1.* *Description:* *Move welding equipment (bottles to the first level scaffolding platform*

JSAA.4 – IDENTIFY HAZARDS	Consulting workers familiar with the task, identify the hazard (or hazards) that could cause the top event to occur. List each identified hazard.  The Hazard Category Reference Table lists hazard categories and commonly associated hazards.
JSAA.5 – ENVIRONMENTAL CONSIDERATIONS	Are there any Environmental considerations? (i.e. Asbestos, Hail, Lead, soil contamination etc.) If so, contact DEI Environmental Services via email for advice on DEI requirements and consents.
JSAA.6 – IDENTIFY TOP EVENTS	Consulting workers familiar with the task, identify the "top events" that may be caused by each hazard. These are events that would occur during a "loss of control" situation. 
JSAA.7 – IDENTIFY THREATS/ CONSEQUENCES	Consulting workers familiar with the task, identify the threats that may cause the top event, and its consequences. 
JSAA.8 – PERFORM RISK ASSESSMENT	Consulting with workers and Health and Safety specialists, assess the risk of the top event. That is, the probability of the event and the severity of the consequences. Use *Error! eference source not found.* to determine the risk level. 

JSAA.9 – ESTABLISH CONTROLS

Consulting with workers and Health and Safety representatives and advisors, determine the most appropriate controls to best mitigate the hazards and risks inherent in the task.

Threats and Consequences (Describe the threats to and consequences of the top event.)	Initial R/A (no controls)	Controls (Describe the control methods to be used to mitigate the risk and identify the level of the control)	
		Control description	Level
Insufficient strength to lift bottles	Medium (24)	Use mini hoist to lift gas bottles	2
Bottles dropped		Use mini hoist to lift gas bottles	2
Back/muscular injuries due to heavy lifting		Use mini hoist to lift gas bottles	2
Bottles not secured correctly	Medium (24)	Ensure safety chains are secured properly to bottle trolleys when moving lifting bottles	3
Injury to workers		Ensure area below bottles is clear of staff	4
Damage to equipment		Ensure area below bottles is clear of equipment	4

Select the highest appropriate level of controls to ensure the safety of employees performing hazardous tasks (see ***Figure 6. Hierarchy of Controls Pyramid.***)

Note: Always be aware that while controls may mitigate some hazards, they may also introduce others that will require addressing.

JSAA.10 – PERFORM RESIDUAL RISK ASSESSMENT

Consulting with workers and Health and Safety representatives and advisors, assess the risk of the top event after implementing the specified controls. That is, the probability of the event still occurring and the severity of the consequences. Use ***Identify the Risk Levels for Each Step*** to determine the risk level.

Initial R/A (no controls)	Controls (Describe the control methods to be used to mitigate the risk and identify the level of the control)		Residual R/A (with controls)
	Control description	Level	
Medium (24)	Use mini hoist to lift gas bottles	2	Low (11)
	Use mini hoist to lift gas bottles	2	
	Use mini hoist to lift gas bottles	2	
Medium (24)	Ensure safety chains are secured properly to bottle trolleys when moving lifting bottles	3	Low (11)
	Ensure area below bottles is clear of staff	4	
	Ensure area below bottles is clear of equipment	4	

The aim of the implemented controls should be to lower the risk level to "Low".

Note: Tasks with a residual risk level of *Medium* must have special authorisation from the Site Supervisor, and those with a residual risk of High must be authorised by the Site Manager, before the task can begin.

JSAA.11 – SPECIFY ADDITIONAL ACTIONS REQUIRED

Section c)

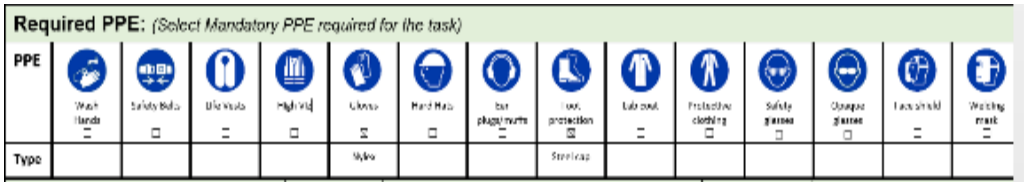
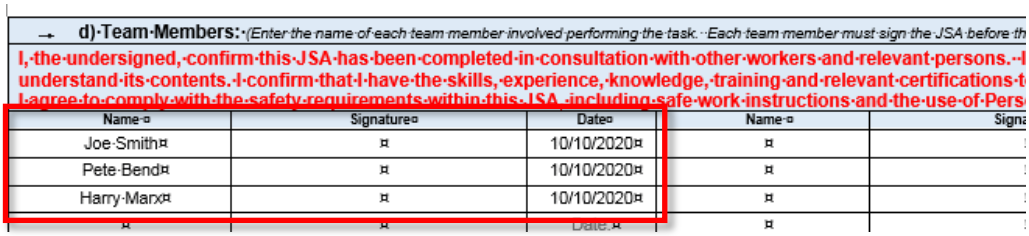
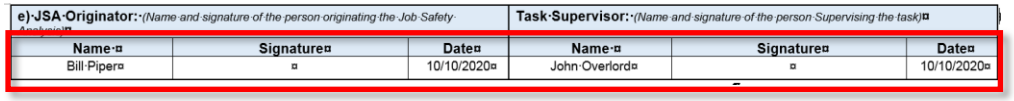
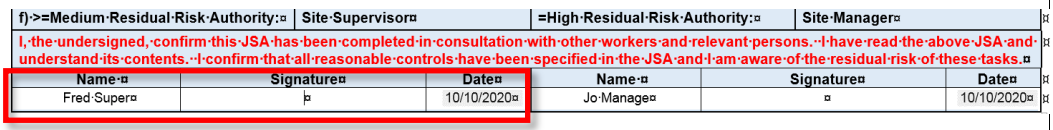
Note any additional action that may be required prior to the task step commencing.

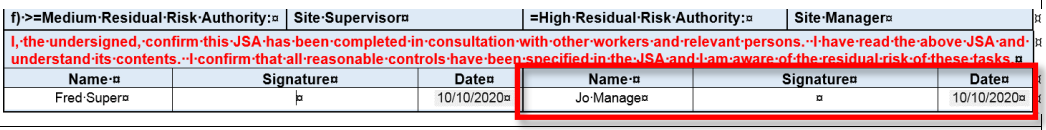
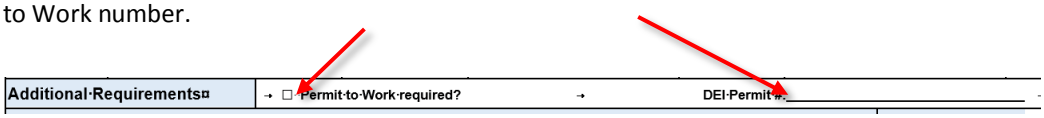
d) Action Items: (List any specific action items)	Check Joe's hoist operating certificate is current
	Check Gas bottles are full so we don't have to do it more than once.

JSAA.12 – MORE STEPS?

Are there any more steps required to complete the task?

- Yes: Go to step ***JSAA.3 – Define Task Steps***
- No: Go to step ***JSAA.13 – Update PPE requirement?***

JSAA.13 – UPDATE PPE REQUIREMENT?	Return to page one of the JSA and update the PPE and where applicable, the type of PPW that will be required for the task.  **Required PPE:** *(Select Mandatory PPE required for the task)* PPE | Type
JSAA.14 – WORKERS SIGN JSA	***Section d)*** Have all workers that will be involved in the execution of the task, enter their name and sign the JSA, indicating they have read and understood the requirements of the JSA.  **d) Team Members:** *(Enter the name of each team member involved performing the task. Each team member must sign the JSA before th* I, the undersigned, confirm this JSA has been completed in consultation with other workers and relevant persons. I understand its contents. I confirm that I have the skills, experience, knowledge, training and relevant certifications t I agree to comply with the safety requirements within this JSA, including safe work instructions and the use of Pers Name | Signature | Date | Name | Signa Joe Smith | 10/10/2020 Pete Bend | 10/10/2020 Harry Marx | 10/10/2020
JSAA.15 – SIGN JSA	***Section e)*** Sign the JSA and have it signed by the Task Supervisor, to indicate they have read and understood its requirements.  **e) JSA Originator:** *(Name and signature of the person originating the Job Safety* | **Task Supervisor:** *(Name and signature of the person Supervising the task)* Name | Signature | Date | Name | Signature | Date Bill Piper | 10/10/2020 | John Overlord | 10/10/2020
JSAA.16 – IS RESIDUAL RISK => MEDIUM OR HIGHER	If a JSA has any tasks with a residual risk of Medium or higher, the site Health and Safety Adviser must sign the JSA to indicate they have considered all possible controls and staff are aware of the risk involved. Do any tasks have a residual risk of Medium or higher? - Yes: Go to step ***JSAA.17 – Site Supervisor sign JSA*** - No: Go to step ***JSAA.19 – Is Task Permitable***
JSAA.17 – SITE SUPERVISOR SIGN JSA (IF REQUIRED)	***Section f)*** If required, have the Site Supervisor sign the JSA to indicate they are aware of the residual risk and that they have considered all reasonable steps to make the task as safe as possible.  **f) >=Medium Residual Risk Authority:** | **Site Supervisor** | **=High Residual Risk Authority:** | **Site Manager** I, the undersigned, confirm this JSA has been completed in consultation with other workers and relevant persons. I have read the above JSA and understand its contents. I confirm that all reasonable controls have been specified in the JSA and I am aware of the residual risk of these tasks. Name | Signature | Date | Name | Signature | Date Fred Super | 10/10/2020 | Jo Manage | 10/10/2020
JSAA.18 – IS RESIDUAL RISK => MEDIUM	If a JSA has any tasks with a residual risk of High, the Site Manager must sign the JSA to indicate they have considered all possible controls and staff are aware of the risk described. Do any tasks have a residual risk of High? - Yes: Go to step ***JSAA.19 – Site Manager sign JSA*** - **No**: Go to step ***JSAA.19 – Is Task Permitable***

JSAA.19 – SITE MANAGER SIGN JSA (IF REQUIRED)	***Section f)*** If required, have the Site Supervisor sign the JSA to indicate they are aware of the residual risk and that they have considered all reasonable steps to make the task as safe as possible.  f) >=Medium Residual Risk Authority: | Site Supervisor | =High Residual Risk Authority: | Site Manager I, the undersigned, confirm this JSA has been completed in consultation with other workers and relevant persons. I have read the above JSA and understand its contents. I confirm that all reasonable controls have been specified in the JSA and I am aware of the residual risk of these tasks. Name | Signature | Date | Name | Signature | Date Fred Super | | 10/10/2020 | Jo Manage | | 10/10/2020
JSAA.20 – IS TASK PERMITABLE	A DEI Permit to Work is required for all permitable work. Is the task permitable? - Yes: Go to step ***JSAA.21 – Raise PTW*** - **No:** Go to step ***JSAA.22 – Update***
JSAA.21 – RAISE PTW	Follow procedure ***PTW1: Permit to Work – Application Procedure*** to raise a Permit to work for the task.
JSAA.22 – UPDATE PTW NUMBER	Section e) Indicate on page one of the JSA that the task requires a permit to work and include the Permit to Work number.  Additional Requirements | ☐ Permit to Work required? | DEI Permit #:
JSAA.23 –FILE JSA	File JSA for future reference.
JSAA.24 –END	End of Process

Appendix C Job Safety Analysis Form (Sample)

Document ID: *(pvid)-(cntrtrlD)-(base code)*-**JSA**-*(yymmdd)*-**V**(*version*)

(Enter only the hazards and controls that are required for each step. Refer to pages 7 and 8 and 9 for risk assessment and hazards references.)

a) Date:	Date.	**PVID#:**		**JSA number:**		**Version:**	
Camp/Base	Choose an item.	**Location:**		**Site:**		**Contractor ID:**	
Additional Requirements	☐ **Permit to Work required?**			**DEI Permit #:**			
Task Description: *(Enter a description of the task to be performed and its desired outcome)*						**Review Date:**	Date.

Required PPE: *(Select Mandatory PPE required for the task)*

PPE	Wash Hands ☐	Safety Belts ☐	Life Vests ☐	High Vis ☐	Gloves ☐	Hard Hats ☐	Ear plugs/muffs ☐	Foot protection ☐	Lab coat ☐	Protective clothing ☐	Goggles ☐	Opaque Glasses ☐	Face shield ☐	Welding mask ☐	Face mask ☐	Respirator ☐	Breathing apparatus ☐	Harness ☐	Other PPE ☐ List:
Type																			

b) Sequence of Steps	Potential Hazard	Top Event *(Loss of Control)*	Threats and Consequences *(Describe the threats to and consequences of the top event.)*	Risk of Loss of Control	Controls *(Describe the control methods to be used to mitigate the risk and identify the level of the control)*		Residual Risk *(with controls in place)*
					Control description	*Level*	
Step 1. *Description:*				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
c) Action Items: *(List any specific action items)*							

(Enter only the hazards and controls that are required for each step. Refer to pages 7 and 8 for risk assessment and hazards references.)

b) Sequence of Steps	Potential Hazard	Top Event *(Loss of Control)*	Threats and Consequences *(Describe the threats to and consequences of the top event.)*	Risk of Loss of Control	Controls *(Describe the control methods to be used to mitigate the risk and identify the level of the control)*		Residual Risk *(with controls in place)*
					Control description	*Level*	
Step 2. *Description:*				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
c) Action Items: *(List any specific action items)*							
Step 3. *Description:*				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
c) Action Items: *(List any specific action items)*							

d) Team Members: *(Enter the name of each team member involved performing the task. Each team member must sign the JSA before the task is commenced)*					
I, the undersigned, confirm this JSA has been completed in consultation with other workers and relevant persons. I have read the above JSA and understand its contents. I confirm that I have the skills, experience, knowledge, training and relevant certifications to perform my role in this task. I agree to comply with the safety requirements within this JSA, including safe work instructions and the use of Personal Protective Equipment.					
Name	**Signature**	**Date**	**Name**	**Signature**	**Date**
		Date.			Date.
		Date.			Date.
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		Date.			Date.
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		Date.			Date.
		Date.			Date.
		Date.			Date.
		Date.			Date.

e) JSA Originator: *(Name and signature of the person originating the Job Safety Analysis)*			**Task Supervisor:** *(Name and signature of the person Supervising the task)*		
Name	**Signature**	**Date**	**Name**	**Signature**	**Date**
		Date.			Date.

f) >=Medium Residual Risk Authority:	**Site Supervisor**	**=High Residual Risk Authority:**	**Site Manager**
I, the undersigned, confirm this JSA has been completed in consultation with other workers and relevant persons. I have read the above JSA and understand its contents. I confirm that all reasonable controls have been specified in the JSA and I am aware of the residual risk of these tasks.			

Name	**Signature**	**Date**	**Name**	**Signature**	**Date**
		Date.			Date.

RISK LEVEL DESCRIPTIONS

VERY HIGH	HIGH	MEDIUM	LOW
Intolerable. Further treatment required as matter of priority. Action required: Develop treatment strategies or introduce appropriate controls, with the objective of reducing the risk to a lower level. Activities with a residual risk level of *VERY HIGH* must not proceed. Review at least monthly or if a significant change occurs.	**Generally Intolerable.** Further treatment required to be identified as matter of priority. Action required: Develop treatment strategies or introduce appropriate controls, with the objective of reducing the risk to a lower level. Activities with a residual risk level of High requires consultation and collaboration with relevant parties on the camp or base through a forum such as SIMOPS and approval of the designated Site Manager.	**Generally Tolerable.** Further treatment may be required where practicable. Action required: Develop treatment strategies or introduce appropriate controls, with the objective of reducing the risk to a lower level. Activities with a residual risk level of Medium or higher requires approval from the Site Health and Safety Adviser before work can commence on the task.	**Tolerable.** Unlikely to require further treatment. Action Required: The risk may be able to be managed by routine procedures. Minimal resource allocation or management effort required. In most cases these risks need no special precautions or actions, other than periodic monitoring of controls to ensure that the level of the risk has not changed.

Figure 4 - Risk Level Description

Figure 5 - Hierarchy of Hazard Controls

3.4 ICE-A: Contractor/FM Provider Non-Conformance Reporting Procedure

3.4.1 About This Procedure

WHAT THIS PROCEDURE IS FOR?

130. This guide provides a step-by-step procedure for completing and submitting a Non-Conformance report detailing control measures that will be put in place to correct and prevent the recurrence of a Health and Safety risk, discovered during an inspection.

WHO THIS PROCEDURE IS FOR?

131. This procedure is for Contractor/FM Providers Completing a Non-Conformance report.

3.4.2 General Overview

132. The *Construction Health Environment & Safety Specifications (CHESS)* document provides the Contractor/FM Providers with guidelines and specifications required by Defence Estate and Infrastructure, in the construction and maintenance of Defence Estate assets.

133. The specifications defined in the chapters and sections of CHESS Volume One (Policy and Specifications) are subject to inspection by DEI representatives at any time during Contractor/FM Providers construction projects, PMP works or maintenance tasks occurring on the Defence Estate.

134. DEI has created standard checklists for the use of the Defence Officer of Compliance (DOC), authorised DEI official, or FM Permit Issuer (FMPI) (or the Contractor/FM Provider), various stages through a construction or maintenance project. Inspection results will be summarised for future use as KPIs.

135. Checklists are divided into three main categories.

    a. General
    b. Permitable work (refer definition Page 44)
    c. Incidents

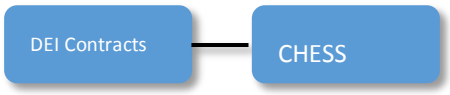
136. The DOC, authorised DEI official, or FMPI will determine when an inspection would be appropriate, according to the directions in CHESS and information recorded in ArcGIS and Planview. The Construction Safety Monitoring Level (see *CHESS - Policy and Specifications Vol 1* for more information) may also be used as a general guideline. Not all inspections are valid or appropriate for every Contractor/FM Provider's construction project, PMP works or maintenance task.

137. the DOC, authorised DEI official, or FMPI may perform:

    a. General inspections – after Contractor/FM Providers have initially established their site, then at regular intervals;
    b. Permitable work inspections – when a Permit to Work has been issued for a Contractor/FM Provider;
    c. Incident inspections – after an incident has occurred, to ensure the site is safe and secure.

138. Contractor/FM Providers would be welcome to perform any number of the inspections at their discretion, to ensure they comply with CHESS requirements.

3.4.3 DEI Processes and Policies



CHESS SUB-PROCESSES AND PROCEDURES

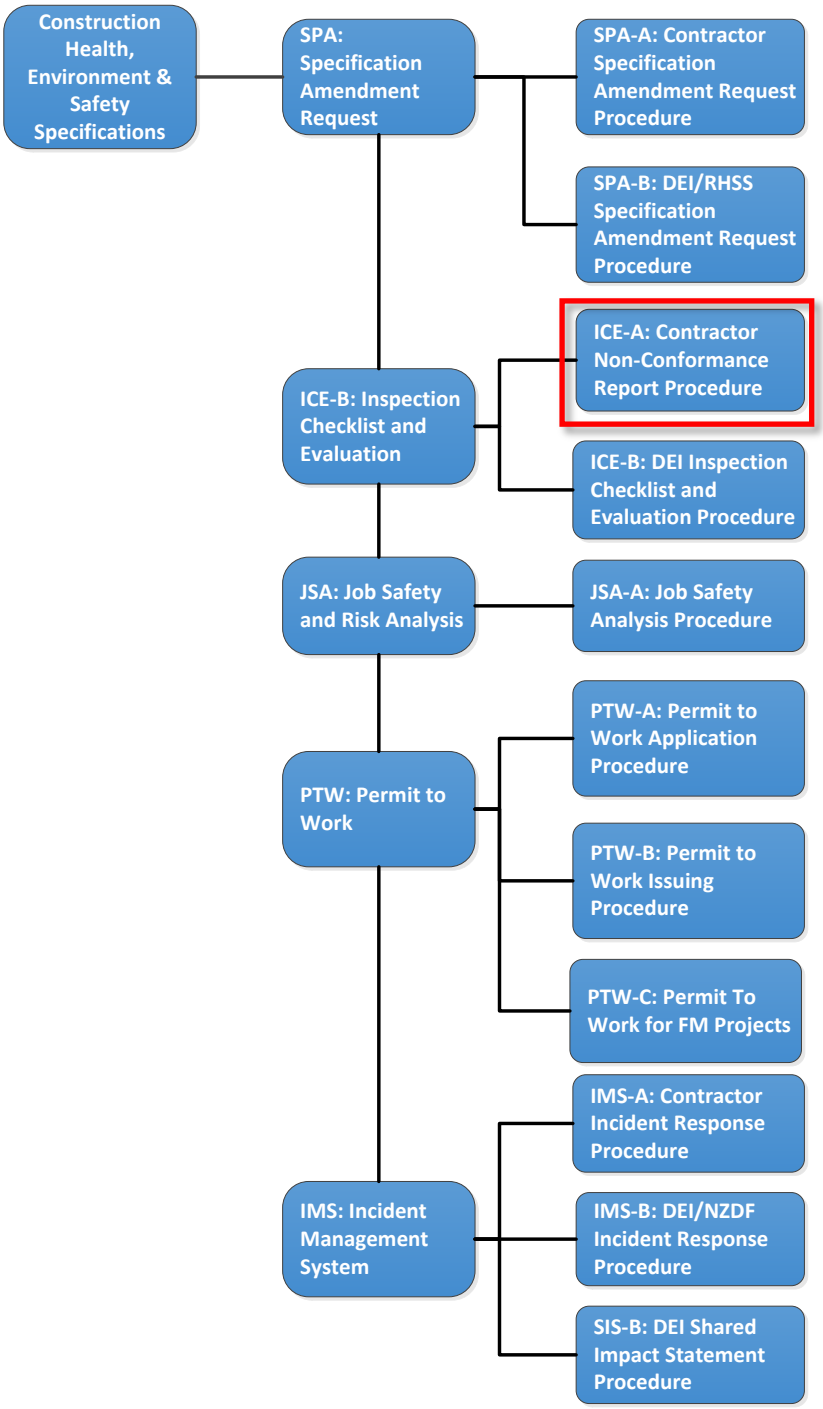


Figure 7. *CHESS Procedures and Sub-Procedures*

RELATED PROCEDURES

ICE-B: DEI Inspection Checklist and Evaluation Procedure

3.4.4 Non-Conformance Notifications and Reports

139. In the event of an inspection identifying area or items on-site that do not conform to applicable government, legislative, or contractual requirements, they will discuss the non-conformity with the Site Manager.

140. The Site Manager and the person performing the inspection should then reach a timely and mutually agreeable course of action to rectify the issue.

141. The DOC, authorised DEI official, or FMPI will send a Non-Conformance Report (NCR) to the site manager identifying the areas of concern, with expected review dates, for completion. DEI requires the Site Manager or Contractor/FM Provider to detail their proposed corrective and preventative actions in the NCR, and return it to the issuer when the actions are complete. (See *CHESS Policy and Specifications Vol 1, Chapter 14*)

142. This document describes the procedure Contractor/FM Providers should use to complete a NCR.

143. **Note:** depending on circumstances (location, system availability etc.), the DOC, authorised DEI official, or FMPI may elect to use an Excel based inspection system. When this is the case, refer to ***ICE-A: (ALT) Contractor/FM Provider Non-Conformance Report Procedure*** for instructions on updating and returning NCRs.

3.4.5 Roles and Responsibilities

144. Roles listed in this section may differ from real life, depending on the structure of the associated departments. The responsibilities listed here relate to Inspections only.

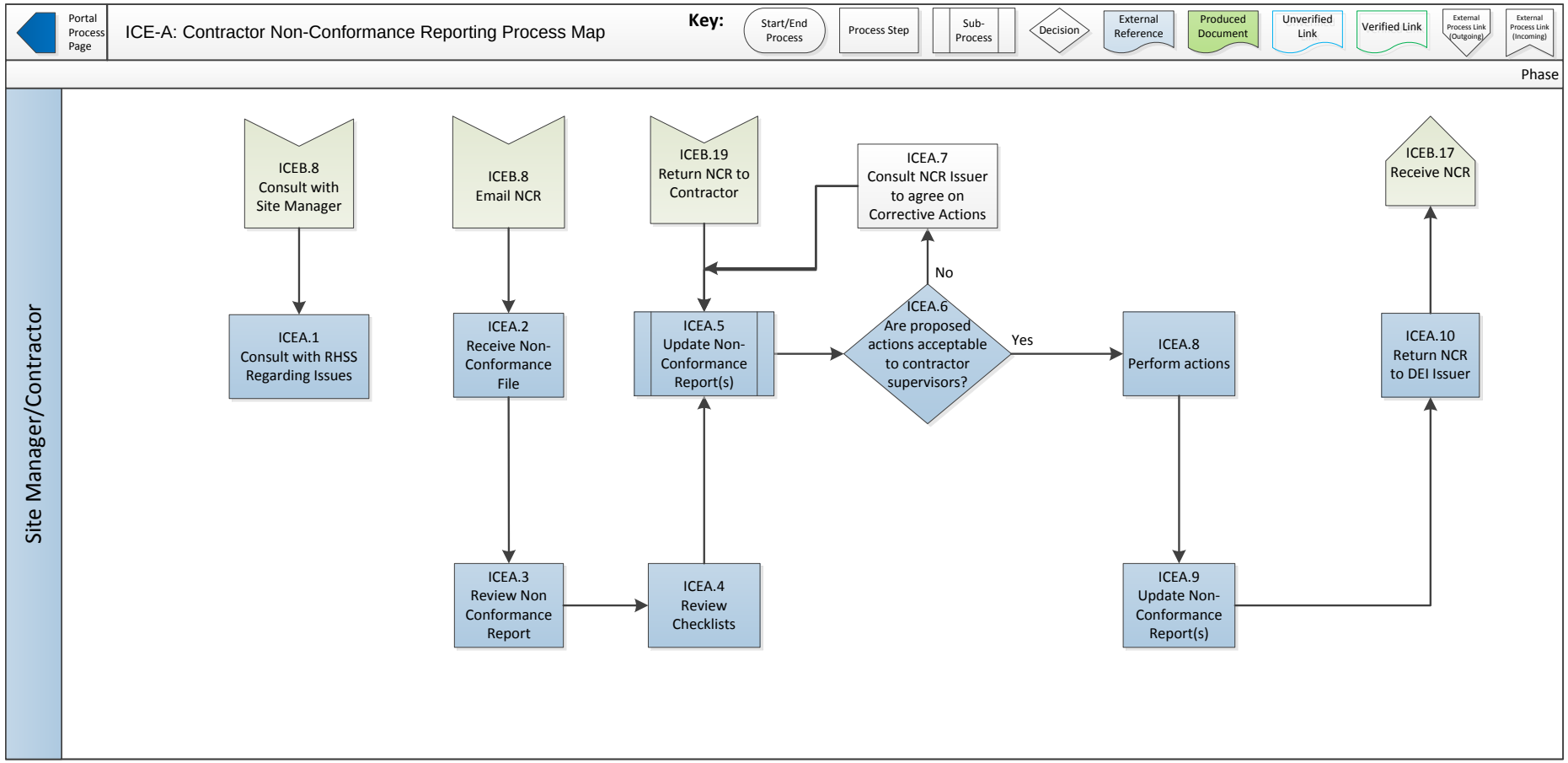
145. The DOC, authorised DEI official, or FMPI is responsible for:

a. Performing regular inspections on all Contractor/FM Provider worksites;
b. Performing general inspections on a scheduled basis;
c. Performing Permitable work inspections when advised by EDD;
d. Performing Incident inspections after reported incidents;
e. Liaising with the Site Managers and Contractor/FM Providers regarding non-conformance items;
f. Providing NCN and NCRs to Site Managers;
g. Recording inspection and NCR results.

146. The Site Manager/Contractor/FM Provider is responsible for:

a. Implementing all applicable government, legislative, or contractual H&S requirements;
b. Liaising with the NCR issuer regarding non-conformance items;
c. Completing and returning Non-Conformance Reports;
d. Implementing corrective and preventative actions to rectify non-conformance issues.

3.4.6 ICE-A: Contractor/FM Provider Non-Conformance Reporting Process Map



3.4.7 ICE-A: Contractor/FM Provider Non-Conformance Report Procedure

(Note: refer to the ***ICE-A: (ALT) Contractor/FM Provider Non-Conformance Report Procedure*** when Excel based NCRs are used)

<table>
<tr><th>Step #</th><th>Description Detail</th></tr>
<tr><td>ICEA.1 – Inspection Condition Occurs</td><td>The Construction Project Manager (CPM), Regional Health and Safety Specialist (RHSS), DEI Officer of Compliance (DOC) or Facilities Maintenance Permit Issuer (FMPI) will conduct inspections at varying intervals for all contractor sites, depending on the type, complexity and number of tasks the Contractor performs. There are four separate circumstances where an inspection may be required:
1. New Contractor on Site – When a new contractor has been engaged to perform work on the Camp/Base, the DOC, authorised DEI official, or FMPI will perform a general inspection to ensure the contractor complies with basic requirements as defined in CHESS. It may be appropriate to perform additional specific inspections where contractors are specialists (for example, excavations).
2. New Permit to Work issued – Regular reports from ArcGIS will list PTWs issued to contractors. Depending on the type, complexity, level of risk, and period of activity involved, the DOC, authorised DEI official, or FMPI will inspect sites performing permitable work, according to CHESS specifications.
3. Incident reports and investigations – Contractors are required to report any incidents and near misses to JARS. Whether an investigation is conducted or not, mitigation controls must be implemented to prevent future recurrences. In addition, when a major incident occurs, the contractor must ensure the site is safe, secure and protected until investigators can review the site. The DOC, authorised DEI official, or FMPI will inspect sites after an incident to ensure the safety of workers and the public, and that recommended mitigation controls are in place.
4. Scheduled Inspections – The DOC, authorised DEI official, or FMPI should perform general and specific inspections on all sites at regular intervals, as required.</td></tr>
<tr><td>ICEA.2 – Receive Non-Conformance File</td><td>After identifying a non-conformance issue, the DOC, authorised DEI official, or FMPI will send a Non-Conformance Report to the Contractor and the Site Manager.
Note: The contractor may receive a Non-Conformance Report (NCR) as PDF or Excel files, attached to an email.
(if Excel files are used, refer to the ICE-A: (ALT) Contractor/FM Provider Non-Conformance Report Procedure)</td></tr>
<tr><td>ICEA.3 – Review Non-Conformance Report</td><td>The Non-Conformance Report (NCR) contains a summary list of all the non-conformance items identified during the inspection. It also includes basic comments recorded by the DOC, authorised DEI official, or FMPI at the time of the inspection.
TE OPE KĀTUA O AOTEAROA DEFENCE FORCE — NZDF Health & Safety / Non-Conformance
<table><tr><th colspan="4">METADATA</th></tr><tr><td>Quarter</td><td>Q2</td><td>Report Date</td><td>May 14, 2024</td></tr><tr><td>Region</td><td>Southern</td><td>Camp/Base</td><td>Trentham</td></tr><tr><td>Created by (email)</td><td>D.Inspector@nzdf.mil.nz</td><td>Created by (user)</td><td>DEI.Inspector_NZDF</td></tr><tr><td>Contractor ID (if known)</td><td colspan="3">654</td></tr><tr><td>PVID (unique ID)</td><td colspan="3">2024-05-14_TRN</td></tr></table>
<table><tr><th colspan="2">N/C RECEIVER</th><th colspan="2">N/C ISSUER</th></tr><tr><td>name</td><td>Joe Contractor</td><td>name</td><td>DEI Pissuer</td></tr><tr><td>on Behalf of</td><td>Just Contractors</td><td>on Behalf of</td><td>NZDF</td></tr><tr><td>email</td><td>J.contractor@justcontractors.com</td><td>email</td><td>DEI.Pissuer@nzdf.mil.nz</td></tr><tr><td>phone</td><td></td><td>phone</td><td></td></tr></table>
Review the NCR to determine what items have been flagged as non-conforming.</td></tr>
</table>

ICEA.4 – Review all Items

Items considered of major importance are highlighted according to their level of risk.

Items will display recommended corrective actions along with the agreed review date, i.e. the date the DOC, authorised DEI official, or FMPI shall re-inspect the non-conformance item to ensure it has been rectified.

SECTION - 1: DEI Inspector

Description or Situation

On visiting site the current site register was checked against persons inducted. A number of people were signed into the site but did not have a current DEI induction which is a requirement.

Non-Conformance Items

Item: 1

Corrective Action to be taken	**Risk Level**
Ensure all on-site staff have received all appropriate inductions before commencing work, and that the site register is up to date.	☐ Low ☐ Medium ☑ High ☐ Very High
Complete by Date	May 16, 2024

Review each item for more information on each inspection.

ICEA.5 – Update Non-Conformance Report(s)

In accordance with CHESS, DEI requires the Site Manager or Contractor to implement the corrective actions and return the NCR to the issuing DOC, authorised DEI official, or FMPI.

To update the NCR, complete section 2 for each item in the report, as described below:

1. Describe the cause of the non-conformance.

SECTION - 2: Contractor / N/C Receiver

Cause of non-conformance

1.	Missing NZDF Inductions.

2. Enter the root cause(s) of the non-conformance, i.e. a summary of the cause.

Root Cause	
1.	Site manager unaware that AC removal team had not completed their NZDF induction.

3. Describe the actions to be taken to correct the issue.

Proposed Corrective Action
All NZDF induction links to be resent to relevant staff. Site register to be updated when inductions are completed.

4. Enter the proposed preventative actions to be taken.

Proposed Preventative Action	
1.	Ensure evidence of induction is produced prior to Contractor site induction.

ICEA.6 – Are Proposed Actions Acceptable?

A representative of the primary contractor is required to indicate they accept the proposed actions and have implemented them. This may be the Site Manager, if they are a direct employee of the primary contractor.

Enter the name of the Contractor representative and the date they accept and implemented the proposed actions.

SECTION - 3: Contractor / Acceptance			
Accepted by	Jo Contractor	**Date**	16/5/24

If the actions are not acceptable to the Contractor representative,

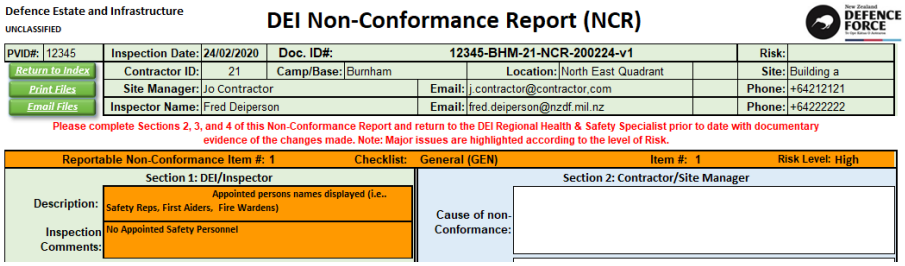
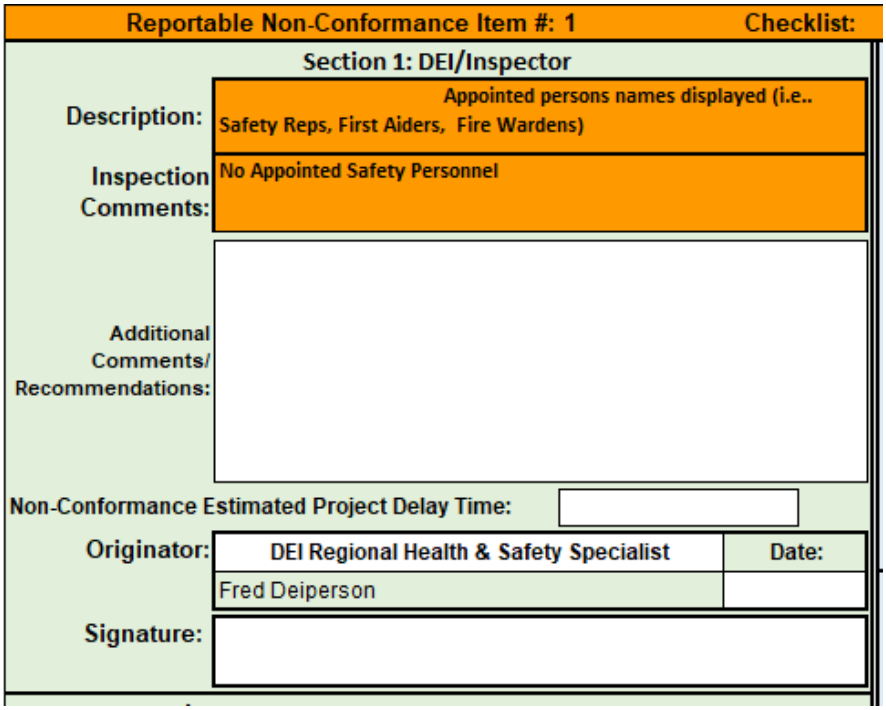
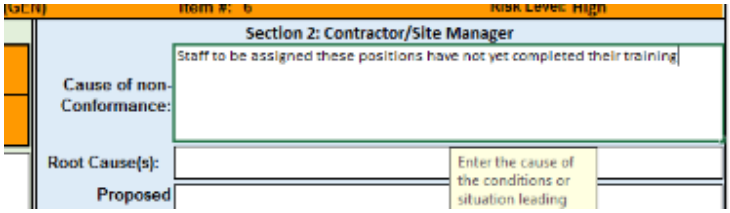
Go to ***ICEA.7 – Consult NCR Issuer to agree on Corrective Actions***

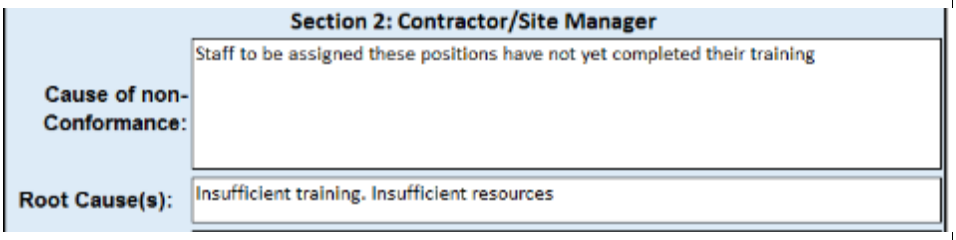
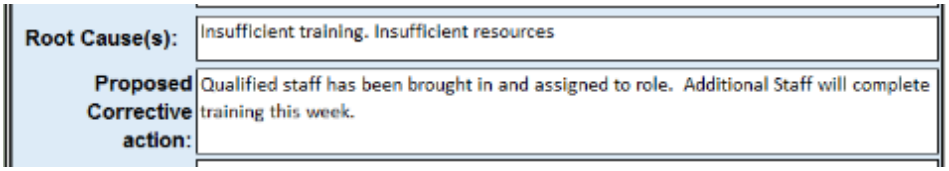
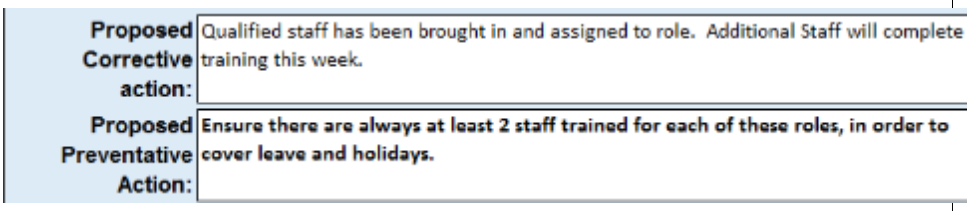
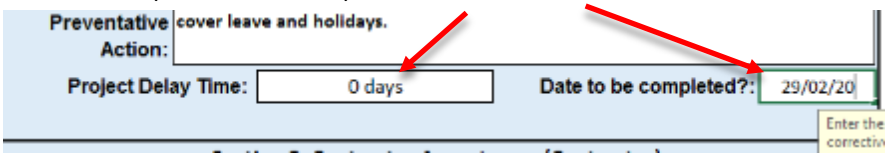
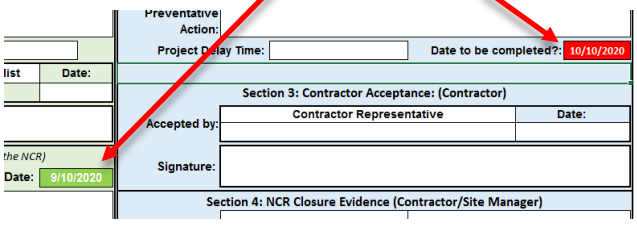
ICEA.7 – CONSULT NCR ISSUER TO AGREE ON CORRECTIVE ACTIONS	Contact the NCR issuer to consult and agree on acceptable corrective actions. Go to Step ***ICEA.5 – Update Non-Conformance Report(s)***
ICEA.8 – PERFORM ACTIONS	Complete the proposed actions to remedy the non-conformance item.
ICEA.9 – RETURN NCR TO DEI RHSS	Email or print and send the completed **NCRs** to the issuing DOC, authorised DEI official, or FMPI**.**

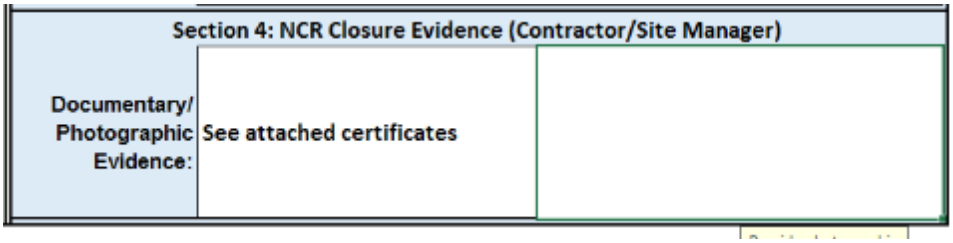
3.4.8 ICE-A: (ALT) Contractor/FM Provider Non-Conformance Report Procedure

(This procedure is to be used when the excel based inspection system is used. For ArcGIS NCRs refer to ***ICE-A: Contractor/FM Provider Non-Conformance Report Procedure***)

Step #	Description Detail
ICEA.1A – INSPECTION CONDITION OCCURS	The Construction Project Manager (CPM), Regional Health and Safety Specialist (RHSS), DEI Officer of Compliance (DOC) or Facilities Maintenance Permit Issuer (FMPI) will conduct inspections at varying intervals for all contractor sites, depending on the type, complexity and number of tasks the Contractor performs. There are four separate circumstances where an inspection may be required: 1. **New Contractor on Site** – When a new contractor has been engaged to perform work on the Camp/Base, the DOC, authorised DEI official, or FMPI will perform a general inspection to ensure the contractor complies with basic requirements as defined in CHESS. It may be appropriate to perform additional specific inspections where contractors are specialists (for example, excavations). 2. **New Permit to Work issued** – Regular reports from ArcGIS will list PTWs issued to contractors. Depending on the type, complexity, level of risk, and period of activity involved, the DOC, authorised DEI official, or FMPI will inspect sites performing *permitable* work, according to CHESS specifications. 3. **Incident reports and investigations** – Contractors are required to report any incidents and near misses to JARS. Whether an investigation is conducted or not, mitigation controls must be implemented to prevent future recurrences. In addition, when a major incident occurs, the contractor must ensure the site is safe, secure and protected until investigators can review the site. The DOC, authorised DEI official, or FMPI will inspect sites after an incident to ensure the safety of workers and the public, and that recommended mitigation controls are in place. 4. **Scheduled Inspections** – The DOC, authorised DEI official, or FMPI should perform general and specific inspections on all sites at regular intervals, as required.
ICEA.2A – RECEIVE NON-CONFORMANCE FILE	After identifying a non-conformance issue, the RHSS will send a Non Conformance Notification, a copy of the inspection checklists used, and a Non-Conformance report to the Site Manager. **Note:** The reports may be sent as hardcopies or as an Excel file, attached to an email. Attention: Jo contractor A recent Inspection by our DEI Regional Health & Safety Specialist has identified one or more areas where safety on site does not comply with applicable government, legislative, or contractual requirements. 1. Please review the attached Non-Conformance Notification and checklist spreadsheets, providing details and comments made at the time of the inspection, and after consultation with you. 2. A Non-Conformance report has been created for each item in the Notification file. Complete sections 2, 3, and 4 of each Non-Conformance Report in the spreadsheet, detailing the actions you intend to take to correct and prevent each deficiency. 3. Return the report to the DEI regional Health and Safety Specialist (RHSS) by the review date, with evidence of the remediation actions. Note: Major issues are highlighted according to their level of Risk. Fred Deiperson DEI Health & Safety Email: Fred.deiperson@nzdf.mi.nz 12345-BHM-21-ICE-200224-v2(Notification).xlsx

ICEA.3A – REVIEW NON CONFORMANCE REPORT	The Non-Conformance Report (NCR) contains a summary list of all the non-conformance items identified during the inspection. It also includes basic comments recorded by the DOC, authorised DEI official, or FMPI at the time of the inspection.  Defence Estate and Infrastructure UNCLASSIFIED **DEI Non-Conformance Report (NCR)** PVID#: 12345 | Inspection Date: 24/02/2020 | Doc. ID#: 12345-BHM-21-NCR-200224-v1 | Risk: Return to Index | Contractor ID: 21 | Camp/Base: Burnham | Location: North East Quadrant | Site: Building a Print Files | Site Manager: Jo Contractor | Email: j.contractor@contractor.com | Phone: +64212121 Email Files | Inspector Name: Fred Deiperson | Email: fred.deiperson@nzdf.mil.nz | Phone: +64222222 Please complete Sections 2, 3, and 4 of this Non-Conformance Report and return to the DEI Regional Health & Safety Specialist prior to date with documentary evidence of the changes made. Note: Major issues are highlighted according to the level of Risk. Reportable Non-Conformance Item #: 1 | Checklist: General (GEN) | Item #: 1 | Risk Level: High Section 1: DEI/Inspector Description: Appointed persons names displayed (i.e.. Safety Reps, First Aiders, Fire Wardens) Inspection Comments: No Appointed Safety Personnel Section 2: Contractor/Site Manager Cause of non-Conformance: Review the NCN to determine the non-conformance items.
ICEA.4A – REVIEW ALL ITEMS	Items considered of major importance are highlighted according to their level of risk. Items will display recommended corrective actions along with the agreed review date, i.e. the date the DOC, authorised DEI official, or FMPI shall re-inspect the non-conformance item to ensure it has been rectified.  Reportable Non-Conformance Item #: 1 Checklist: Section 1: DEI/Inspector Description: Appointed persons names displayed (i.e.. Safety Reps, First Aiders, Fire Wardens) Inspection Comments: No Appointed Safety Personnel Additional Comments/ Recommendations: Non-Conformance Estimated Project Delay Time: Originator: DEI Regional Health & Safety Specialist | Date: Fred Deiperson Signature: Review each checklist for more information on each inspection.
ICEA.5A – UPDATE NON-CONFORMANCE REPORT(S)	In accordance with CHESS, DEI requires the Site Manager or Contractor/FM Provider to complete each report, implement the planned changes, and return the NCR to the DEI inspector. The left side of each report details the non-conforming item and may include additional comments and recommendations from the DEI Official. To update the NCR, complete sections 2, 3, and 4 on the right of each page of the report, as described below:
1.	Describe the cause of the non-conformance.  Item #: 6 Risk Level: High Section 2: Contractor/Site Manager Cause of non-Conformance: Staff to be assigned these positions have not yet completed their training Root Cause(s): Proposed Enter the cause of the conditions or situation leading

	2.	Enter the root cause(s) of the non-conformance i.e. a summary of the cause. 
	3.	Describe the actions to be taken to correct the issue. 
	4.	Enter the proposed preventative actions to be taken to avoid the issue occurring again. 
	5.	Enter the period of time the project has been delayed and the date the corrective actions are expected to be completed.  **Note:** If the expected completion date is later than the review date, it will be highlighted in red. 
ICEA.6A – ARE PROPOSED ACTIONS ACCEPTABLE?	A representative of the Contractor/FM Provider is required to indicate they accept the proposed actions. This may be the Site Manager, if they are a direct employee of the primary Contractor/FM Provider. Enter the name of the Contractor/FM Provider representative and the date they accept the proposed actions. It can be signed digitally, or printed, signed and scanned.  If the actions are acceptable to the Contractor/FM Provider representative. Go to ***ICEA.8a – Perform actions***	

ICEA.7A – CONSULT NCR ISSUER TO AGREE ON CORRECTIVE ACTIONS	Contact the NCR issuer to consult and agree on acceptable corrective actions. Go to Step ***ICEA.5a – Update Non-Conformance Report(s)***
ICEA.8A – PERFORM ACTIONS	Complete the proposed actions to remedy the non-conformance item.
ICEA.9A – UPDATE NON-CONFORMANCE REPORT(S)	When the corrective actions are complete, update the **NCR** with evidence (Photos, videos, certificates, documents) of the undertaken corrective measures. 
ICEA.10A – RETURN NCR TO DEI ISSUER	Email or print and send the completed NCRs to the DEI Issuer .

Appendix A Non-Conformance Report (NCR) Example (ArcGIS version)

TE OPE KĀTUA O AOTEAROA DEFENCE FORCE

NZDF Health & Safety / Non-Conformance

METADATA			
Quarter	Q2	**Report Date**	May 14, 2024
Region	Southern	**Camp/Base**	Trentham
Created by (email)	D.Inspector@nzdf.mil.nz	**Created by (user)**	DEI.Inspector_NZDF
Contractor ID (if known)	654		
PVID (unique ID)	2024-05-14 TRN		

N/C RECEIVER		N/C ISSUER	
name	Jo Contractor	**name**	D.Inspector
on Behalf of	Just Contractors	**on Behalf of**	NZDF
email	J.contractor@justcontractors.com	**email**	D.Inspector@nzdf.mil.nz
phone		**phone**	

N/C Type(s)

- ☐ PTW
- ☑ Inductions
- ☑ Process
- ☑ CHESS Requirement
- ☐ NZDF Policy

SECTION - 1: DEI Inspector

Description or Situation

On visiting site the current site register was checked against persons inducted. A number of people were signed into the site but did not have a current DEI induction which is a requirement.

Non-Conformance Items

Item: 1

Corrective Action to be taken	**Risk Level**
Ensure all on-site staff have received all appropriate inductions before commencing work, and that the site register is up to date.	☐ Low ☐ Medium ☑ High ☐ Very High

Complete by Date	May 16, 2024

Item:

Corrective Action to be taken	**Risk Level**
	☐ Low ☐ Medium ☐ High ☐ Very High

Complete by Date	

Item:

Corrective Action to be taken	**Risk Level**
	☐ Low ☐ Medium ☐ High ☐ Very High

Complete by Date	

Appendix B Non-Conformance Report (NCR) Example (Excel Version)

Defence Estate and Infrastructure

UNCLASSIFIED

DEI Non-Conformance Report (NCR)

PVID#:	12345	Inspection Date:	24/02/2020	Doc. ID#:	12345-BHM-21-NCR-200224-v1			Risk:	
Return to Index		Contractor ID:	21	Camp/Base:	Burnham	Location:	North East Quadrant	Site:	Building a
Print Files		Site Manager:	Jo Contractor			Email:	j.contractor@contractor.com	Phone:	+64212121
Email Files		Inspector Name:	Fred Deiperson			Email:	fred.deiperson@nzdf.mil.nz	Phone:	+64222222

Please complete Sections 2, 3, and 4 of this Non-Conformance Report and return to the DEI Regional Health & Safety Specialist prior to date with documentary evidence of the changes made. Note: Major issues are highlighted according to the level of Risk.

Reportable Non-Conformance Item #: 1 | **Checklist: General (GEN)** | **Item #: 1** | **Risk Level: High**

Section 1: DEI/Inspector

Description:	Appointed persons names displayed (i.e.. Safety Reps, First Aiders, Fire Wardens)
Inspection Comments:	No Appointed Safety Personnel
Additional Comments/ Recommendations:	
Non-Conformance Estimated Project Delay Time:	

Originator:	DEI Regional Health & Safety Specialist	Date:
	Fred Deiperson	
Signature:		

Section 2: Contractor/Site Manager

Cause of non-Conformance:	
Root Cause(s):	
Proposed Corrective action:	
Proposed Preventative Action:	
Project Delay Time:	Date to be completed?:

Section 3: Contractor Acceptance: (Contractor)

Accepted by:	Contractor Representative	Date:
Signature:		

Section 5: DEI Acceptance *(complete on return of the NCR)*

Corrective Actions Accepted?: | Review Date: date

If "No", provide Reasons:		
Accepted by:	DEI Regional Health & Safety Specialist	Date:
	Fred Deiperson	
Signature:		

Section 4: NCR Closure Evidence (Contractor/Site Manager)

Documentary/ Photographic Evidence:	

3.5 IMS-A: Contractor/FM Provider Incident Response Procedure

3.5.1 About This Procedure

WHAT THIS PROCEDURE IS FOR?

147. This guide provides descriptions and a step-by-step procedure for reporting and managing safety incidents and near misses that occur on sites on the Defence Estate, under the control of the Contractor/FM Provider.

WHO THIS PROCEDURE IS FOR?

148. This procedure is for the Contractor/FM Provider, reporting an incident on a worksite. As incidents have the potential to affect other worksites and the camp or base, the Contractor/FM Provider must follow strict reporting processes. The steps in this procedure provide instruction on who to contract, what recording is required, and over what period.

3.5.2 General Overview

149. Under the *Health and Safety at Work Act* 2015*,* in general terms, all PCBUs must, so far as is reasonably practicable, consult, cooperate, and coordinate their activities with other businesses, particularly when there are overlapping duties in relation to workplace health and safety. Overlapping duties mean that more than one business has health and safety duties in relation the same matter.

150. The increased level of construction and upgrades taking place on the Defence Estate has, by necessity, increased the amount of administrative infrastructure required to govern and control the camps and bases. Consequently, when incidents or near misses occur, multiple levels of management across multiple areas need to be informed to ensure operational safety, the proper investigation of causes, and appropriate remediation actions.

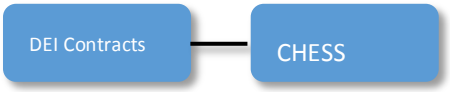
151. While the initial responsibility for an incident lies with the Contractor/FM Provider performing the task where the incident occurred, ultimately, accountability lies with NZDF as the primary PCBU. Therefore, the Contractor/FM Provider must notify DEI of safety incidents that occurs on any site under their control.

152. This procedure relates to the Contractor/FM Provider. DEI requires the near miss reporting in addition to other incidents, as a learning opportunity to assist both workers and site managers in ensuring sites are as safe as is reasonably practical. This procedure describes the notification steps required by DEI, as the primary PCBU's representative.

153. The Joint Assurance and Reporting System (JARS) is the primary tool for contractors to record details of an incident that occurs on Defence Estate. JARS provides DEI adequate notification of less severe incidents in its monthly reports. However, contractors must notify DEI regarding higher severity incidents, prior to updating JARS.

154. This procedure describes the steps required by all relevant personnel when an incident occurs.

3.5.3 DEI Processes and Policies



CHESS SUB-PROCESSES AND PROCEDURES

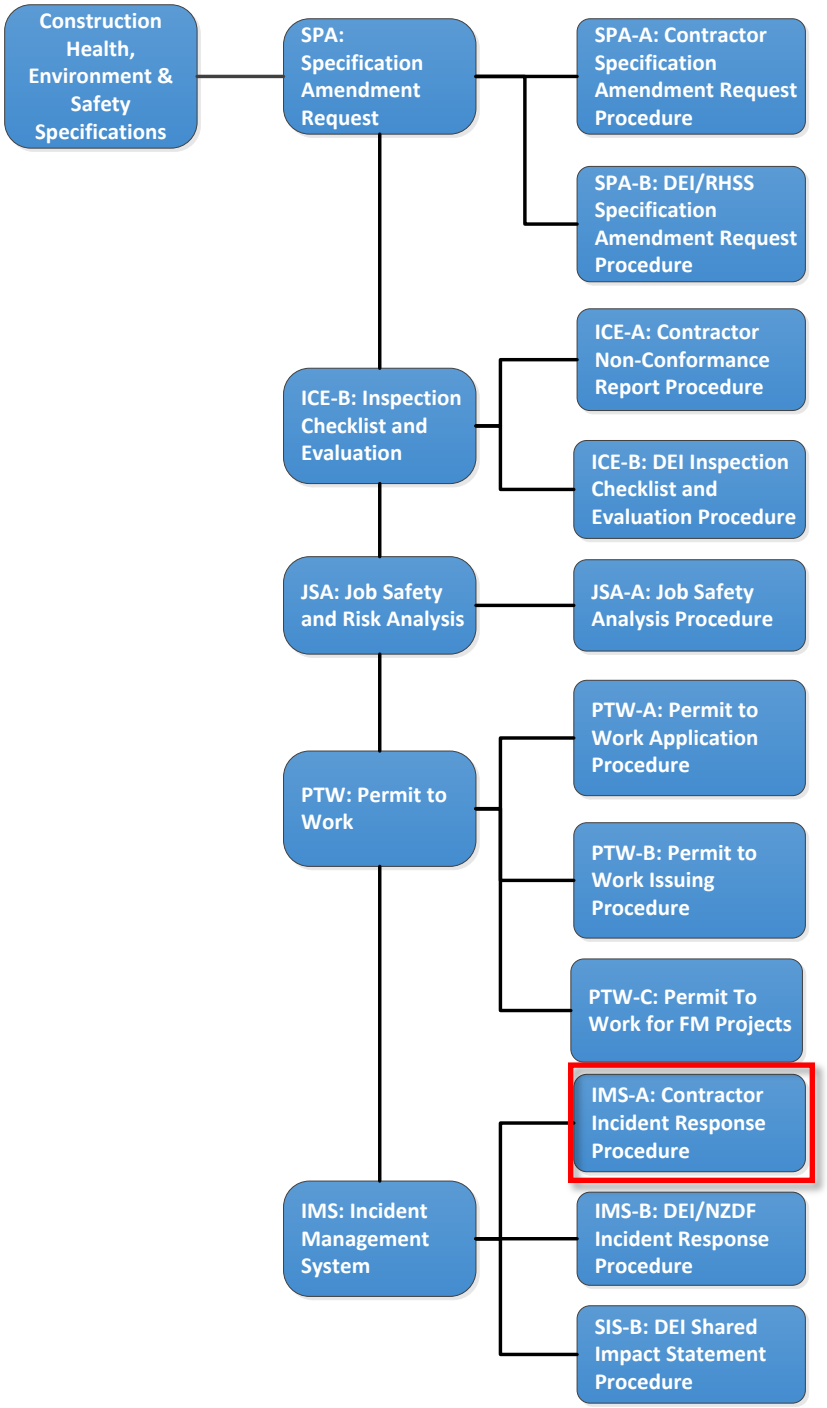


Figure 8. *CHESS Procedures and Sub-Procedures*

RELATED PROCEDURES

***IMS-B: DEI/NZDF Incident Response Procedure*.** Defines the steps required by NZDF for the Contractor/FM Provider to report incidents and near misses on Defence Estate work sites.

3.5.4 Incident Classification Classes

155. A number of criteria that describe the severity of the harm caused (or that could have been caused), classifies an incident (including near misses). There are four different classes of incident:

    a. Class A (most severe consequences);
    b. Class B;
    c. Class C;
    d. Class D (Least severe consequences).

(See ***Figure 9. Safety Triage Summary***. For more information on incident classification classes)

156. The class selected is the highest class calculated by determining the severity of the incident across three areas:

    a. Personal Injury Level (PIL)
    b. Platform Damage Level (PDL)
    c. Potential for the Hazard to Release Harm (PHRH)

157. ***Safety Triage Summary*** lists the criteria used to determine the class of an incident. However, in summary, the contractor must notify DEI, before updating JARS, for incidents where:

    a. There is one or more fatality;
    b. There is one or more injuries requiring hospitalization;
    c. There could be or is major disruption to camp or base operations; and/or
    d. The incident is notifiable to WorkSafe New Zealand.

3.5.5 Shared Responsibility for Tasks

158. This procedure identifies 12 different people/groups that must be notified and perform tasks in the event of an incident, depending on the class of the incident and its consequences.

159. Many of these tasks are shared; that is more than one person is identified as being responsible for ensuring actions are performed. Given the nature of severe incidents and the possibility that people may miss tasks in the rush to ensure the safety of workers and the public, multiple people are responsible for ensuring the completion of some tasks, as an assurance of successful completion.

160. The table below indicates the shared tasks and the positions responsible for ensuring they are completed.

3.5.6 Roles and Responsibilities

161. Roles listed in this section may differ from real life, depending on the structure of the associated departments. It is expected the staff assigned to these roles will be known to each other, prior to or after starting in their roles. The responsibilities listed here relate to incident response and reporting only.

162. The **Worker** is responsible for:

    a. Aiding injured persons;
    b. Ensuring the safety of others;
    c. Contacting medical and emergency services;
    d. protecting and preserving the incident site;
    e. Reporting incidents and rear misses to the Site Supervisor/Manager; and
    f. Following Contractor/FM Provider mandated procedures.

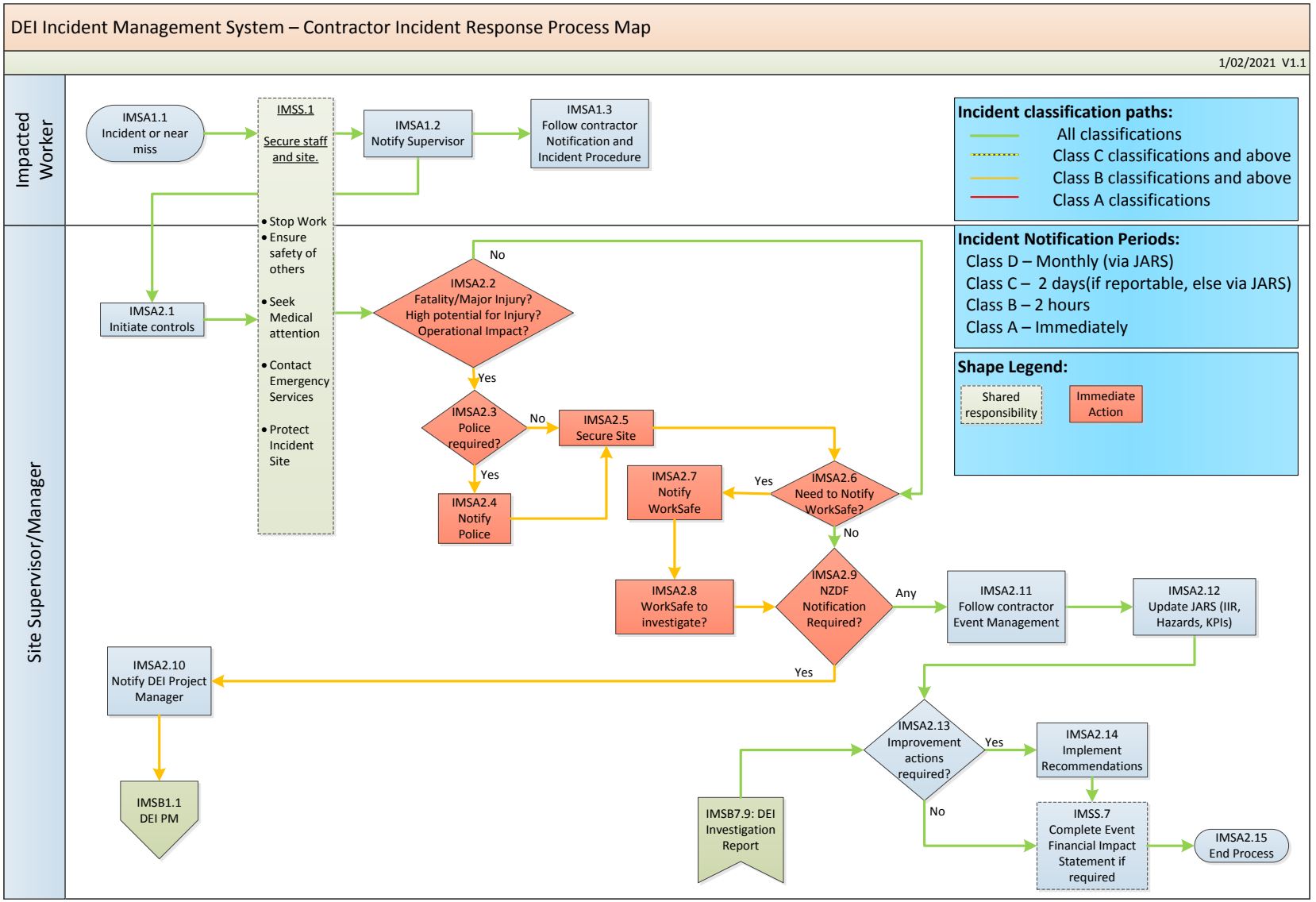
163. The **Site Supervisor/Manager** is responsible for:

a. Aiding injured persons;
b. Ensuring the safety of others;
c. Contacting medical and emergency services;
d. Protecting and preserving the incident site;
e. Notifying police if applicable;
f. Notifying WorkSafe New Zealand if applicable;
g. Following Contractor/FM Provider mandated procedures;
h. Recording all incidents in JARS;
i. Notifying the DEI Health & Safety Regional Advisor of incidents involving:
j. Fatalities;
k. Injuries requiring hospitalisation;
l. camp or base operational impact; and
m. WorkSafe New Zealand Notifiable incidents.
n. Implementing any improvement actions recommended by investigations.

Table 5. Shared Task Table

Task	Worker	Site Sup./ Mgr.	DEI HS Spec.	EDD	Camp/ Base Cmdr.	EST DEL DIR	GM EST DIR	DD HS DEI	XO DEI	HDEI
Stop work **Ensure worker safety** **Seek medical attention** **Contact emergency services** **Secure incident site**	X	X	X	X						
Update SRS/SEMT			X	X		X	X	X		
Engage Executive HS Committee									X	X
Inform and assist media response									X	X
Investigation personnel, scope, and objectives			X	X	X	X	X	X		
Assist DD HS DEI with input/findings			X	X	X	X	X			
Review investigation findings								X	X	X
Ensure Investigation finding are implemented								X	X	X

3.5.7 IMS1: Contractor/FM Provider Incident Response Process Map



3.5.8 IMS-A1: Incident Response Procedure – (Worker)

Step #	Description Detail
IMSA1.1 – INCIDENT OR NEAR MISS EVENT.	All NZDF employees and the Contractor/FM Provider have the right and obligation to cease performing any work or behaviours they feel are unsafe in the workplace. In the event of a near miss or a safety incident occurring, it is the responsibility of all workers to highlight and report the event.
IMSA.1 – SECURE STAFF AND SITE	If injured, workers should seek medical attention immediately. If safe to do so, uninjured workers should ensure staff are safe and the site is secured by: • Stopping work; • Ensure the safety of other workers; • Assist injured staff; • Contact emergency services; • Protect and secure the incident site. **Note:** When calling an Ambulance, provide precise details of the location of the accident on the camp or base, and request they approach the camp or base with lights and sirens so gate security will let them through immediately.
IMSA1.2 – NOTIFY SITE SUPERVISOR	After ensuring the safety of themselves and other staff, workers should immediately notify their Site Supervisor or Site Manager of the incident or event.
IMSA1.3 – DEFINE TASK STEPS	When notifying the Site Supervisor or Site Manager of the event, workers should follow the Contractor/FM Provider specific emergency procedures as presented to them by their contract manager in their Site Induction.

3.5.9 IMS-A2: Incident Response Procedure – (Site Supervisor/Manager)

Step #	Description Detail
IMSA2.1 – INITIATE CONTROLS	On notification of a safety incident or near miss event, a Site Supervisor or Site Manager must immediately put in to place controls to ensure the safety of all workers and personnel in the site.
IMSA.1 – SECURE STAFF AND SITE	If safe to do so, the Site Supervisor/Manager must ensure staff are safe and the site is secured by; a. Stopping affected work b. Ensure the safety of other workers; c. Assist injured staff; d. Contact emergency services; e. Protect and secure the incident site. **Note:** When calling an ambulance, provide precise details of the location of the accident and request they approach the camp or base with lights and sirens so gate security will let them through immediately.
IMSA2.2 – DETERMINE INCIDENT IMPACT	After ensuring the safety of themselves and other staff, the Site Supervisor/Manager is to determine the extent of the incident. Does the incident involve: a. One or more fatalities; b. One or more injuries that require hospitalisation; c. A high potential for serious harm to people or plant; d. An impact to operations on the camp or base? - Yes: Go to step IMSA2.3 – Police Required? - No: Go to step IMSA2.6 – Need to Notify WorkSafe New Zealand?
IMSA2.3 – POLICE REQUIRED?	The Police must be called if a major event or fatality occurs. Are police required? - Yes: Go to step IMSA2.4 – Notify Police - No: Go to step IMSA2.5 – Secure Site
IMSA2.4 – NOTIFY POLICE	Notify police of incident on 111.
IMSA2.5 – SECURE SITE	For all major events and incidents, the site must be secured and left undisturbed until it is determined if an investigation is required or not. Secure the site by: a. Isolating power/gas/water; b. Placing related equipment out of service; c. Covering deceased persons; d. Erecting barriers around incident site.
IMSA2.6 – NEED TO NOTIFY WORKSAFE NEW ZEALAND?	WorkSafe New Zealand must be notified when certain work-related events (notifiable events) occur. A notifiable event is any of the following events that arise from work:

	a. A death b. A notifiable illness or injury (where the worker is admitted to hospital as an inpatient) or c. A notifiable incident, where an unplanned or uncontrolled incident occurs that exposes the health and safety of workers or others to a serious risk arising from immediate or imminent exposure to hazardous substances or conditions. WorkSafe New Zealand only require notification for serious events. These trigger requirements to preserve the site, notify the regulator and keep records. Does WorkSafe New Zealand need to be notified? - Yes: Go to step IMSA2.7 –Notify - No: Go to step IMSA2.9 – NZDF Notification Required?
IMSA2.7 –NOTIFY WORKSAFE NEW ZEALAND	Notify WorkSafe New Zealand of the incident
IMSA2.8 – WORKSAFE NEW ZEALAND TO INVESTIGATE?	When WorkSafe New Zealand are notified of an incident, they may elect to investigate its circumstances. If WorkSafe New Zealand are to investigate, Contractor/FM Providers must notify NZDF in order to allow them access to the camp or base.
IMSA2.9 – NZDF NOTIFICATION REQUIRED?	NZDF must be notified of the incident in the event of: a. A fatality; b. An injury requiring hospitalisation; c. An impact to camp or base operations; d. Instances where there is a high potential for fatality or serious injury; e. The police being notified; f. WorkSafe New Zealand being notified; g. A WorkSafe New Zealand investigation. Does NZDF need to be notified? - Yes: Go to step IMSA2.10 – Notify DEI? - No: Go to step IMSA2.11 – Contractor Incident Management Procedure.
IMSA2.10 – NOTIFY DEI?	Notify DEI as soon as possible within the following time frames: Immediately: a. A fatality or injury requiring hospitalisation; b. An impact to camp or base operations; c. The police being notified. Within 2 hours: a. WorkSafe New Zealand being notified; b. A WorkSafe New Zealand investigation; c. Instances where there is a high potential for fatality or serious injury. Include details on whether: a. Police have been notified; b. Emergency services have been called; c. WorkSafe New Zealand has been notified, and d. WorkSafe New Zealand plan to investigate (if known). e. The site is safe and secure; f. Operations will be affected; g. Status of Injured personnel; h. Status of damaged plant or equipment; After notifying the DEI HS Specialist, return to step IMSA2.11 – Contractor Incident Management Procedure.

IMSA2.11 – CONTRACTOR INCIDENT MANAGEMENT PROCEDURE	Execute Contractor Incident Management Procedure.
IMSA2.12 – UPDATE JARS	Joint Assurance Reporting System (JARS) is an NZDF tool used to record PTWs, Incidents and other details of work performed by the Contractor/FM Provider. Record all safety incidents and events in JARS as specified by *CHESS – Policies and Specifications*. JARS produces a monthly report to NZDF reporting all events on Contractor/FM Provider sites.
IMSA2.13 – IMPROVEMENT ACTIONS REQUIRED?	In the event of an NZDF investigation into an incident, NZDF may inform the Contractor recommendations for actions to be implemented on the incident site will be distributed to the Contractor/FM Provider. Are any improvements or actions required? - Yes: Go to step IMSA2.14 – Implement Actions - No: Go to step IMSA2.15 – End Procedure
IMSA2.14 – IMPLEMENT ACTIONS	It is the Contractor/FM Provider's responsibility to implement any actions arising from the investigation report.
IMSA2.15 – END PROCEDURE	***End of Procedure***

Appendix C Safety Triage Summary

Personal Injury Level (PIL)

	Minor	Moderate	Significant	Fatality
PIL Description	First Aid treatment, no long-term effects	Medical treatment on/off site, medium to long term effects	Injury or illness requiring hospitalisation, long term effects, HSWA notifiable event	Fatality/Multiple fatalities or multiple injury or illness requiring hospitalisation
Minimum Event Classification	Class D	Class C	Class B	Class A

Platform Damage Level (PDL)

	No significant damage	Moderate damage	Substantial damage	Destroyed
PDL Description	Platform sustained either no damage or minor damage that is repairable within two days	Platform sustained moderate damage that is repairable without extensive inspection.	Platform sustained substantial damage or structural failure that requires extensive inspection but is economically repairable	Platform missing, destroyed, unrecoverable or sustained damage to such an extent that it is unrepairable or uneconomical to repair
Minimum Event Classification	Class D	Class C	Class B	Class A

Potential for the Hazard to Release its Harm (PHRH)

Table A - Most credible negative safety outcome

	No outcome	Minor	Significant	Catastrophic
Effect on NZDF personnel and others	First Aid treatment, no long-term effects	Minor injury, first aid/medium term effects	Medical treatment off- and on-site, medium to long term effects	Fatality/Multiple fatalities or multiple injury or illness requiring hospitalisation
Effect on platforms and critical infrastructure	No significant damage	Moderate platform/ equipment damage	Substantial platform/ equipment damage	Platform/ equipment destroyed
Effect on worthiness systems	Little or no effect on worthiness	Minor deviation from approved standards which has a limited effect on worthiness, critical systems were not affected	Deviation from approved standards which had a significant impact on worthiness, safety critical systems were affected	Deviation from approved standards which compromised worthiness, safety critical systems were inoperative or unavailable
Effect on Defence capability	Little or no effect on Defence capability provided by a Service or core system	Temporary degradation of Defence capability provided by a Service or core system	Temporary loss or long-term degradation of Defence capability provided by a Service or core system	Indefinite loss of Defence capability provided by a Service or core system. System is possibly not irreparable

Table B – Effectiveness of remaining safety controls

Highly Effective	Mostly Effective	Barely effective	Not effective/ unavailable
The remaining controls and subsequent safety margin were highly effective. It is rare or under exceptional circumstances that the event could have escalated into the most credible outcome	The remaining controls were mostly effective with a considerable safety margin remaining. It is improbable that the event could have escalated into the most credible outcome	The remaining controls were lower order or weak controls and barely effective. It is probable that the event could have escalated into the most credible safety outcome	The only thing separating the event from the negative safety outcome was luck or exceptional skill which is not trained for or expected

Table C – Determining the PHRH

	A: Most Credible Outcome			
B: Remaining Risk Controls	No outcome	Minor	Significant	Catastrophic
Highly effective	Class D	Class D	Class D	Class C
Mostly effective	Class D	Class D	Class C	Class C
Barely effective	Class D	Class C	Class C	Class B
Not Effective	Class D	Class C	Class B	Class B

***Figure 9**. Safety Triage Summary.*

3.6 SPA-A: Specification Amendment Request Procedure

4 About This Procedure

WHAT THIS PROCEDURE IS FOR?

164. This guide provides the Contractor/FM Provider with instructions on how to complete the Specification Amendment Request (SPA) request form and apply for amendments to, or exemptions from, specifications defined in volumes 1, 2 and 3 of the Construction Health, Environment and Safety Specifications (CHESS) document.

WHO THIS PROCEDURE IS FOR?

165. This procedure is for the Contractor/FM Provider.

4.1.1 General Overview

166. The *Construction Health, Environment and Safety Specifications (CHESS Volume One)* document contains many best practice and legal specifications that the Contractor/FM Provider are required to adhere to.

167. It may be that these specifications are difficult to implement, impractical, or not relevant to a specific project being undertaken. In addition, a specific Job Safety Analysis may identify a requirement to request an amendment the specifications for the duration of the task analysed.

168. In these cases, the Contractor/FM Provider may request an amendment to the specifications, either for a temporary period or a total exemption from compliance for the project.

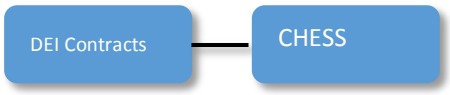
169. To do so, the Contractor/FM Provider must identify the specific document and section that defines the specification, and provide relevant evidentiary documentation justifying the reason for requesting the amendment or exemption. They may also need to provide a Job Safety Analysis (JSA) and/or risk assessment as evidence all potential hazards have been considered, and need to document any additional controls required to mitigate additional risks.

170. Forward Specification Amendment Request (SPA) requests to the DEI Regional Health and Safety Specialist (RHSS) for review and approval. The RHSS may, where deemed necessary, escalate the request for further consultation and approval.

171. On receipt of approval for an amendment, the Contractor/FM Provider is obliged to ensure any additional safety controls are in place, before continuing work.

172. The RHSS may also inspect the site on a regular basis to ensure documented controls are in place and effective.

4.1.2 DEI Processes and Policies



CHESS SUB-PROCESSES AND PROCEDURES

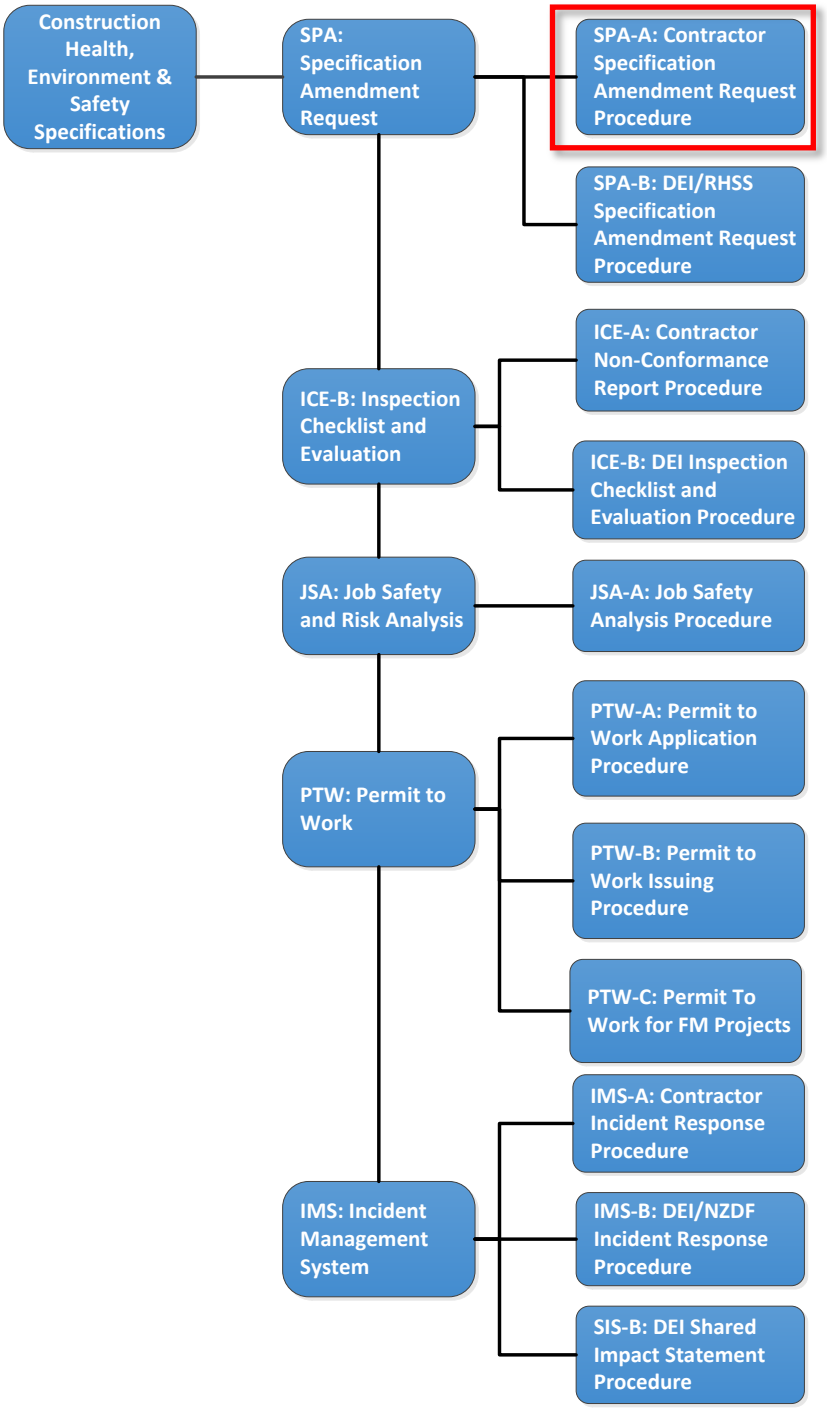


Figure 10. *CHESS Procedures and Sub-Procedures*

4.1.3 Roles and Responsibilities

173. The Requester (Team/Task Supervisor/Site Manager/Contractor/FM Provider is responsible for:

a. Raising the SPA request;
b. Performing appropriate Risk Assessments;
c. Implementing the specified controls; and
d. Restoring the environment if applicable.

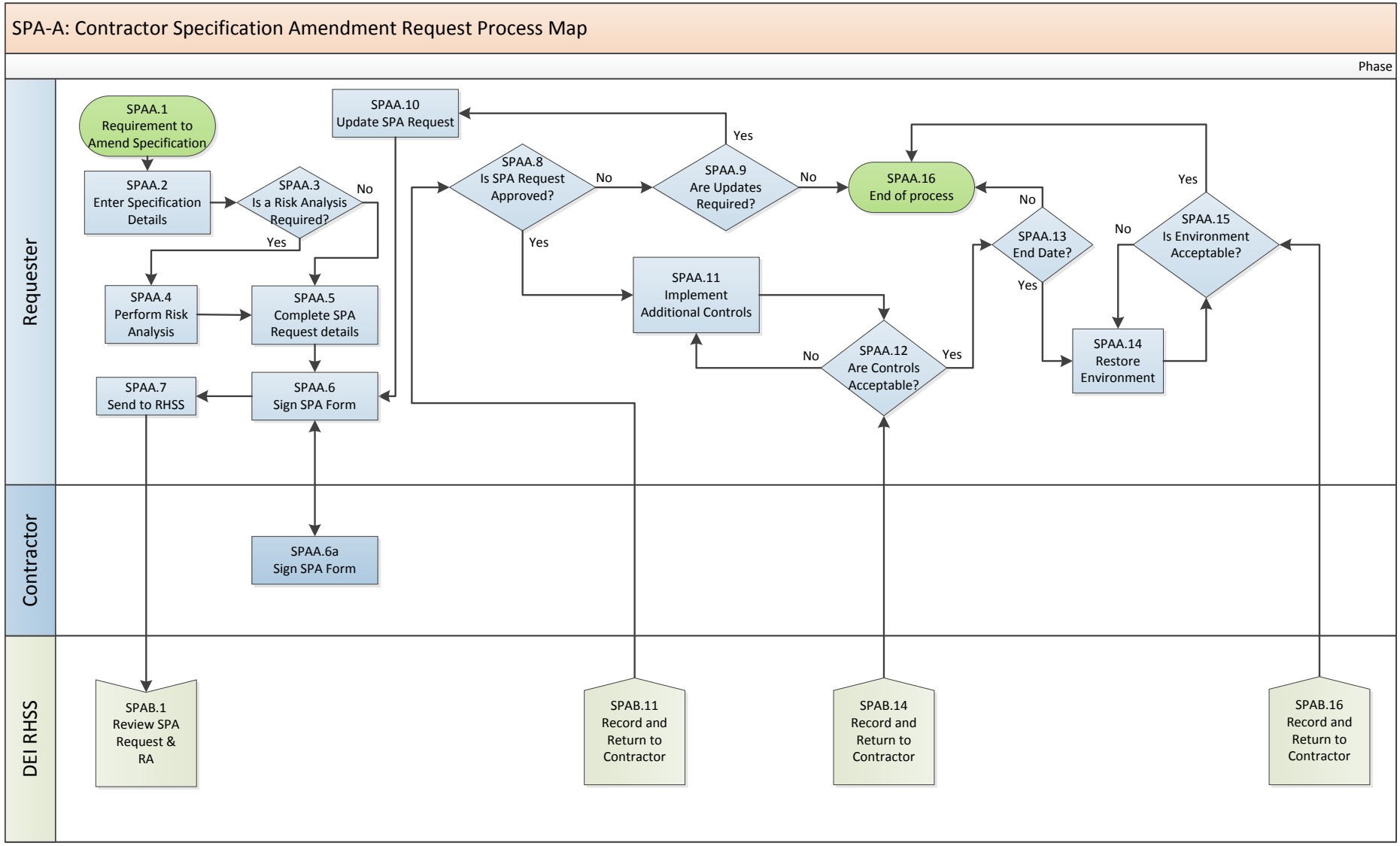
174. The **Contractor/FM Provider** is responsible for:

a. Receiving and reviewing SPA requests;
b. Accessing SPA requests;
c. Escalating SPA requests for consultation and approval.

175. The DEI Regional Health & Safety Specialist (RHSS) is responsible for:

a. Receiving and reviewing SPA requests;
b. Accessing SPA requests;
c. Approving SPA requests where appropriate;
d. Escalating SPA requests for consultation and approval where deemed appropriate.
e. Inspecting sites to ensure all appropriate safety controls are in place.

4.1.4 SPA-A: Contractor/FM Provider Specification Amendment Request Process Map



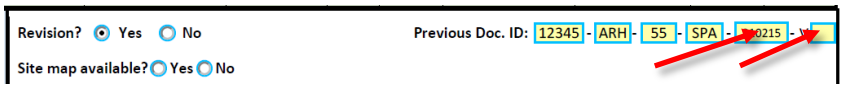
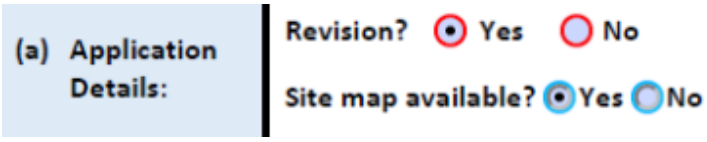
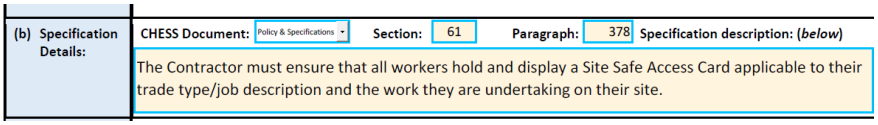
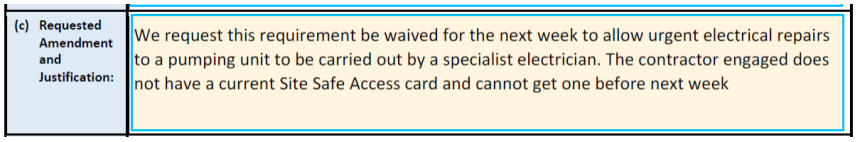
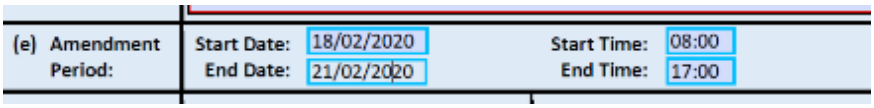
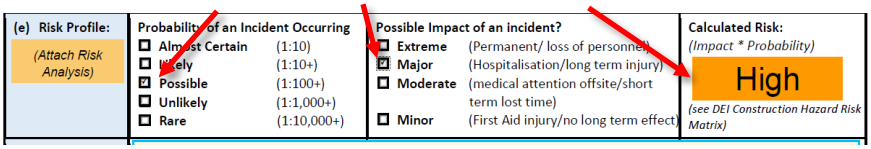
4.1.5 SPA-A: Contractor/FM Provider Specification Amendment Request Procedure

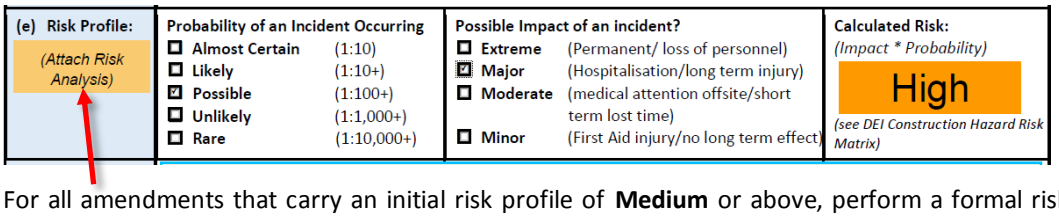
Step #	Description Detail
SPAA.1 – AMENDMENT REQUIREMENT	The requirement for a Specification Amendment (SPA) request may arise from a Job Safety Analysis (JSA) or due to circumstances specific to a particular project or work site. Given that the specifications defined in the Construction Health, Environment and Safety Specifications (CHESS) document are the minimum levels of controls and safety measures required by NZDF and in many cases, NZ legislation, changes or amendments to these standards are taken seriously and approval is not given lightly. However, NZDF understands that in some circumstances, amendments may be appropriate. Before requesting an amendment, you must perform a stringent analysis of the effects of the change along with any increased risk, and define any additional controls that you need to put in place to ensure safety of workers, the public, and the environment. Any contractor/FM provider, subcontractor or task supervisor may raise a specification amendment, however, an authorised representative of the Contractor/FM Provider must also sign it.
SPAA.2 – ENTER SPECIFICATION DETAILS	Complete the SPA request by following these steps:
	Complete the contract details in Header according to the following criteria: **Date** – The date the application is to be submitted. **Version** – Increment this number by 1 each time the request is resubmitted for approval. For new requests, specify "0" (default). **PVID#** – The NZDF Planview ID for the project. If the Planview ID is not known, consult with your Project Manager. **Contractor** – The company name of the Contractor/FM Provider on the project. **Contractor ID** – The contractor/FM Provider ID as defined in JARS. **camp or base** – Select the camp or base location from the drop down menu. **Location** – Specify the specific location (if applicable) where the specification amendment will apply to. **Site** – Specify the site of the project on the Base/Camp.

Date:	01/02/21	Document ID#:	12345-ARH-55-SPA-210211-V1		Version #:	1
PVID#:	12345	Contractor/Company Name:	Contractor Co. Inc		Contractor ID:	55
Camp/Base:	Arch Hill (ARH)	Location:	NE Quadrant	Site:	building A	

Document ID# - The form will automatically generate the Document ID based on values entered into other fields. Saving this form into a common document folder as the document ID number will allow the import function of the Document Register to recognise and record it.

Section (a) Application Details	**Revision (Yes/No)** – If this is a revision of a request that has previously been rejected, specify "Yes" **Previous DOC, authorised DEI official, or FMPI. ID** – If this is revision of a previous request, the document ID of the previous rejected request is required. The system will automatically populate the first four sections based on the current document. Enter the previously requested start date in the format *yymmdd*, and the version number of the previous request.

		 **Note:** If any of the first four fields of the **DOC, authorised DEI official, or FMPI. ID** have changed, raise a new request.
		Specify the location of the project. **Site Map** – If a site map is available, mark the location and attach the map to the request. 
	Section (b) Specification Details	Most specifications required by NZDF are defined in the three CHESS documents: • Specifications • Procedures • Other Identify the document (drop-down menu), section, and paragraph containing the specification to be amended, and detail the actual specification (use "other" and specify the document for non-CHESS specifications). 
	Section (c) Requested Amendment and Justification	State the amendment being requested and the reason for the amendment. 
	Section (d). Amendment Period	Enter the start and end date and times, the amendment is to be in effect. If it is for the duration of the project, enter the scheduled end date of the project. 
	Section (e). Risk Profile	Select the probability of an incident occurring and the possible impact of an incident, according to the DEI Construction Hazard Risk Matrix on page 2. The form will automatically display the calculated risk accordingly. 

<table>
<tr><td>SPAA.3 – Is a Risk Analysis Required</td><td colspan="2"> 

For all amendments that carry an initial risk profile of Medium or above, perform a formal risk analysis and submit it with the request.

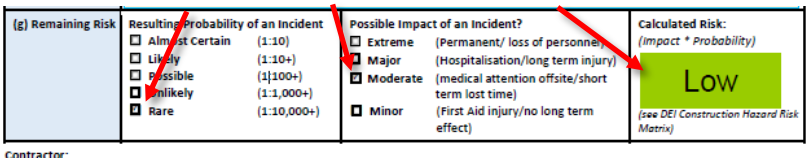
Is a Risk Analysis required?

- Yes: Go to step SPAA.4 – Perform Risk Analysis

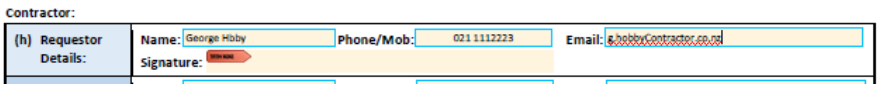
- No: Go to step SPAA.5 – Complete SPA Request Details.</td></tr>
<tr><td>SPAA.4 – Perform Risk Analysis</td><td colspan="2">Perform a standard formal Risk Analysis determining probability and impact of potential incidents, mitigation controls that should be implemented, and the residual risk after controls are in place.</td></tr>
<tr><td rowspan="3">SPAA.5 – Complete SPA Request Details</td><td>(i)

Mitigation Controls</td><td>Section (f). If a Risk Analysis has been performed, specify the mitigation controls that will be put in place to reduce to the additional risk introduced by the specification amendment.

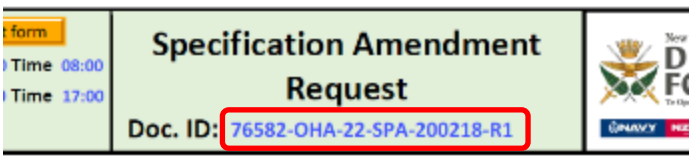
If no additional controls are required, specify N/A.</td></tr>
<tr><td>(ii)

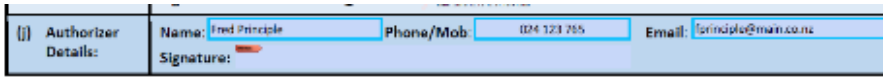
Remaining Risk</td><td>Section (g). Select the resulting probability of an incident occurring and the possible impact of an incident, after controls are put in place. The form will automatically display the calculated risk accordingly.
 
</td></tr>
<tr><td rowspan="2">SPAA.6 – Sign SPA Request</td><td>(iii)

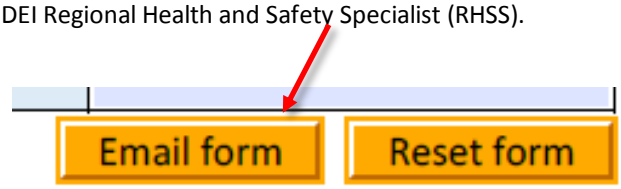
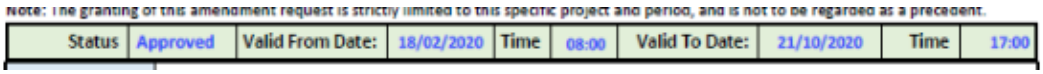
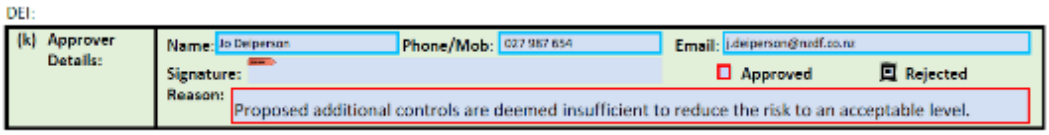
Requester Signature</td><td>Section (h). As the Requester, enter your name and contact details.

Sign the form digitally, or print and physically sign it if a digital signature is not available.
 

The system will request you to save the form each time it is signed.

Save the form with the same name as the DOC. ID at the top of the page.
 
</td></tr>
<tr><td>(iv) (SPAA.6a)

Requester Signature</td><td>A representative of the Contractor/FM Provider must authorise the request by entering their details and signing (digitally or physically) the SPA request.
 
</td></tr>
</table>

		Note: The requester and the authoriser may be the same person, providing they have the authority to represent the Contractor/FM Provider.
SPAA.7 – SEND SPA REQUEST TO RHSS	If digitally signed, click on the **Email form** button at the top, left corner of the form to send the SPA request to the DEI Regional Health and Safety Specialist (RHSS).  Alternatively, email a scanned copy, or deliver a hardcopy of the request to the RHSS. **Note:** Include/attach the Risk Analysis or other appropriate evidentiary documentation when submitting the request.	
SPAA.8 – IS SPA REQUEST APPROVED?	The RHSS will consult with all relevant stakeholders to determine if the request poses a significant increase to the financial or health and safety risk inherent in the project. The RHSS may forward the request to the Deputy Director of Health and Safety, DEI for a ruling, if they feel the risk is unacceptable or they are unable to make a determination. When a final decision has been made, the RHSS will return the SPA request to the requester. Its approval status can be found at the top of the form.  Has the amendment request been approved? - Yes: Go to step SPAA.11 – Implement Additional Controls - No: Go to step SPAA.9 – Are Updates Required?	
SPAA.9 – ARE UPDATES REQUIRED?	If DEI has rejected the request, the reason for the rejection will be included at the bottom of the form.  You have the option of accepting the decision, or updating and resubmitting the request. Are updates required? - Yes: Go to step SPAA.10 – Update SPA Request - No: Go to step SPAA.16 – EOP.	
SPAA.10 – UPDATE SPA REQUEST	Clear all signatures from the request form and update the details as required to address any concerns raised by DEI. Ensure the **Revision version** has been incremented and the **DOC, authorised DEI official, or FMPI.ID** of this request is included in section (a) of the revision. Go to step ***SPAA.5 – Complete SPA Request Details.***	
SPAA.11 – IMPLEMENT ADDITIONAL CONTROLS	Ensure all additional controls specified in section (g) of the SPA request are implemented before continuing the project under the amended specifications.	

SPAA.12 – ARE CONTROLS ACCEPTABLE	Review the controls implemented to ensure they are adequately mitigate any additional risks introduced by the amendment. **Note:** The RHSS may elect to inspect the additional controls, depending on circumstances. Are the controls acceptable? - Yes: Go to step SPAA.13 – End Date? - No: Go to step SPAA.11 – Implement Additional Controls.
SPAA.13 – END DATE?	If an end date (other than the end of the project) has been specified, the environment at the work site must be returned to the original state and all controls restored according to specifications. Was an end date defined (and if so, has it been reached)? - Yes: Go to step SPAA.14 – Restore Environment - No: Go to step SPAA.16 – EOP.
SPAA.14 – RESTORE ENVIRONMENT	When the end date of the PSA request has been reached restore the work site environment to ensure all controls are in accordance with specifications.
SPAB.15 – IS ENVIRONMENT ACCEPTABLE	Inspect the worksite environment to ensure all controls are in place according to specifications. **Note:** The RHSS may elect to inspect the worksite, depending on circumstances. Is the worksite environment in a safe and acceptable state? - Yes: Go to step SPAA.16 – EOP - No: Go to step SPAA.14 – Restore Environment.
SPAA.16 – EOP	**End of Process.**

4.2 Construction H&S Indicative Performance System (CHIPS)

4.2.1 About This Procedure

WHAT THIS PROCEDURE IS FOR?

176. This procedure provides instruction for using and recording the CHIPS template for scoring.

WHO THIS PROCEDURE IS FOR?

177. This procedure is primarily for the use of for FM Safety Advisors and Contractor HSA/Managers along with Regional Health and Safety Representatives on Contractor/FM Providers.

4.2.2 General Overview

178. DEI (on behalf of NZDF) has a primary duty to ensure, so far as reasonably practicable, the health and safety of their staff and contractors while they are at work. These duties include monitoring the interconnected relationships, such as contract management and health and safety monitoring and engagement.

179. A central part of monitoring health and safety outcomes is the relationships between various parties, which under the HSWA, starts with the person conducting a business or undertaking (PCBU). Measuring and Reporting on Work Health and Safety (Australian resource), Health and Safety Guide: Good Governance for Directors (NZ Resource), Lead Indicators (New Zealand Resource), and A Guide to Measuring Health and Safety Performance (UK resource) cover three broad types of hazards: **technical, cultural** and **governance** issues.

180. The following areas have been identified where relationship monitoring is considered due to the nature of our organisation. Each deliverable is referenced against its origins (See Footnotes).

4.2.3 CHIPS Monitoring Categories

181. The Contractor/FM Provider is required to collate and supply proof of actions in the following categories:

Staff Engagement & Perception Of Health And Safety In The Workplace

a. The Contractor/FM Provider leadership has engaged with workers on health and safety matters (per Section 59 of the Health and Safety at Work 2015 Act).[1]

b. The Contractor/FM Provider's health and safety personnel are monitoring health and safety conditions and practices e.g., inspections (FM Provider to provide 1 x USM/week, AND 2 x projects/week, CAPEX 1/week), i.e. dashboard of inspections completed.[2]

Project/Site Leadership and Engagement

c. Effective Monthly Communication of Health and Safety management and conforming to the Occupational Health and Safety (OH&S) management system requirements e.g., QA scorecards, Foreman's monthly report.[3]

Contractor/FM Provider Management Relationships

d. Engagement and communication by the Contractor/FM Provider engaging with their sub- and subordinate contractors (e.g., daily pre-starts, Toolbox talks, site and project meeting minutes and attendance records.[4]

[1] CSMP requirement
[2] Rule 19 – Government Procurement Rules
[3] ISO 45001 – Leadership
[4] Health-and-safety-and-employment-standards-at-work-construction-procurement

Hazard /Risk Management

e. All Permit to Work tasks been conducted/completed, as per permit issuer approval requirements and JSA specification?[5] (Specific examples include permit suspension and close out as per specified timeframes, JSA accompanying every permit request, permits closed out in the system.

f. All Contractor/FM Provider, sub and subordinate staff s are currently DEI/NZDF inducted, including new inductions and renewal.[6]

Project / Site Stakeholder Relationships

g. Monitoring or measurement of a sub- or subordinate contractor that was evaluated and communicated to them.[7]

Incident Engagement

h. The Contractor/FM Provider incident register accurately reflects the health and safety events recorded in JARS.[8]

i. All Incident/Accident/Event corrective actions have been completed in accordance with allocated time frames.[9]

j. All corrective actions identified have been closed out in accordance with allocated times.[10]

k. All Non-Conformances been closed out in accordance with allocated times (No NC's for the month = N/A).[11]

l. All incidents been reported in accordance with CHESS timeframes (No incidents for the time frame = N/A).[12]

m. All incidents been reported in accordance with CHESS timeframes.[13]

n. The Contractor/FM Provider (including sub- and subordinate contractors to Estate works) had any notifiable events as described in the HSW Act for this reporting period? (Yes = fail).

o. The Contractor/FM Provider has health and safety complaints submitted against them relating to Estate works for this reporting period (excluding by DEI or Alliance staff). Yes = fail.

Promotion of Good Health and Safety Practices

p. Capturing and reporting new health and safety risks for the past CHIPS reporting month, e.g., Hazard/HAZID register, JARS inscription).[14]

q. The Contractor/FM Provider met the requirements for promotion and management of mental health for contractors, including a focus on suicide prevention in construction.

[5] ISO 45001 – Operation
[6] DFI 0.71 and Chess Policy and Specification
[7] ISO 45001 - Performance evaluation
[8] Health-and-safety-and-employment-standards-at-work-construction-procurement
[9] ISO 45001 – Leadership
[10] CHESS Policy and Specification
[11] Health-and-safety-and-employment-standards-at-work-construction-procurement
[12] CHESS IMS
[13] CHESS IMS
[14] ISO 45001 – Operation

4.2.4 Roles and Responsibilities

182. Roles listed in this section may differ from real life, depending on the structure of the associated departments. It is expected the staff assigned to these roles will be known to each other, prior to or after starting in their roles. The responsibilities listed here relate to incident response and reporting only.

183. The FM Health and Safety Advisor is responsible for:

    a. Completing all relevant CHIPS Monthly Score templates for each project/task they are responsible for;
    b. Consulting with the RHSS to determine and agreeable score;
    c. Completing the FM Monthly report; and
    d. Sending the FM Monthly report to the Site Manager/EDD.

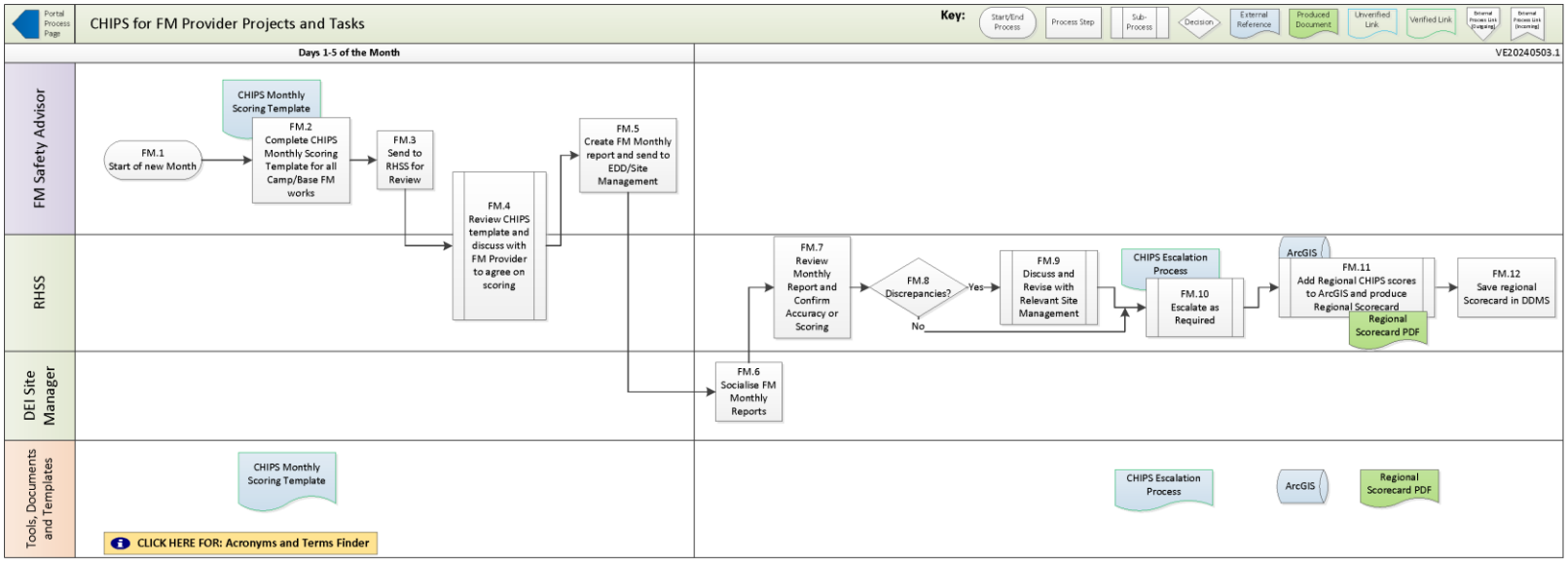
184. The **RHSS** is responsible for:

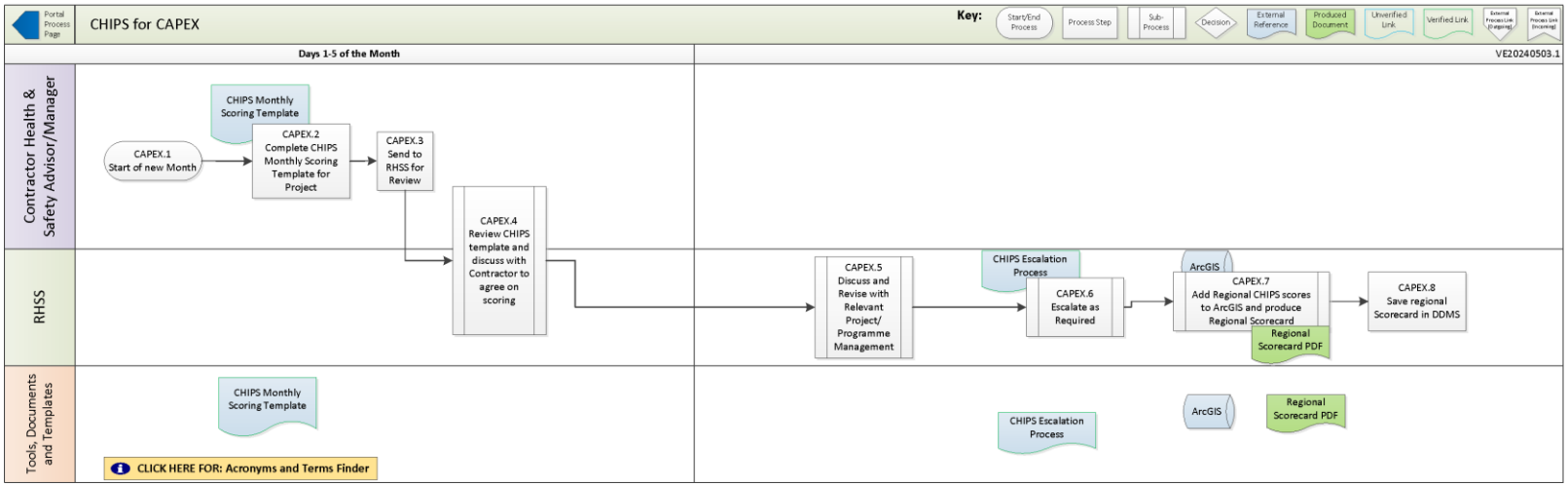
    a. Receiving the CHIPS Monthly Score templates;
    b. Reviewing the CHIPS Monthly Score templates with the FM safety advisor and contractor HSAs, and agreeing on a score;
    c. Reviewing the Monthly FM report for accuracy of CHIPS scores;
    d. Performing escalation actions where required;
    e. Recording CHIPS scores in ArcGIS;
    f. Producing the Regional Scorecard from ArcGIS; and
    g. Saving the monthly Regional Scorecard in DDMS.

185. The Contractor Health and Safety Advisor (HSA)/Manager is responsible for:

    a. Completing all relevant CHIPS Monthly Score templates for each project they are responsible for; and
    b. Consulting with the RHSS to determine and agreeable score.

4.2.5 Process for monthly CHIPS Scoring





4.2.6 CHIPS Procedures

FM PROVIDER CONSTRUCTION PROJECTS, PMP WORKS AND MAINTENANCE TASKS

Step #	Description Detail
FM Provider - Health and Safety Advisor	
FM.1 –START OF NEW MONTH	The process starts at the beginning of each Month
FM.2 – COMPLETE CHIPS MONTHLY SCORING TEMPLATE	Complete a Health and Safety Performance Scoring template for all FM works for the month. All Monitoring Categories are evidence based; therefore, evidence must be gathered before the joint discussion. The CHIPS Monthly Scoring template is available at https://jars.nz/chess.html or can be requested through the Regional Health and Safety Representative (RHSS).
FM.3 - SEND TO RHSS FOR REVIEW	Submit the completed Health and Safety Performance Scoring template along with the monthly incident/accident registers to the RHSS. The information must be submitted to the RHSS preceding the draft submission of the FM report to DEI Site management. completed Health and Safety Performance Scoring template is required for **each** FM Provider construction project, PMP works and maintenance task.
RHSS	
FM.4 – REVIEW CHIPS TEMPLATES	Review the CHIPS template and associated evidentiary documentation with FM Safety Advisor, and agree on an appropriate CHIPS score.
FM Provider - Health and Safety Advisor	
FM.5 – CREATE FM MONTHLY REPORT AND SEND TO DEI	Where templates are reviewed and accepted by RHSS and FM Safety Advisor, the CHIPS information can be added to the monthly FM report and submitted to DEI.
DEI Site Manager/EDD/Facilities Management	
FM.6 – SOCIALISE FM MONTHLY REPORT	Collate and socialize Monthly FM Reports.
RHSS	
FM.7 – REVIEW AND CONFIRM FM MONTHLY REPORT	Review FM Monthly report for discrepancies and confirm accuracy of scoring.
FM.8 – DISCREPENCIES?	Have discrepancies been found in the FM Monthly Report? If Yes go to **Step FM.9 – Consult with Site Manager** If No go to **Step FM.10 – Escalate as Required**

FM.9 – Consult with Site Manager	Discuss any discrepancy with the relevant DEI Site management and address as required.
FM.10 – Escalate as Required	Depending on the final CHIPS score, perform any required escalation actions specified in the CHIPS Escalation Process.
FM.11	Regional CHIPS scores will be added to the regional scorecard by RHSS and submitted to DEIHS for reporting purposes.
FM.12	Regional CHIPS scores will be added to the regional scorecard by RHSS and submitted to DEIHS for reporting purposes.

CAPEX Projects

Step #	Description Detail
Contractor HSA/Manager	
CAPEX.1 – Start of New Month	The process starts at the beginning of each Month
CAPEX.2 – Complete CHIPS Monthly Scoring Template	Complete a Health and Safety Performance Scoring template for all FM works for the month. All Monitoring Categories are evidence based; therefore, evidence must be gathered before the joint discussion. The CHIPS Monthly Scoring template is available at https://jars.nz/chess.html or can be requested through the Regional Health and Safety Representative (RHSS).
CAPEX.3 - Send to RHSS for Review	Submit the completed Health and Safety Performance Scoring template along with the monthly incident/accident registers to the RHSS. A completed Health and Safety Performance Scoring template is required for **each** contractor construction project and must be completed by the 5th of the month.
RHSS	
CAPEX.4 – Review CHIPS templates	For each project being undertaken, review the CHIPS template and associated evidentiary documentation with the Contractor HSA/Manager for the reporting period (e.g. during monthly project meetings), and agree on an appropriate CHIPS score.
CAPEX.5 - Review and confirm Scores with Project/ Programme Management	Discuss submitted CHIPS Templates with the relevant Project/Programme Management and revise where appropriate.
CAPEX.6 – Escalate as Required	Depending on the final CHIPS score, perform any required escalation actions, as specified in ***CHIPS Scoring Escalation Process***
CAPEX.7 – Update ArcGIS	Add Contractor CHIPS scores to ArcGIS and produce Contractor Scorecard
CAPEX.8 Save and Share Scorecard	Save Scorecard in DDMS. Share the Regional Scorecard with Defence Commercial Services (DCS) as a part of the NZDF procurement contract performance review process..

4.2.7 CHIPS Health and Safety Scoring template (Example only)

DEI C.H.E.S.S. CHIPS Health and Safety Scoring		
Contractor :	**Camp/Base:**	**Contractor ID:**
For Month:	**Year:**	

CHIPS Performance Rating	Previous CHIPS Score (If available)		**Comment**
Health and Safety Performance Scoring	**Monthly outcome for all Events**	**Score**	
Evidence that the contractor (PCBU) Leadership has engaged with workers on health and safety matters, as required by Sec 59 of the HSW Act.	Yes	100	
Evidence that the contractor's health and safety position is monitoring health and safety conditions and practices? (Examples: inspections, FM to provide 1 x USM/week, AND 2 x projects/week, CAPEX 1/week)	Yes	100	
Evidence of effective Monthly Communication of Health and Safety management and of conforming to the Occupational Health and Safety (OH&S) management system requirements? (Examples: QA scorecards, Foreman's monthly report)	Yes	100	
Evidence of engagement and communication by the Contractor/FM Provider engaging with their subcontractors (Examples: Daily pre-starts, Toolbox talks, site and project meeting minutes and attendance records)	Yes	100	

Have all Permit to Work tasks been conducted / completed, as per permit issuer and permit receiver requirements and JSA specification? (Specifics include: permit suspension and close out as per specified timeframes, JSA accompanies every permit, permits closed out following correct process)	No	0	
Are all contractors currently DEI / NZDF inducted, including new inductions and renewals?	No	0	
Evidence of results from monitoring or measurement of a subcontractor's health and safety, that has been evaluated and communicated to them?	Yes	100	
Does the contactors accident/incident register accurately reflect the health and safety events recorded in JARS?	Yes	100	
Evidence that all corrective actions related to Incidents/Accidents/H&S Events have been completed in accordance with allocated time frames.	Yes	100	
Evidence that all other corrective actions identified, where applicable, have been closed out in accordance with allocated times?	Yes	100	
Has the contractor received one or more High or Very High non-conformances during this reporting period? (Yes = fail)	Yes	0	
Have all Non-Conformances been closed out in accordance with allocated times? (No NC's for the month = N/A)	Yes	100	
Have all H&S incidents been reported in accordance with CHESS timeframes? (No incidents for the time frame = N/A)	Yes	100	

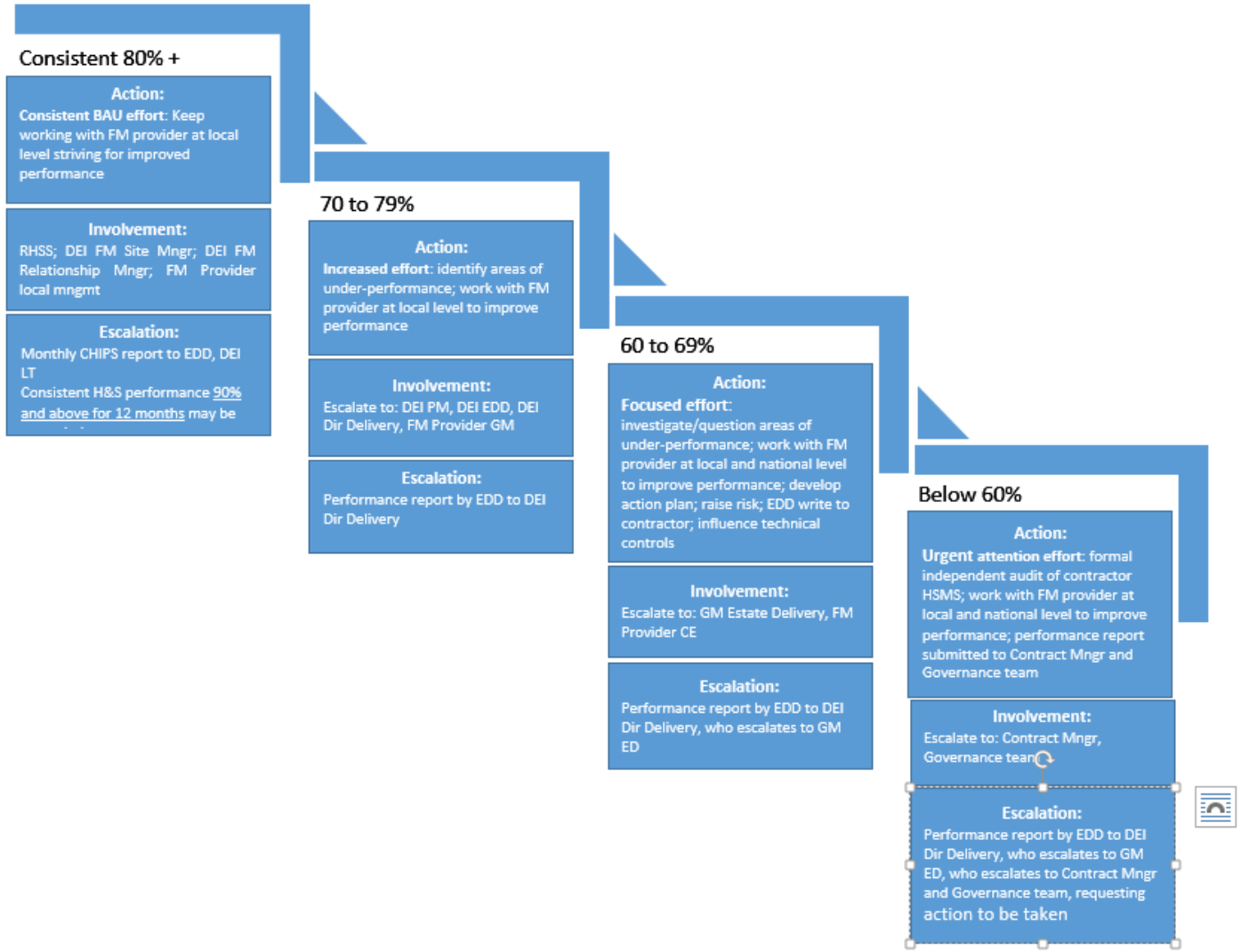
Has the contractor (including sub-contractors to Estate works) had any notifiable H&S events as described in the HSW Act for this reporting period? (Yes = fail)	Yes	0	
Has the contractor received any health and safety complaints submitted against them, relating to Estate works, for this reporting period (excluding by DEI or Alliance staff)? (Yes = fail)	No	100	
Evidence of the capturing and reporting of **new** health and safety risks for the past CHIPS reporting month? (Example: Hazard/HAZID register, risk management tool).	N/A		
Has the contractor met the requirements for promotion and management of mental health in the workplace, including a focus on suicide prevention?	Yes	100	
	Performance Rating	75.00 %	

Weighting based on the following classification	
High: 80%+ - All required performance categories correctly achieved	
Med: 70-79%	
Low: 60-69%	
Fail: < 60%	

4.2.8 CHIPS Scoring Escalation Process

Table 6. CHIPS Scoring Escalation Process

Score / percentage	Actions and Consequences	Involvement by whom	Escalation actions
Consistent 80%+ (Happy) 	Consistent BAU effort: Keep working with FM Provider for improved performance	RHSS DEI FM Site Mngr DEI FM Relationship Mngr FM Provider local mngmt	Monthly CHIPS report to EDD, DEI LT Consistent H&S performance <u>90% and above for 12 months</u> may be rewarded
70 to 79% (Concerned) 	Increased effort: identify areas of under-performance; work with FM Provider at local level to improve performance	Escalate to: DEI PM DEI EDD DEI Dir Delivery FM Provider GM	Performance report by EDD to DEI Dir Delivery
60 to 69% (Worried) 	Focused effort: investigate/question areas of under-performance; work with FM provider at local and national level to improve performance; develop action plan; raise risk; EDD write to contractor; influence technical controls	Escalate to: GM Estate Delivery FM Provider CE	Performance report by EDD to DEI Dir Delivery, who escalates to GM ED
Below 60% (Very worried) 	Urgent attention effort: formal independent audit of contractor HSMS; work with FM provider at local and national level to improve performance; performance report submitted to Contract Manager and Governance team	Escalate to: Contract Manager Governance team	Performance report by EDD to DEI Dir Delivery, who escalates to GM ED, who escalates to Contract Manager and Governance team, requesting action to be taken



5 Forms, Templates and Inspection Checklists

186. DEI provides a number of forms and templates for use by Contractors to assist in complying with CHESS specifications and procedures. Some of these forms are "smart" forms, capable of indicating required fields, providing buttons to assist in saving or emailing, and performing calculations on existing field values. These forms were designed and built for use on Windows systems. They may not perform as shown on Apple or mobile devices.

Note: The forms displayed in this guide are examples only. Download working forms and templates from https://jars.nz/chess.html.

5.1 DEI Document Control System

187. Most DEI forms and registers contain a header at the top of the page, providing standard contractor, project and site information.

Date:		Document ID#:				Version #:
PVID#:		Contractor/Company Name:			Contractor ID:	
camp or base:		Location:		Site:		

188. All DEI macro enabled templates and smart forms use this information to automatically generate a document identification number (DOC. ID), as described in the table below.

Table 7. Document ID format.

Term	Format
DCS Identification Structure	***PVID#-Base-ContractorID-type-yymmdd-vn(aaaaa)***
Planview Project ID	***PVID#***– is the Planview ID# (also referred to as the Planview Work ID) for the project/contract. Generally a unique 5 digit number.
Project location, i.e. camp of base	***Base*** – is the 3 character camp or base code (most forms provide a drop-down list of available Camps/Bases).
Contractor/FM Provider ID	***Contractor ID*** – is the ID number given to the contractor in JARS.
Document type	***Type*** –All DEI CHESS template are assigned a 3 letter ***Form*** code. For Example: **ICE** is short for "Inspection Checklist and Evaluation"; **PTW** is short for "Permit To Work"; **JSA** is short for "Job Safety Analysis; (see the table below for a list of Form codes).
Date	***Date*** – the date in the format yymmdd calculated from the date entered in the form header. (On most forms, this defaults to the day the form is created.
Version numbers	***vn*** – The version number of the document (this will normally be "1" but can be changed if the form is amended).
Additional information	***(aaaaa)*** – Additional information for selected templates and documents. e.g. page numbers, employee initials, checklist codes, etc.
Sample	***12345-BHM-21-ICE-190223-v1***

Please Note: Saving forms with the same name as the document ID will allow the Document Register spreadsheet to import and automatically categorise each file in the same folder as the register.

Form codes

189. The table below describes the forms and templates shown in this document, with their form codes, types, and where they are referenced in CHESS Policy and Specifications Volume One.

Table 8. CHESS templates, form codes and types.

Form Code	Title	CHESS Reference	Type
DCR	Document Control Register	8.3	Macro enabled Excel spreadsheet
DNS	Daily Notices Submission Form	4.6	Smart PDF
EDR	Emergency Drill Report	12.1	Smart PDF
EEP	Emergency Response Plan	4.1, 12.1, 17.32	Smart PDF
EFI	Event Financial Impact Statement	13.2	Macro enabled Excel spreadsheet
FMP[15]	Facilities Maintenance Safety Management Plan	3.1	Word Document
FPR	FOD Prevention Register	15.7	Smart PDF
HSA	Hazardous Substances Application	9.1	Smart PDF
HSR	Hazardous Substances Register	9.1, 9.4, 17.4	Macro enabled Excel spreadsheet
III	Incident Investigation Report (ICAM)	13.2	Word Template
IIS	Incident Investigation Report (Short Form)	13.2	Word Template
INF	Issue Notification Form	15.1, 15.2, 15.3, 15.5, 15.6	Smart PDF
JSA	Job Safety Analysis	4.1, 4.2, 4.3, 4.10, 8.1, 8.3, 11.6, 14.1, 14.2, 14.3, 16.2, 16.7, 17.1, 17.2, 17.14, 17.21, 17.22, 17.25, 17.26, 17.28, 17.29, 17.30, 17.34, 17.36, 17.37	Word Template
NCN	Non-Conformance Notification	7.1, 14, 14.2, 14.4	Macro enabled Excel spreadsheet
NCR	Non-Conformance Report	2.1, 14, 14.1, 14.2, 14.4	Macro enabled Excel spreadsheet
PTW	Permit to Work	4.3	Smart PDF
SMP[1]	Construction Safety Management Plan	2.1	Word Document
SPA	Specification Amendment Request	4.10	Smart PDF
SVI	Site Visitor/Induction Register	12.1 16.11	Smart PDF
TCR	Training and Competency Register	8.1, 10.1, 16.4, 17.9, 17.21	Smart PDF
VPE	Vehicle, Plant and Equipment Register	4.7	Macro enabled Excel spreadsheet

[15] Not included in this document. Refer to the DEI Construction Project Manager or Regional Health & Safety Specialist for more details.

5.2 Forms and Templates

190. The following pages display examples of these forms and templates.

a. Daily Notices Submission Form (DNS)[4]
b. Emergency Drill Report (EDR)[4]
c. Emergency Evacuation Plan (EEP)[4]
d. Event Financial impact Statement (EFI)
e. FOD Prevention Register (FPR)[4]
f. Hazardous Substance Application (HSA)[4]
g. Hazardous Substances Register (HSR)[4]
h. Incident Investigation Report (III) (ICAM)[16]
i. Incident Investigation Report (IIS) (Short Form) [1]
j. Issue Notification Form (INForm) (INF) [4]
k. Job Safety Analysis template (JSA)[17]
l. Non-Conformance Notification (NCN)
m. Non-Conformance Report (NCR)
n. Permit to Work (PTW)[18]
o. Site Visitor Induction Register (SVR)[4]
p. Specification Amendment Request form (SPA)[4]
q. Training and Competency Register (TCR)[2]
r. Vehicle, Plant and Equipment Register (VPE)[2]

Note: The forms displayed in this guide are examples only. Download working forms and templates from https://jars.nz/chess.html.

5.3 Daily Notices Submission (DNS) Form

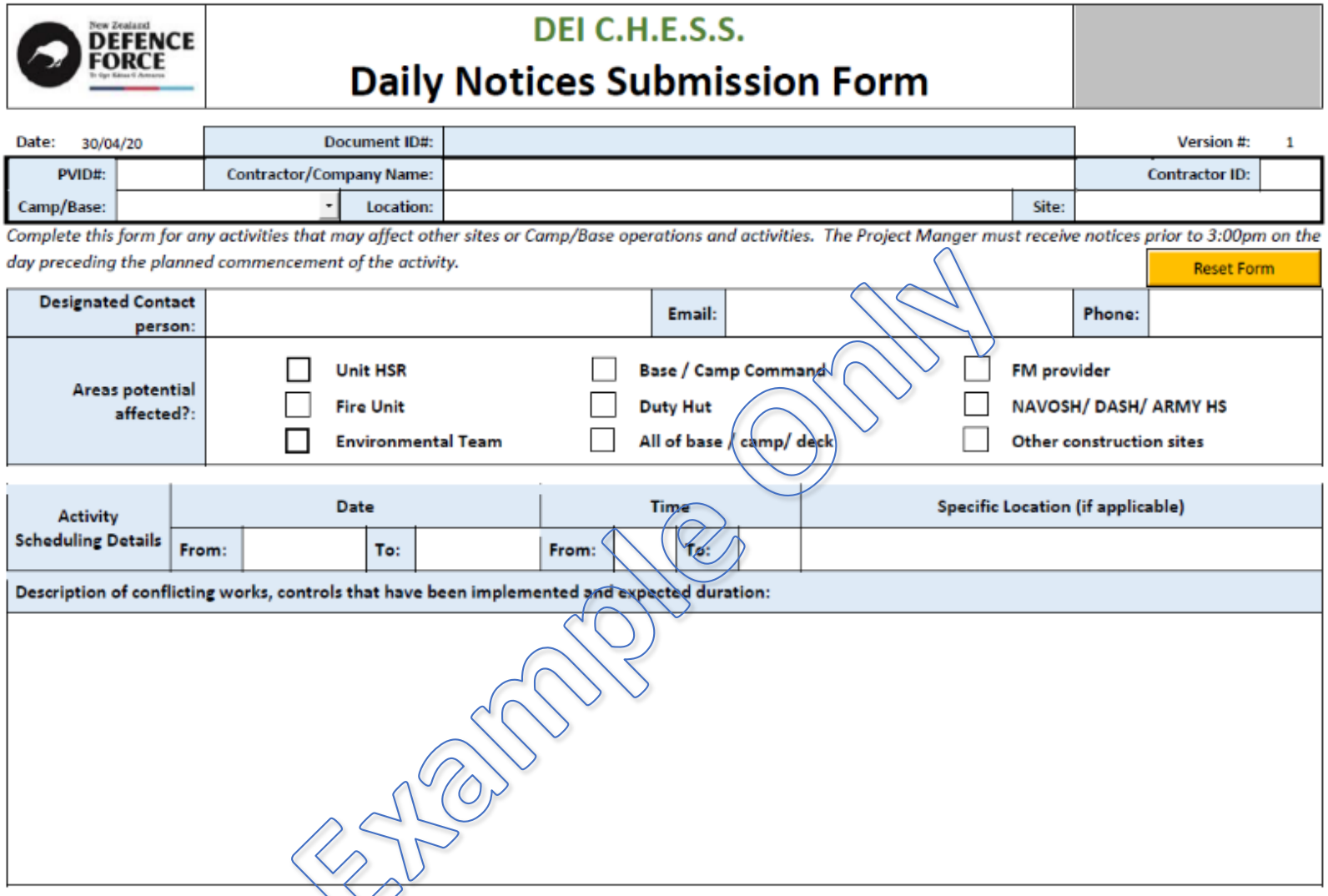
191. The *Daily Notices Submission Form* for is an editable "smart" PDF file. Its purpose is to allow contractors notify DEI of activities that will occur onsite that may affect other sites or camp or base operations.

192. DEI will collate any DNS forms received prior to 3:00pm daily and publish them to all other sites on Base and to Base operations.

193. Download a soft copy of the DNS form from https://jars.nz/chess.html.

[16] Word Template
[17] Excel Spreadsheet
[18] Smart editable PDF form

DAILY NOTICES SUBMISSION FORM



DEI C.H.E.S.S.

Daily Notices Submission Form

Date: 30/04/20		Document ID#:		Version #: 1	
PVID#:		Contractor/Company Name:		Contractor ID:	
Camp/Base:		Location:		Site:	

Complete this form for any activities that may affect other sites or Camp/Base operations and activities. The Project Manger must receive notices prior to 3:00pm on the day preceding the planned commencement of the activity.

Reset Form

Designated Contact person:		Email:		Phone:	

Areas potential affected?:	☐ Unit HSR	☐ Base / Camp Command	☐ FM provider
	☐ Fire Unit	☐ Duty Hut	☐ NAVOSH/ DASH/ ARMY HS
	☐ Environmental Team	☐ All of base / camp/ deck	☐ Other construction sites

Activity Scheduling Details	Date		Time		Specific Location (if applicable)
	From:	To:	From:	To:	

Description of conflicting works, controls that have been implemented and expected duration:

Page 1

5.4 Emergency Drill Report (EDR)

194. The *Emergency Drill Report* is an editable "smart" PDF file. Its purpose is to allow contractors to report on the success (or issues) of emergency drills when undertaken. It provides a layout that encourages a standardised approach to analysing and reporting on Emergency drills.

195. Download a soft copy of the EDR form from https://jars.nz/chess.html.

EMERGENCY DRILL REPORT (PG.1).

New Zealand DEFENCE FORCE

DEI C.H.E.S.S.
Emergency Drill Report

(Insert Company Logo File)

Date: 08/05/20	Document ID#:			Version #:	1
PVID#:		Contractor/Company Name:		Contractor ID:	
Camp/Base:		Location:		Site:	

Save the Form | Reset Form

Evacuation Trial Coordinator:	
Evacuation Trial Observers:	

Wardens:		First Aiders:	
Date:	Time:	Number of involved Workers:	

Nature and summary of emergency trial (fire, chemical, medical event, medical accident, accident):

Were FENZ notified of the Trial? *(04 8010812)*	◯ Yes ◯ No	Time Emergency Services called: *(this can be a virtual call)*	
Who called Emergency Services?:		Full evacuation trial duration:	h m

Debrief Details By: Date:

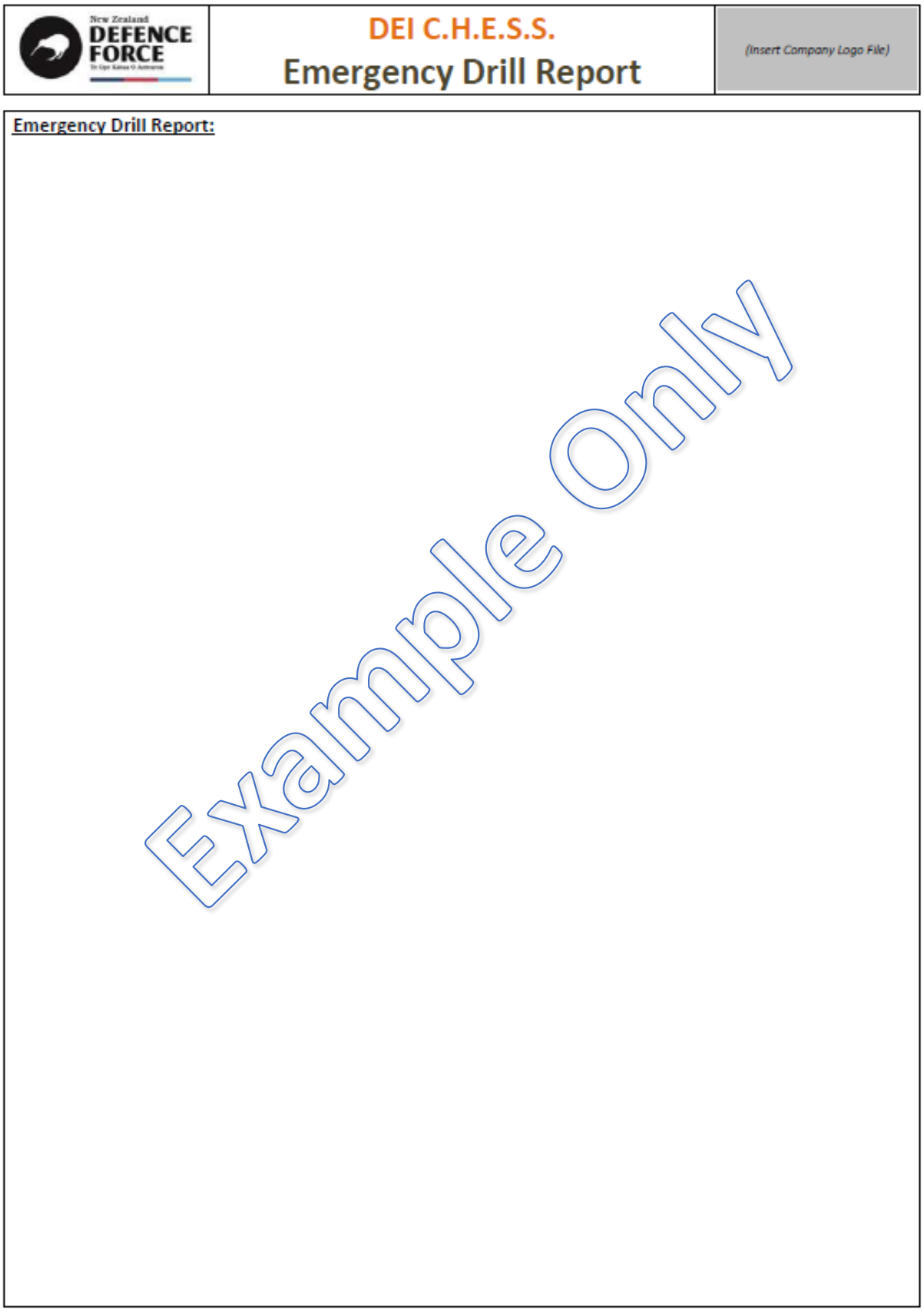
Attendees:

Consider the following questions that should be answered when holding debrief. *(Note: this is not a full list of discussion points, if not applicable select N/A or leave blank. If discussed, add details to the report, including any corrective actions or shared learnings to be communicated)*

Y	N	N/A	
◯	◯	◯	Was the alarm heard by everyone on the site?
◯	◯	◯	Is the type of alarm appropriate (e.g.: voice, air horn, whistle etc) ? (Type:)
◯	◯	◯	Was the sign in register taken to the evacuation point?
◯	◯	◯	Were the wardens/ first aiders easily identified during the evacuation?
			How Were the wardens/ first aiders identified (e.g. jerkin colour, arm band etc)?
◯	◯	◯	Were First Aid kits taken to the evacuation point?
◯	◯	◯	Did everyone evacuating know where the evacuation point was?
◯	◯	◯	Is it clearly signposted and shown to all being inducted onto the site?
◯	◯	◯	Were any personnel identified as requiring assistance (e.g. physically, hearing or visually impaired)?
◯	◯	◯	Is this covered in your Emergency Response Plan?
◯	◯	◯	Was a person nominated to meet Emergency Services at the gate to provide directions?
◯	◯	◯	Did the nominated person go to the gate to meet emergency services?
◯	◯	◯	Did your trial evacuation meet with the details in your Emergency Response Plan?
◯	◯	◯	Was the site made safe before evacuation (e.g. chemicals secured, electricity and plant turned off, etc.)?
			How long is the expected delay of Emergency Services? mins
			(This may assist in understanding any further responses required while waiting for Emergency Services.)
◯ Full	◯ Part		Was a full site evacuation required or could part of the site continue to operate safely?
◯	◯	◯	Is a staged evacuation appropriate?

1

EMERGENCY DRILL REPORT (PG.2).



EMERGENCY DRILL REPORT (PG.3).

New Zealand DEFENCE FORCE	**DEI C.H.E.S.S.** **Emergency Drill Report**	*(Insert Company Logo File)*

#	Corrective Actions:	Assigned to:	Achieve by date:
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			

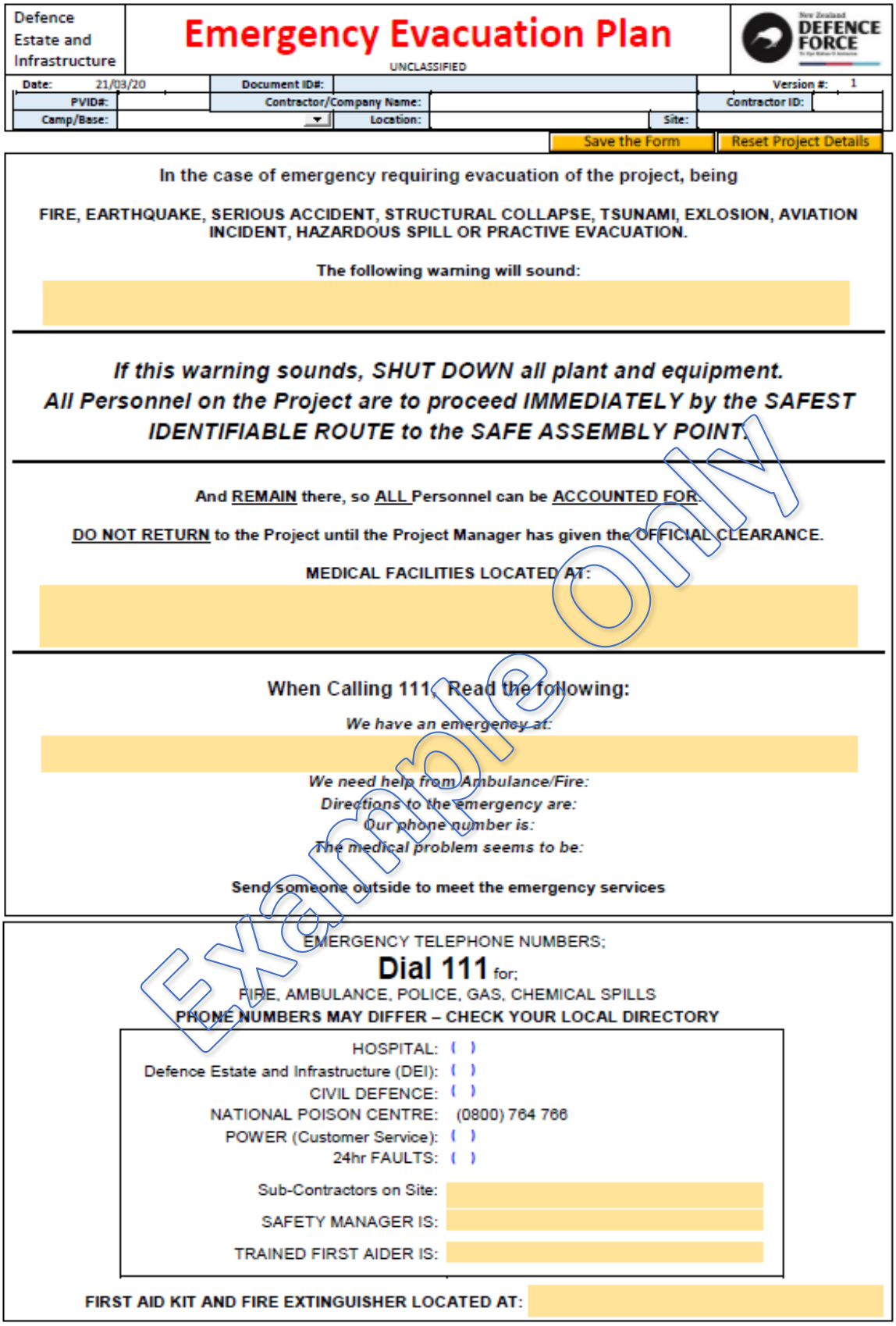
Date Action items were completed:	
Date Copy of Emergency Evacuation Trial and corrective actions list was sent to Authorised DEI representative:	

5.5 Emergency Response Plan (ERP)

196. The Emergency Response Plan (ERP) is an editable "smart" PDF file that provides a standard layout and "look and feel" for all Emergency Response Plans across Defence Estate construction sites.

197. Download a soft copy of the ERP form from https://jars.nz/chess.html.

EMERGENCY RESPONSE PLAN



Defence Estate and Infrastructure

Emergency Evacuation Plan

UNCLASSIFIED

New Zealand DEFENCE FORCE

Date:	21/03/20	Document ID#:		Version #:	1
PVID#:		Contractor/Company Name:		Contractor ID:	
Camp/Base:		Location:		Site:	

Save the Form | Reset Project Details

In the case of emergency requiring evacuation of the project, being

FIRE, EARTHQUAKE, SERIOUS ACCIDENT, STRUCTURAL COLLAPSE, TSUNAMI, EXLOSION, AVIATION INCIDENT, HAZARDOUS SPILL OR PRACTIVE EVACUATION.

The following warning will sound:

If this warning sounds, SHUT DOWN all plant and equipment.
All Personnel on the Project are to proceed IMMEDIATELY by the SAFEST IDENTIFIABLE ROUTE to the SAFE ASSEMBLY POINT.

And REMAIN there, so ALL Personnel can be ACCOUNTED FOR.

DO NOT RETURN to the Project until the Project Manager has given the OFFICIAL CLEARANCE.

MEDICAL FACILITIES LOCATED AT:

When Calling 111, Read the following:

We have an emergency at:

We need help from Ambulance/Fire:
Directions to the emergency are:
Our phone number is:
The medical problem seems to be:

Send someone outside to meet the emergency services

EMERGENCY TELEPHONE NUMBERS;

Dial 111 for;

FIRE, AMBULANCE, POLICE, GAS, CHEMICAL SPILLS

PHONE NUMBERS MAY DIFFER – CHECK YOUR LOCAL DIRECTORY

HOSPITAL:	( )
Defence Estate and Infrastructure (DEI):	( )
CIVIL DEFENCE:	( )
NATIONAL POISON CENTRE:	(0800) 764 766
POWER (Customer Service):	( )
24hr FAULTS:	( )
Sub-Contractors on Site:	
SAFETY MANAGER IS:	
TRAINED FIRST AIDER IS:	

FIRST AID KIT AND FIRE EXTINGUISHER LOCATED AT:

5.6 Event Financial Impact Statement (EFIS)

198. The *Event Financial Impact Statement (EFIS)* is a macro enabled Excel spreadsheet. Its purpose is to assist DEI (and Contractors) in assessing the financial impact of incidents that occur on Defence Estate through a Shared Impact Statement. In the event of an incident, this form may be sent to Contractors to provide information regarding the financial impact of incidents.

199. When required, contractors will receive an email similar to the follow:

Attention: J. Contractor

An event/incident (event ID#:*abc-123* – (*event description*) occurred on the *(date)* at *(camp or base)*.

To help NZDF to determine the overall impact of this event, please complete the attached "Event Financial Impact Statement", detailing the estimated direct and indirect costs incurred by your company, department or unit, that were associated with this event.

Select each relevant category and item from the menus provided, include a brief description, and estimate of the hours or number of items involved, and the average rate or unit price.

Do not include blank lines before or between completed lines.

Please return the spreadsheet to the email address below, when completed.

Your assistance in helping NZDF analyse the impact of events on Defence Estate, is greatly appreciated.

EVENT FINANCIAL IMPACT STATEMENT (EFIS)

Defence Estate and Infrastructure

Event Financial Impact Statement

PVID#:		Event Date:		Doc. ID#:		Version #:	1	Total Financial Impact:	$0.0
Contractor ID:		Camp/Base:		Location:		Site:			
Event #:		Description:							
DEI Investigator:		Email:		Phone:					
Affected Party:		Email:		Phone:					
Title:		Company/Department/Unit:							

Email Sheet

	(Select from drop-down menus)		Description	Estimated		Cost
	Category	Item		Hrs/Units	Rate /Cost	
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						

(Optional Section):	Profit margin? (%):	
Calculated additional gross income required to cover costs:		

Page 1 of 1

5.7 FOD Prevention Register (FPR)

200. The *FOD Prevention Register (FPR)* is an editable "smart" PDF file. Its purpose is to assist workers in ensuring all appropriate precautions are taken prior to performing tasks Airside at NZDF air bases, and in preventing Foreign Object Debris (FOD) being left behind after tasks have been completed.

201. Download a soft copy of the FPR form from https://jars.nz/chess.html.

FOD Prevention Register (FPR) (pg.1)

New Zealand DEFENCE FORCE

DEI C.H.E.S.S.

Foreign Object Debris (FOD) Prevention Register

Date:	21/03/20	Document ID#:		Version #:	1
PVID#:		Contractor/Company Name:		Contractor ID:	
Camp/Base:		Location:		Site:	

Pre-start checklist: Reset Form

☐	Base notified prior to airside worksite set-up?	
☐	All airside workers have completed FOD-prevention training?	
☐	Clearance received from Air Traffic Service to initiate task?	Clearance #
☐	All tools, materials and equipment secured on/inside vehicle to prevent accidental falling off?	
☐	Small tools and items such as drillbits and bolts are kept and transported to and from site in suitable containers?	
☐	Worksite screened off to prevent FOD material from going onto airside?	
☐	Observer appointed to ensure no materials or packaging are left behind or blown away?	
☐	Containers with lids used for waste?	
☐	Only tools, materials and equipment to be used are offloaded?	
☐	ALL offloaded tools, materials and equipment captured in the FOD register?	

Task completion checklist:

☐	Base notified prior to leaving the airside worksite?
☐	All tools, materials and equipment collected, are loaded and accounted for?
☐	All waste and off-cuts are collected, loaded and accounted for?
☐	FOD register updated?
☐	Excavated material is reinstated, or removed and loaded?
☐	Worksite is reinstated to required standard?
☐	Worksite and surrounding environment has been 'swept' and confirmed clear of any FOD items?

The worksite is in a safe and serviceable condition and has been inspected by:

Aerodrome Operator / Aerodrome Air Traffic Service Representative	**Name:**	**Email:**	**Phone/Mob:**
	Signature:		

Page 1

FOD Prevention Register (FPR) (pg.2)

DEI C.H.E.S.S.

Foreign Object Debris (FOD) Prevention Register

List ALL tools, materials and equipment used at worksite.

	Tool/Material/Equipment	Number/mass/ length unloaded	Date	Time	Number/mass/ length removed	Date	Time	Comments
1	(Example) Shovel	4	20/06/20	09:30	4	20/06/20	16:30	
2	(Example) 16mm 400v cable	20m	20/06/20	09:30	1.5m	20/06/20	16:30	Used 18.5m
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

I declare the above information is accurate and complete:

Contractor Representative	Name:	Email:	Phone/Mob:
	Signature:		

Page 2

5.8 Hazardous Substances Application (HSA)

202. The *Hazardous Substance Application* is an editable "smart" PDF file. Its purpose is to allow contractors to seek approval from DEI and camp or base authorities to bring potentially hazardous materials onto the camp or base. This will allow DEI to ensure appropriate precautions are taken, and inform them of any potentially incompatible substances in close proximity to each other.

203. Download a soft copy of the HSA form from https://jars.nz/chess.html.

HAZARDOUS SUBSTANCE APPLICATION (HSA) (PG1)

New Zealand DEFENCE FORCE	**DEI C.H.E.S.S.** **Hazardous Substance Application**	*(Insert Company Logo File)*

Date: 10/05/20		**Document ID#:**		**Version #:** 1	
PVID#:		**Contractor/Company Name:**		**Contractor ID:**	
Camp/Base:		**Location:**		**Site:**	

Save the Form | Reset Form

SECTION A *(Complete this page and send to authorised DEI representative)*

Requested by:	**Name:**		**Email:**	**Phone:**	
Department:				**Date:**	
	☐ New Hazardous Substance *(Check Site Hazardous Substances Register)*				
or **Changed:**	☐ Volume	☐ Concentration	☐ Storage Location		

Hazardous Substance Information. *Please supply Safety Data Sheet (mandatory).*

Substance Name (and formula where applicable)	Supplier	HSNO Classification/s *e.g. 5.1.1B*	UN Number	Concentration (%)

How will the product be delivered:	☐ Bulk	☐ IBC	☐ Other		
Container type:		**Container Size:**		**Maximum volume stored on site:**	
Storage Location:					

Describe the reason for the request and how substance will be used.

Page 1

HAZARDOUS SUBSTANCE APPLICATION (HSA) (PG2)

New Zealand DEFENCE FORCE

DEI C.H.E.S.S.
Hazardous Substance Application

(Insert Company Logo File)

SECTION B – Completed by DEI Authorised HSNO Certifier:

Approval Criteria – (Indicate applicable items by ✓)

	Issue:	Required Action:	Assigned To:	Due Date:	Completed:
☐	SDS Supplied?				
☐	Affects the Location Test Certificate?				
☐	Requires a Hazardous Atmosphere Zone?				
☐	Requires a Controlled Zone?				
☐	Approved Handlers required?				
☐	Tracking required?				
☐	Notification of Regulatory Authorities required?				
☐	Notification of external Emergency Services?				
☐	Medical Surveillance programme required?				
☐	Safety Equipment (PPE)				
☐	Hazardous Substances Management Plan attached (HSMP)				
☐	Other				

Authorised HSNO Certifier	☐ Approved ☐ Declined Reasons: Name: Email: Phone: Signature:

SECTION C - Administration

Copy of completed Form sent to:	☐ Requestor ☐ Regional HSS ☐ Environmental ☐ Filed
Documentation Updates Required?	☐ Site Dossiers ☐ Chemwatch ☐ Site Maps & Drawings ☐ ChemSafe ☐ Emergency Response Plan ☐ SDS (Hard & soft files)

Page 2

5.9 Hazardous Substances Register (HSR)

204. The *Hazardous Substances Register (HSR)* is a macro enabled Excel spreadsheet. It allows contractors to record hazardous substances in used on-site, and provides an ongoing register of substances on site that may assist in the event of an emergency.

205. Download a soft copy of the HSR spreadsheet from https://jars.nz/chess.html.

HAZARDOUS SUBSTANCES REGISTER (HSR)

DEI C.H.E.S.S.

Hazardous Substances Register

Date: 22/01/21 | Document ID: | Version #: 1

PVID: | Contractor/Company: | Contractor ID:

Camp/Base: | Location: | Site:

Save Register | Print File

Material / Substance	Gas/ Solid/ Liquid	Container Type	Unit of measure	Continer size	Maximum No. Containers	Total Units	Hazard Class	UN Number	Req'd PPE/ RPE	Specific location on camp/ base	Special transport requirements	SDS (current within 5 years) hyperlink/ location	Segregation requirements	Spill kit		ERP Available (Y/N)
														Type?	Available? (Y/N)	

Download from https://jars.nz/chess.html - NOTE: THIS IS A MACRO ENABLED EXCEL TEMPLATE

5.10 Incident Investigation Report (III) (ICAM)

206. The *Incident Investigation Report (III) (ICAM)* is a special Word template. Its purpose is to provide a standard layout and "look and feel" for incident reports produced by Contractors relating to major incidents on NZDF sites. There are two versions of the Incident Investigation Report form. They are:

    a. III - ICAM
    b. IIS - Short form (or 5 Whys)

207. This form should be completed when using the Incident Cause Analysis Method (ICAM) for investigating and reporting on:

    a. All events notifiable to WorkSafe New Zealand;
    b. Investigating complex events or trends; and
    c. "Deep Dive" detailed investigations.

208. For other events use Incident Investigation Report (IIS) (Short Form).

209. Download a soft copy of the III template from https://jars.nz/chess.html.

INCIDENT INVESTIGATION REPORT (IIR) (ICAM) (PG.1).

DEI C.H.E.S.S.

Incident Investigation Report (ICAM)

Date: Date.		**Document ID#:** *(pvid)-(cntrtrID)-(base code)-III-(yymmdd)-V(version)*		**Version #:**	
PVID#:		**Contractor/Company Name:**		**Contractor ID:**	
Camp/Base: Choose a Camp/Base		**Location:**		**Site:**	

(Date and Time of Event)

(Corresponding JARS Event Number)

(Brief Event Title)

Event reported by:	
Incident investigator/s	
Report Author	

To be completed for:

- All events notifiable to WorkSafe;
- Investigating complex events or trends; and
- "Deep Dive" detailed investigations.

For other events use "Incident Investigation Report – (short form)"

Page 1

INCIDENT INVESTIGATION REPORT (IIR) (ICAM) (PG.2).

DEI C.H.E.S.S.

Incident Investigation Report (ICAM)

Contents

Page 2

INCIDENT INVESTIGATION REPORT (IIR) (ICAM) (PG.3).

DEI C.H.E.S.S.

Incident Investigation Report (ICAM)

1. Executive Summary

Insert a summary of the purpose of the investigation. Include key findings, root causes and recommendations for improvement. Note: the executive summary is generally be the last section to be completed.

1.1 Summary Findings

Key findings of this investigation highlighted the following control measures (**red** = inadequate, **green** = adequate):

Control Measure	Status
	Adequate
	Inadequate

Root causes identified include:

- **(Root cause 1 and description)**:
- **(Root cause 2 and description)**:

Recommendations for Improvement include:

- XXX
- XXX

2. Background to the Incident

2.1 The event

(Describe what happened)

2.2 Event time line

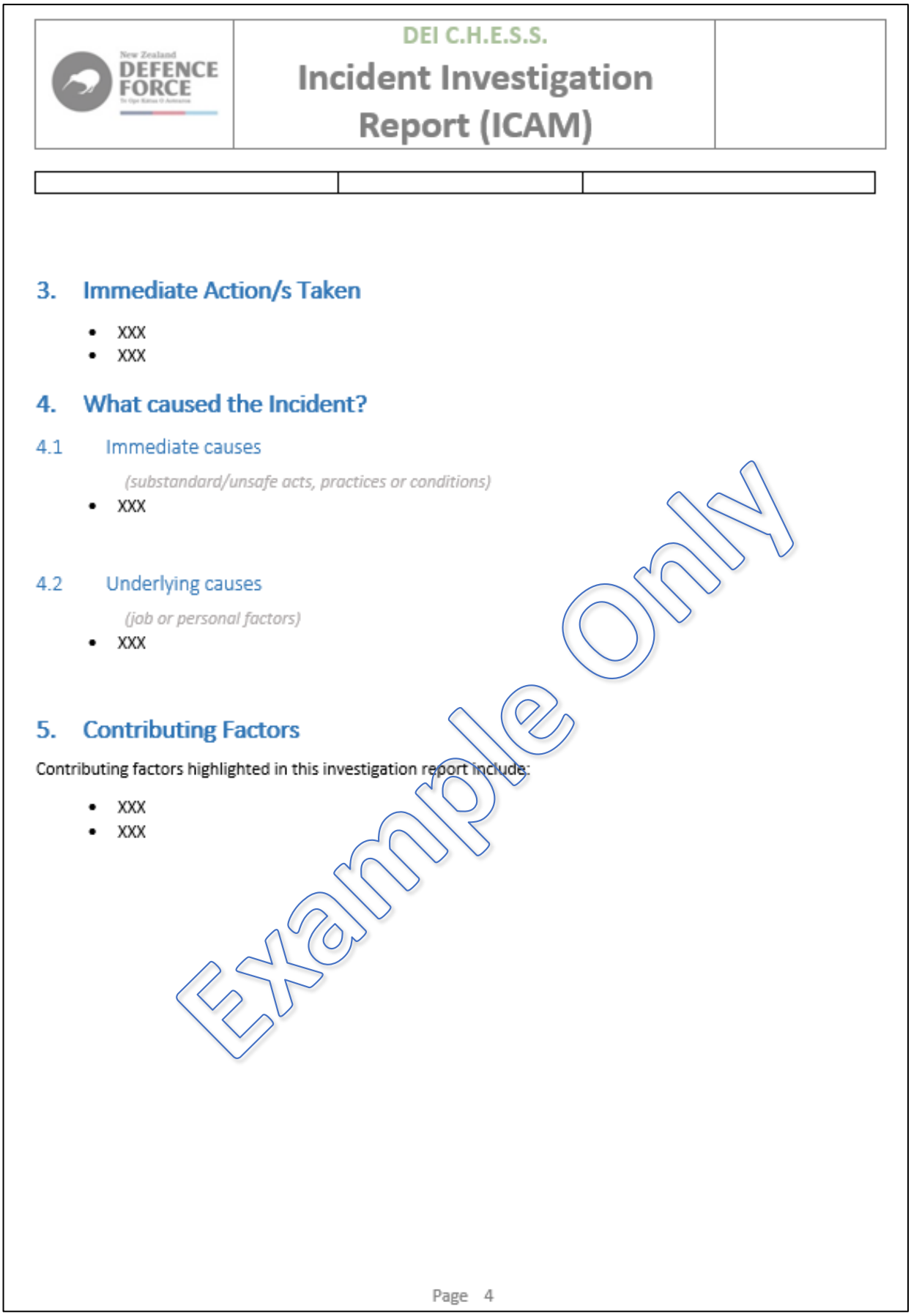
S/No	Date	Time	What happened

2.3 Workers and others interviewed

Name	Position	Company / Organisation

Page 3

INCIDENT INVESTIGATION REPORT (IIR) (ICAM) (PG.4).



DEI C.H.E.S.S.

Incident Investigation Report (ICAM)

3. Immediate Action/s Taken

- XXX
- XXX

4. What caused the Incident?

4.1 Immediate causes

(substandard/unsafe acts, practices or conditions)

- XXX

4.2 Underlying causes

(job or personal factors)

- XXX

5. Contributing Factors

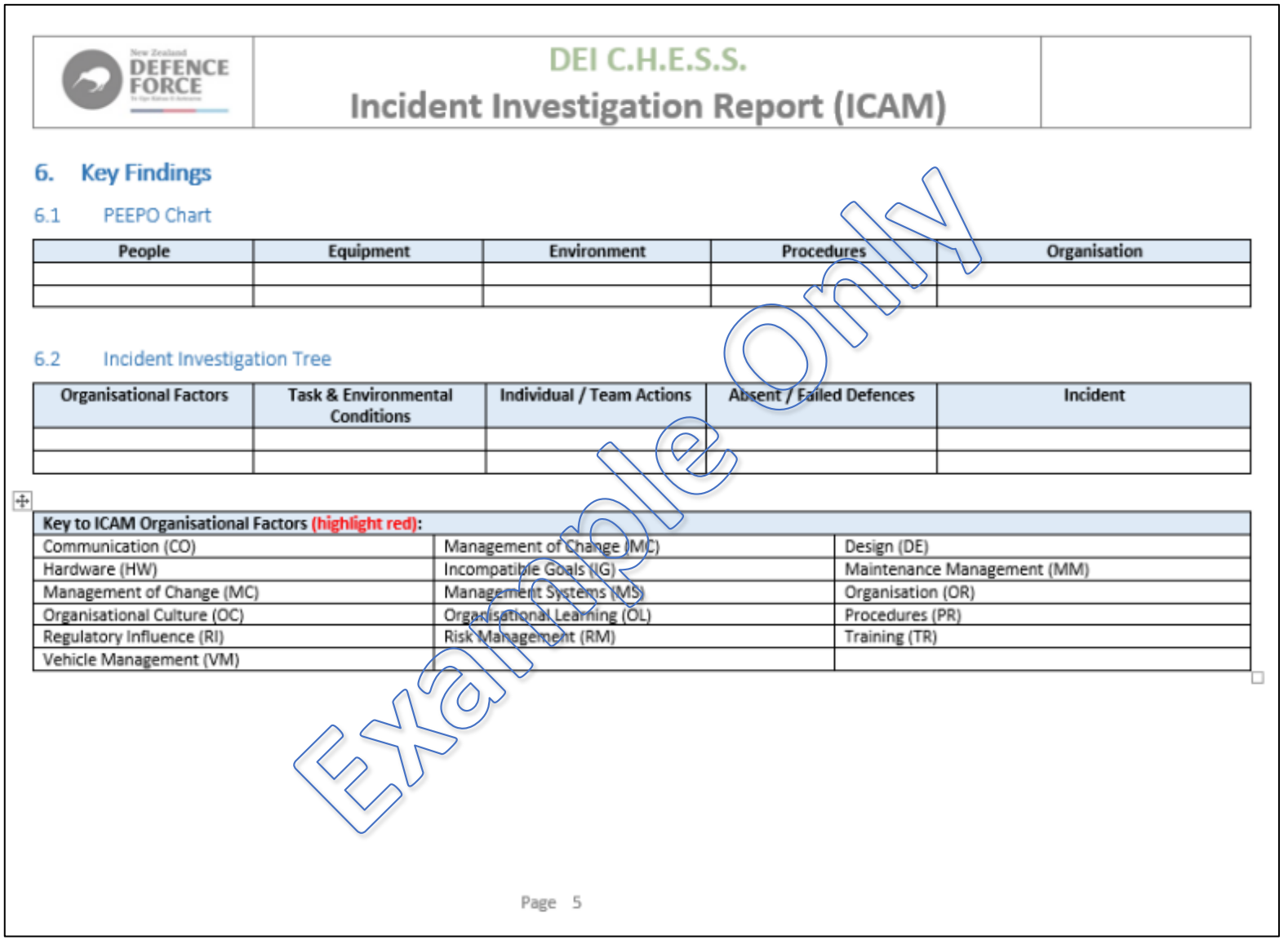
Contributing factors highlighted in this investigation report include:

- XXX
- XXX

Page 4

INCIDENT INVESTIGATION REPORT (IIR) (ICAM) (PG.5).

150



DEI C.H.E.S.S.

Incident Investigation Report (ICAM)

6. Key Findings

6.1 PEEPO Chart

People	Equipment	Environment	Procedures	Organisation

6.2 Incident Investigation Tree

Organisational Factors	Task & Environmental Conditions	Individual / Team Actions	Absent / Failed Defences	Incident

Key to ICAM Organisational Factors (highlight red):		
Communication (CO)	Management of Change (MC)	Design (DE)
Hardware (HW)	Incompatible Goals (IG)	Maintenance Management (MM)
Management of Change (MC)	Management Systems (MS)	Organisation (OR)
Organisational Culture (OC)	Organisational Learning (OL)	Procedures (PR)
Regulatory Influence (RI)	Risk Management (RM)	Training (TR)
Vehicle Management (VM)		

Page 5

INCIDENT INVESTIGATION REPORT (IIR) (ICAM) (PG.6).

DEI C.H.E.S.S.

Incident Investigation Report (ICAM)

7. Root Causes, Conclusion & Lessons Learnt

7.1 Root Cause/s

Key findings in this investigation highlighted the following:

- **(Root cause 1)**: (description)
- **(Root cause 2)**: (description)

7.2 Conclusion

'This incident took place as a result of….'

7.3 Lessons Learnt

Key lessons to be learnt from this incident:

- XXX
- XXX
- XXX

8. Recommendations

8.1 Local Level

- XXX
- XXX

8.2 Wider Organisational Level

- XXX
- XXX

9. Incident Report Sign-off

9.1 Corrective Action Plan

S/No	Action	Hierarchy of Control	Responsible Person	Target Date
1				
2				
3				

Page 6

INCIDENT INVESTIGATION REPORT (IIR) (ICAM) (PG.7).

New Zealand DEFENCE FORCE	DEI C.H.E.S.S. **Incident Investigation Report (ICAM)**	

9.2 Comments and Sign-off

Comments:		
Name	**Signature**	**Date**
(Contractor H&S Manager)		
(Contractor Project Manager)		
(Engineer to Contract)		
(DEI RHSS)		
(DEI DD HS)		
(DEI Exec Representative)		

The process for Sign-off:

1. *Ensure the workers involved have reviewed the investigation*
2. *Sign off should include the DEI RHSS and/or DEI DD H&S, Contractor Group Safety Manager and a representative from the DEI Executive team*

10. Appendices

*Note: Some of the following items may form part of this report **(add or remove as required)**. A Safety Alert & Lessons Learnt must be completed for all investigations and submitted to the DEI H&S office for communication to the wider organisation, where applicable.*

10.1 Safety Alert (drafted and submitted to DEI RHSS)

10.2 Lessons Learnt (drafted and submitted to DEI RHSS)

10.3 Site Photos

10.4 Work Pack Instructions/diagrams

10.5 Copy of Team briefing / Tailgate

10.6 Documented Instructions, JSA's, SWMS, etc

10.7 Permits

10.8 *PEEPO Chart*

10.9 *Investigation Tree / 5 Why's Template*

Page 7

5.11 Incident Investigation Report (IIS) (Short Form)

210. The *Incident Investigation Report (IIS) (short form)* is a special Word template. Its purpose is to provide a standard layout and "look and feel" for incident reports produced by Contractors relating to minor incidents on NZDF sites. There are two versions of the Incident Investigation Report form. They are:

    a. III - ICAM

    b. IIS - Short form (or 5 Whys)

211. This form can be completed when investigating and reporting on:

    a. Any incident that is not notifiable to WorkSafe New Zealand; and

    b. Incidents that do not require an ICAM investigation.

212. See Incident Investigation Report (III) (ICAM) for more information on whether an ICAM investigation is required.

213. Download a soft copy of the IIS template from https://jars.nz/chess.html.

INCIDENT INVESTIGATION REPORT (IIS) (SHORT FORM) (PG.1).

DEI C.H.E.S.S.

Incident Investigation Report (Short Form / 5 Why)

Date: Date.		**Document ID#:** *(pvid)-(cntrtrID)-(base code)*-**IIS**-*(yymmdd)*-**V***(version)*		**Version #:**	
PVID#:		**Contractor/Company Name:**		**Contractor ID:**	
Camp/Base:	Choose a Camp/Base	**Location:**		**Site:**	

(Date and Time of Event)

(Corresponding JARS Event Number)

(Brief Event Title)

Event reported by:	
Incident investigator/s:	
Report writer:	

To be completed for:

- Events that are not notifiable to WorkSafe;
- Events that do not require an ICAM Report.

(Short Form investigations may be conducted by only one person)
For other events use "Incident Investigation Report (ICAM).

Download from https://jars.nz/chess.html

INCIDENT INVESTIGATION REPORT (IIS) (SHORT FORM) (PG.2).

DEI C.H.E.S.S.

Incident Investigation Report (Short Form / 5 Why)

1. Incident Information

1.1 Incident Description

(Enter description)

1.2 Incident Type

(tick appropriate box)

	Injury		Near miss		Environmental
	Property damage		Equipment failure		Electrical
	Other		(specify if 'other')		

1.3 Actual Consequence

(tick appropriate box)

	None		Minor		Moderate		HPE

1.4 Potential Consequence

(tick appropriate box)

	Minor		Moderate		HPE

1.5 Workers and others interviewed

Name	Position	Company / Organisation

2. What happened?

(Describe what happened)

3. Immediate Action/s Taken

- XXX
- XXX

Page

INCIDENT INVESTIGATION REPORT (IIS) (SHORT FORM) (PG.3).

New Zealand DEFENCE FORCE	DEI C.H.E.S.S. **Incident Investigation Report (Short Form / 5 Why)**	

4. What caused the Incident?

4.1 Immediate causes

(substandard/unsafe acts, practices or conditions)

- XXX

5. Contributing Factors

Contributing factors highlighted in this investigation report include:

- XXX
- XXX

6. Root Cause/s & Conclusion

6.1 Root Cause/s

Key findings in this investigation highlighted the following:

- **(Root cause 1):** (description)
- **(Root cause 2):** (description)

6.2 Conclusion

'This incident took place as a result of....'

7. Corrective Action Plan

S/No	Action	Hierarchy of Control	Responsible Person	Target Date
1				
2				
3				

Page

INCIDENT INVESTIGATION REPORT (IIS) (SHORT FORM) (PG.4).

DEI C.H.E.S.S.

Incident Investigation Report (Short Form / 5 Why)

8. Evidence / Appendices

(List and attach all evidence gathered as part of the investigation, e.g. photos, memos, JSA's, statements)

Appendix #	Description	Collected by

9. Comments and Sign-off

Name	Signature	Date
(Contractor H&S Manager)		
(Engineer to Contract)		
(DEI RHSS)		

I am satisfied that all reasonable steps have been taken to thoroughly investigate this incident, including identifying any management failures, systems failures, and identify & assign appropriate corrective actions.

Name: (Print) Position: (Contractor Project Manager)

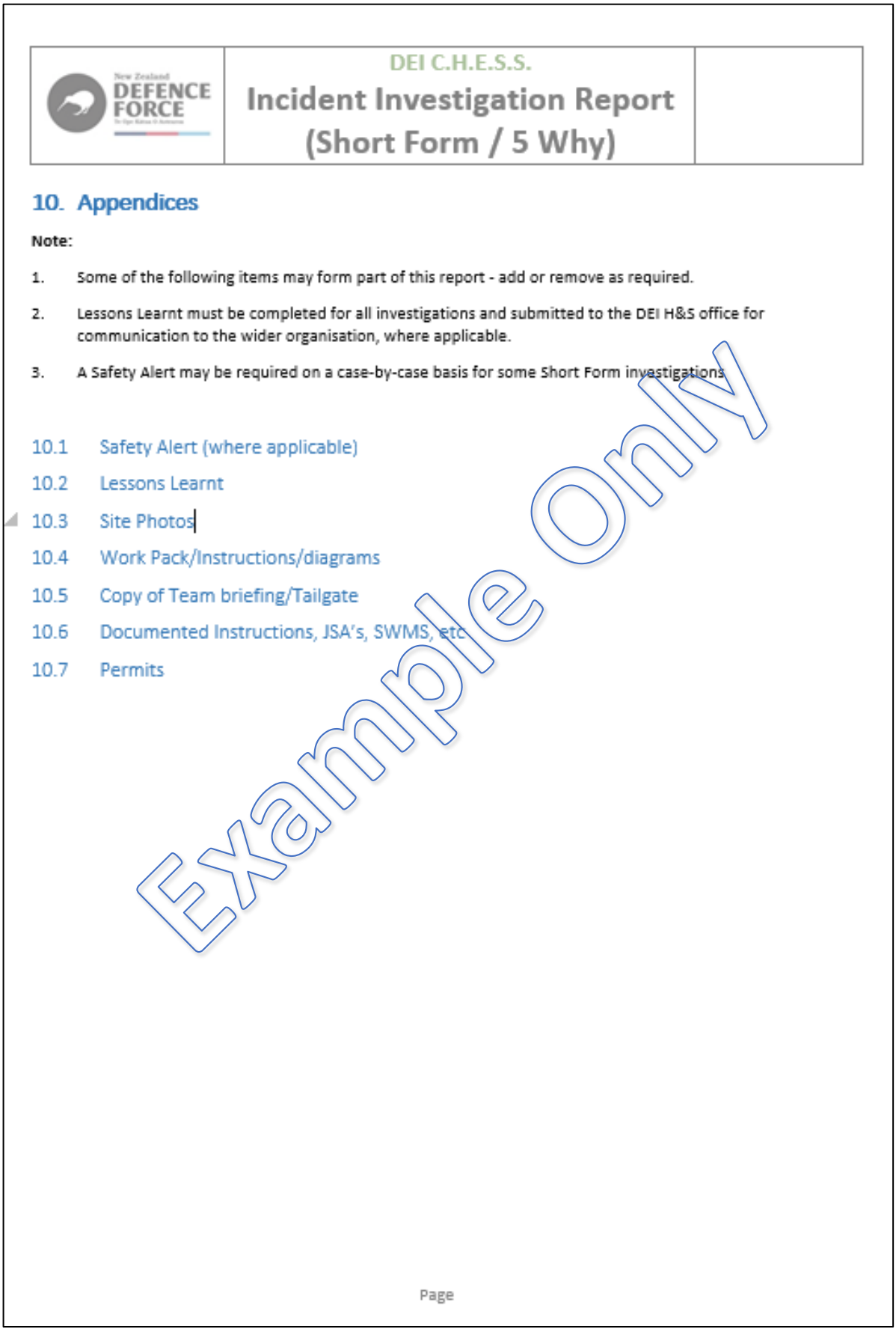
Signature: Date:

The process for Sign-off:

1. *Ensure the workers involved have reviewed the investigation*
2. *Sign off should include the DEI RHSS and/or DEI DD H&S, Contractor Group Safety Manager and Contractor PM*

Page

INCIDENT INVESTIGATION REPORT (IIS) (SHORT FORM) (PG.5).



DEI C.H.E.S.S.

Incident Investigation Report (Short Form / 5 Why)

10. Appendices

Note:

1. Some of the following items may form part of this report - add or remove as required.
2. Lessons Learnt must be completed for all investigations and submitted to the DEI H&S office for communication to the wider organisation, where applicable.
3. A Safety Alert may be required on a case-by-case basis for some Short Form investigations

10.1 Safety Alert (where applicable)

10.2 Lessons Learnt

10.3 Site Photos

10.4 Work Pack/Instructions/diagrams

10.5 Copy of Team briefing/Tailgate

10.6 Documented Instructions, JSA's, SWMS, etc

10.7 Permits

Example Only

Page

5.12 Issue Notification Form (INForm) (INF)

214. The *Issue Notification Form (INF)* is an editable "smart" PDF form. Its purpose is to provide a mechanism for contractors to report the discovery of undocumented hazards, services or culturally significant artefacts on Defence Estate.

215. Download a soft copy of the INF form from https://jars.nz/chess.html.

ISSUE NOTIFICATION FORM (INFORM)

New Zealand DEFENCE FORCE	DEI C.H.E.S.S. **Issue Notification Form (INForm)**	*(Insert Company Logo File)*

Date: 30/03/20	**Document ID#:**			**Version #:**	0
PVID#:		**Contractor/Company Name:**		**Contractor ID:**	
Camp/Base:		**Location:**		**Site:**	

Instructions: *Immediately contact the local DEI Official, then complete this form and email it the Project Manager and DEI Regional Health and Safety Representative.*

Save the Form | Reset Project Details

Type of Issue	☐ **Cultural/Historic Artefacts** ☐ **Contamination** ☐ **Asbestos** ☐ **Unexploded Ordnance** **Undocumented Services:** ☐ **Electrical** ☐ **Water** ☐ **Gas** ☐ **Comms.**
Description *(describe the issue/discovery in detail)*	☐ **Site Map Attached**
Controls	☐ All work has ceased around the discovery. ☐ Barricades **Distance from site:** ☐ 3 m ☐ 10 m ☐ 30 m
Notifications	**The following have been notified of the discovery:** ☐ All other workers on site ☐ Primary Contractor ☐ Project Manager ☐ DEI H & S Representative ☐ Camp/Base Command ☐ Camp/Base Environmental Officer ☐ WorkSafe **Emergency Services:** ☐ Fire ☐ Police ☐ Ambulance
Contact	**Worker/Site Manager:** **Date:** **Email:** **Phone:**

5.13 Job Safety Analysis (JSA) Template

216. The Job Safety Analysis template is an eight page Word document, divided into 4 main sections. They are:

   a. Section (a) provides the basic description of the job being reviewed and any PPE that will be used to assist in mitigating any risk.

   b. Sections (b) and (c) then allows the job to be broken into multiple tasks, with each task listing the hazards, threats, risk controls, and residual risk. It also introduces the concept of the "top event", that is, the event that could cause a loss of control.

   c. Sections (d), (e), and (f) provide accommodation for all involved workers, supervisors and management to sign the analysis, indicating they have consulted in, and understood the task and its hazards and controls.

   d. The final section provides a summary table of the hazard risk matrix in use by NZDF and descriptions of its components.

217. Download a soft copy of the JSA template from https://jars.nz/chess.html.

JOB SAFETY ANALYSIS TEMPLATE (PG.1).

New Zealand DEFENCE FORCE

Job Safety Analysis

Document ID: *(pvid)-(cntrtrlD)-(base code)-JSA-(yymmdd)-V(version)*

(Enter only the hazards and controls that are required for each step. Refer to pages 7 and 8 and 9 for risk assessment and hazards references.)

a) Date:	Date.	**PVID#:**		**JSA number:**		**Version:**	
Camp/Base	Choose an item.	**Location:**		**Site:**		**Contractor ID:**	
Additional Requirements	☐ Permit to Work required?			**DEI Permit #:**			
Task Description: *(Enter a description of the task to be performed and its desired outcome)*						**Review Date:** Date.	

Required PPE: *(Select Mandatory PPE required for the task)*

PPE	Wash Hands ☐	Safety Belts ☐	Life Vests ☐	High Viz ☐	Gloves ☐	Hard Hats ☐	Ear plugs/muffs ☐	Foot protection ☐	Lab coat ☐	Protective clothing ☐	Goggles ☐	Opaque Glasses ☐	Face shield ☐	Welding mask ☐	Face mask ☐	Respirator ☐	Breathing apparatus ☐	Harness ☐	Other PPE ☐ List:
Type																			

b) Sequence of Steps	Potential Hazard	Top Event (Loss of Control)	Threats and Consequences (Describe the threats to and consequences of the top event.)	Risk of Loss of Control	Controls (Describe the control methods to be used to mitigate the risk and identify the level of the control)		Residual Risk (with controls in place)
					Control description	Level	
Step 1. *Description:*				Risk Level		#	Risk Level
						#	
						#	
				Risk Level		#	Risk Level
						#	
						#	
				Risk Level		#	Risk Level
						#	
						#	
				Risk Level		#	Risk Level
						#	
						#	
c) Action Items: *(List any specific action items)*							

Document Name: Job Safety Analysis Form.docx
Location: DDMS - R0000672411
1
Classification: IN CONFIDENCE
Business Activity: Safety Governance and Planning

Download from https://jars.nz/chess.html - NOTE: THIS IS A MACRO ENABLED WORD TEMPLATE

JOB SAFETY ANALYSIS TEMPLATE (PG.2-5).

DEI Job Safety Analysis

(Enter only the hazards and controls that are required for each step. Refer to pages 7 and 8 for risk assessment and hazards references.)

b) Sequence of Steps	Potential Hazard	Top Event (Loss of Control)	Threats and Consequences (Describe the threats to and consequences of the top event.)	Risk of Loss of Control	Controls (Describe the control methods to be used to mitigate the risk and identify the level of the control)		Residual Risk (with controls in place)
					Control description	Level	
Step 2. *Description:*				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
c) Action Items: *(List any specific action items)*							
Step 3. *Description:*				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
				Risk Level		#	Risk Level
c) Action Items: *(List any specific action items)*							

Document Name: Job Safety Analysis Form.docx
Location: DDMS -R0000808534
2
Classification: IN CONFIDENCE
Business Activity: Safety Governance and Planning

JOB SAFETY ANALYSIS TEMPLATE (PG.6).

d) Team Members: *(Enter the name of each team member involved performing the task. Each team member must sign the JSA before the task is commenced)*					
I, the undersigned, confirm this JSA has been completed in consultation with other workers and relevant persons. I have read the above JSA and understand its contents. I confirm that I have the skills, experience, knowledge, training and relevant certifications to perform my role in this task. I agree to comply with the safety requirements within this JSA, including safe work instructions and the use of Personal Protective Equipment.					
Name	**Signature**	**Date**	**Name**	**Signature**	**Date**
		Date.			Date.
		Date.			Date.
		Date.			Date.
		Date.			Date.
		Date.			Date.
		Date.			Date.
		Date.			Date.
		Date.			Date.
		Date.			Date.
		Date.			Date.
		Date.			Date.
		Date.			Date.
		Date.			Date.
		Date.			Date.
		Date.			Date.
		Date.			Date.
		Date.			Date.
		Date.			Date.
		Date.			Date.

e) JSA Originator: *(Name and signature of the person originating the Job Safety Analysis)*			Task Supervisor: *(Name and signature of the person Supervising the task)*		
Name	**Signature**	**Date**	**Name**	**Signature**	**Date**
		Date.			Date.

f) >=Medium Residual Risk Authority:	Site Supervisor	=High Residual Risk Authority:	Site Manager
I, the undersigned, confirm this JSA has been completed in consultation with other workers and relevant persons. I have read the above JSA and understand its contents. I confirm that all reasonable controls have been specified in the JSA and I am aware of the residual risk of these tasks.			
Name	**Signature**	**Date**	**Name**	**Signature**	**Date**
		Date.			Date.

JOB SAFETY ANALYSIS TEMPLATE (PG.7).

DEI Construction Hazard Risk Matrix

(e.g. Risk rating VERY HIGH (3,5), where '3,5' indicates impact level 3 (Major) and likelihood level 5 (Almost Certain)).

		IMPACT →			
	Environment	Temporary damage contained within Defence Estate; short-term, local detrimental effect.	Localised damage with some impact on external environment; serious detrimental effect that requires remedial action.	Extensive or serious damage to the environment; long term detrimental effect requires immediate remedial action.	Extensive, irreversible damage to the environment; extensive long term detrimental impact.
	People/ Health & Safety	First aid injury. Minimal lost time. Temporary partial disability. No long term effects.	Medical attention required. Short term lost time. Permanent partial disability. Medium to long term effects.	Fatality. Serious injury/illness/mental harm. Long term lost time. Permanent total disability. Long term effects.	Multiple fatalities. Multiple instances of serious physical or mental incapacity or ill health. Multiple cases of long term lost time. Multiple permanent total disability. Long term effects.
		Minor	**Moderate**	**Major**	**Extreme**	
Likelihood ↑ Could be expected to occur in most circumstances.	**Almost Certain**	**MEDIUM** (1,5)	**HIGH** (2,5)	**VERY HIGH** (3,5)	**VERY HIGH** (4,5)	5
Could probably occur in most circumstances.	**Likely**	**LOW** (1,4)	**HIGH** (2,4)	**VERY HIGH** (3,4)	**VERY HIGH** (4,4)	4
Could occur at some time.	**Possible**	**LOW** (1,3)	**MEDIUM** (2,3)	**HIGH** (3,3)	**VERY HIGH** (4,3)	3
Could occur at some time, but is improbable.	**Unlikely**	**LOW** (1,2)	**MEDIUM** (2,2)	**MEDIUM** (3,2)	**HIGH** (4,2)	2
Could occur in exceptional circumstances.	**Rare**	**LOW** (1,1)	**LOW** (2,1)	**MEDIUM** (3,1)	**HIGH** (4,1)	1
		1	2	3	4	

RISK LEVEL DESCRIPTIONS

VERY HIGH	HIGH	MEDIUM	LOW
Intolerable. Further treatment required as matter of priority. Action required: Develop treatment strategies or introduce appropriate controls, with the objective of reducing the risk to a lower level. Activities with a residual risk level of *VERY HIGH* must not proceed. Review at least monthly or if a significant change occurs.	**Generally Intolerable.** Further treatment required to be identified as matter of priority. Action required: Develop treatment strategies or introduce appropriate controls, with the objective of reducing the risk to a lower level. Activities with a residual risk level of High requires consultation and collaboration with relevant parties on the camp or base through a forum such as SIMOPS and approval of the designated Site Manager.	**Generally Tolerable.** Further treatment may be required where practicable. Action required: Develop treatment strategies or introduce appropriate controls, with the objective of reducing the risk to a lower level. Activities with a residual risk level of Medium or higher requires approval from the Site Health and Safety Adviser before work can commence on the task.	**Tolerable.** Unlikely to require further treatment. Action Required: The risk may be able to be managed by routine procedures. Minimal resource allocation or management effort required. In most cases these risks need no special precautions or actions, other than periodic monitoring of controls to ensure that the level of the risk has not changed.

JOB SAFETY ANALYSIS TEMPLATE (PG.8).

Table 9a- Hazard Category Reference Table 1/2

Potential Top Event Examples						
Exposure to (resulting in Inhalation / Ingestion / Skin Contact)	**Over stresses / Over-exertion / Poor Technique**	**Contact With / Loss of containment / Exposure to**	**Loss of Containment / Loss of control**	**Contact With**	**Loss of grip / Structural Failure / Loss of Balance**	**Contact With / Loss of Integrity / Structural Failure**
Biological	**Biomechanical**	**Chemical**	**Ecological**	**Electrical**	**Gravity**	**Mechanical**
Airborne fibres/ particulates e.g. Asbestos Bacteria Blood Bourne Pathogens Contaminated Soil Contaminated Water Fungi/ mould Hygiene concerns Insect/ Animal bites or stings Vapours/ Dust/ Fumes/ Exhausts Viruses Water immersion	Body position, uncomfortable position Eye strain Muscular overexertion/ manual handling Repetitive operations Working Posture	Chemical transfer activities Contamination dust, chemicals, sediment, effluent non segregated waste Corrosives Depleted oxygen Explosives Flammable vapours/ materials Gasses (Oxygen, Carbon Monoxide/ Dioxide/ Hydrogen Sulphide/ Ammonia) Piping/ tanks containing chemicals Potential for trapped gases (Pockets of gas) Pyrophoric materials (ignites in Oxygen) Toxic gases/ carcinogens Unapproved chemical	Equipment dropped to water Soil contamination Spill/ Chemical to water Windblown litter	Compressors and transformer Exposed energized systems Lighting and batteries Overhead power lines Portable electrical equipment Static Electricity Underground/ buried electrical cables Unguarded or exposed electrical equipment	Anchor point/ lifting equipment (chains/ slings/ harness) Cave–In Converging/ sloping/ slippery surfaces Fall from height /climbing Inadequate/ constrained entry & exit Moving/ dropped/ falling objects Roof/ walkway/ platform/ handrails Scaffolding /Elevated Work Platform/ Roof Collapse Shifting Loads/ Materials Structural collapse (incl adjacent) Suspended in harness Uneven ground/ same level fall	Equipment Failure (Brakes, lights, pumps, valves and tools) Equipment under tension e.g., springs Exposed drive belts/ conveyors Exposed Rotating Machinery/ Rollers/Screw conveyors

Table 10b- Hazard Category Reference Table 2/2

Potential Top Event Examples						
Contact With / Caught by / Exposure to	**Exposure To**	**Loss of containment / Loss of Pressure / Release of Stored Energy**	**Exposure to / Loss of Concentration**	**Exposure To / Contact With**	**Exposure To / Contact with**	**Exposure To**
Motion	**Noise**	**Pressure**	**Psychosocial**	**Radiation**	**Temperature**	**Vibration**
Aircraft transportation Anchoring / deck lines / ropes Congested Work Area Ejected debris/tool parts Equipment/ Crane Overloading Excavation Equipment Foreign body in eye Line of fire & Pinch points -Hands/ fingers/ feet/ legs Line of fire -Body position -Shifting and swinging loads Marine vessel transportation Moving Vehicles/ Plant Road conditions Vehicle/Plant turnover Water ingress	Equipment noise e.g. grinding, chipping, engines High-pressure release Impact noise Sirens and alarms	Cylinders/ Tanks/ Vessels Exposed piping Hoses Pneumatic/ Hydraulic Underground piping	Aggression, violence Bullying, harassment Heavy workload Human factors (Fatigue, lapses in focus) Lone worker Low resource/ inadequate skills Monotonous tasks Poor communications Stress Unpleasant tasks	Ionising - X-Ray (Sources) Ionising- Lasers Ionising- Radon Non-ionising - Radio frequency and microwaves Non-ionising- Crack detection equipment Non-ionising- Lasers Non-ionising- Power Lines Non-ionising- Radiant heat Non-ionising- UV e.g. Sun, lighting, water treatment Non-ionising -Welding arc	Cooking and heating appliances Exposure to extreme weather conditions (wind, rain, fog) Flammable/ Combustible material (incl vegetation) Friction (Ignition Source) Hot/ Cold Surfaces Ignition Sources (Process/ Tools/ Vehicles) Steam Thermal discomfort	Whole body vibration Hand/arm vibration

5.14 Non-Conformance Notification

218. The Inspection Checklists and Evaluations (ICE) template will automatically create a Non-Conformance Notification to be sent to a Contractor where items on an inspection checklist have not met with the specifications defined in CHESS.

219. The Non-Conformance Notification (NCN) is a summary list of non-conformance items and will be part of a spreadsheet containing the relevant checklist(s) and the Non-Conformance Report (NCR).

220. The NCR is sent to the Contractor as an Excel file with the relevant checklist and the NCR.

DEI INSPECTION NON-CONFORMANCE NOTIFICATION SUMMARY

Defence Estate and Infrastructure

UNCLASSIFIED

DEI Inspection Non-Conformance Notification Summary

New Zealand DEFENCE FORCE

PVID#:		Inspection Date:		Doc. ID#:			Score:	47/49	96%
Return to Index	Contractor ID:		Camp/Base:		Location:		Site:		
Print Files	Site Manager:			Email:			Phone:		
Email Files	Inspector Name:			Email:			Phone:		

A worksite site inspection at Camp/Base-, Location-, Site- on the , has identified one or more areas where safety on site does not comply with applicable government, legislative, or contractual requirements.

The items listed below detail the specific categories and areas when deficiencies were found.

Please complete a Non-Conformance Report (attached) detailing the actions you intend to take to mitigate these deficiencies, and return the report to DEI by the review date, with evidence of the remediation actions. Major issues are highlighted according to the level of Risk.

Inspection Checklist	Item #	Description	Inspector Comments	Risk Level	Review Date
4.1 Training & Competency (TAC)	5	Persons who enter the Site (other than visitors) have completed orientation (on the day of first arrival at the site)?	Visitors register not being kept		10/10/2020
15.11 Power Tools (PTE)	12	Are appropriate guards in place on all power equipment?	guards missing from #3 drop saw	High	10/10/2020
++++++++++++++++	++++++	++	++	++++++	+++++++++
		Inspected By:	Date:		

5.15 Non-Conformance Report

221. The Inspection Checklists and Evaluations (ICE) template will automatically create a Non-Conformance Report to be sent to a Contractor where items on an inspection checklist have not met with the specification defined in CHESS.

222. A two page Non-Conformance Report (NCR) is a produced for every non-conformance item and must be completed and returned to the DEI RHSS when the item is returned to the required specification.

223. The NCR is sent to the Contractor as an Excel file with the relevant checklist and the NCN.

DEI Inspection Non-Conformance Notification Summary

Defence Estate and Infrastructure

UNCLASSIFIED

DEI Non-Conformance Report (NCR)

PVID#:		Inspection Date:		Doc. ID#:				Risk:	High
		Contractor ID:		Camp/Base:		Location:		Site:	
		Site Manager:			Email:			Phone:	
		Inspector Name:			Email:			Phone:	

Please complete Sections 2, 3, and 4 of this Non-Conformance Report and return to the DEI Regional Health & Safety Specialist prior to 10/10/2020 with documentary evidence of the changes made. Note: Major issues are highlighted according to the level of Risk.

Non-Conformance Item #: 2 | **Checklist: 15.11 Power Tools (PTE)** | **Item #: 12** | **Risk Level: High**

Section 1: DEI/Inspector

Description:	Are appropriate guards in place on all power equipment?
Inspection Comments:	guards missing from #3 drop saw
Documentary/ Photographic Evidence:	
Additional Comments/ Recommendations:	
Non-Conformance Estimated Project Delay Time:	

Originator:	DEI Regional Health & Safety Specialist	Date:
Signature:		

Section 2: Contractor/Site Manager

Cause of non-Conformance:	
Root Cause(s):	
Proposed Corrective action:	
Proposed Preventative Action:	
Project Delay Time:	Date to be completed?:

Section 3: Contractor Acceptance: (Contractor)

Accepted by:	Contractor Representative	Date:
Signature:		

Section 5: DEI Acceptance *(complete on return of the NCR)*

Corrective Actions Accepted?: | Review Date: 10/10/2020

If "No", provide Reasons:	

Accepted by:	DEI Regional Health & Safety Specialist	Date:
Signature:		

Section 4: NCR Closure Evidence (Contractor/Site Manager)

Documentary/ Photographic Evidence:		

Page 2 of 30

5.16 Permit to Work (PTW)

224. The permit to Work for is an editable "smart" PDF file. It is designed to simplify, as far, as possible, the application and issuing of Permits across Defence Estate, according to the Permit to Work procedure.

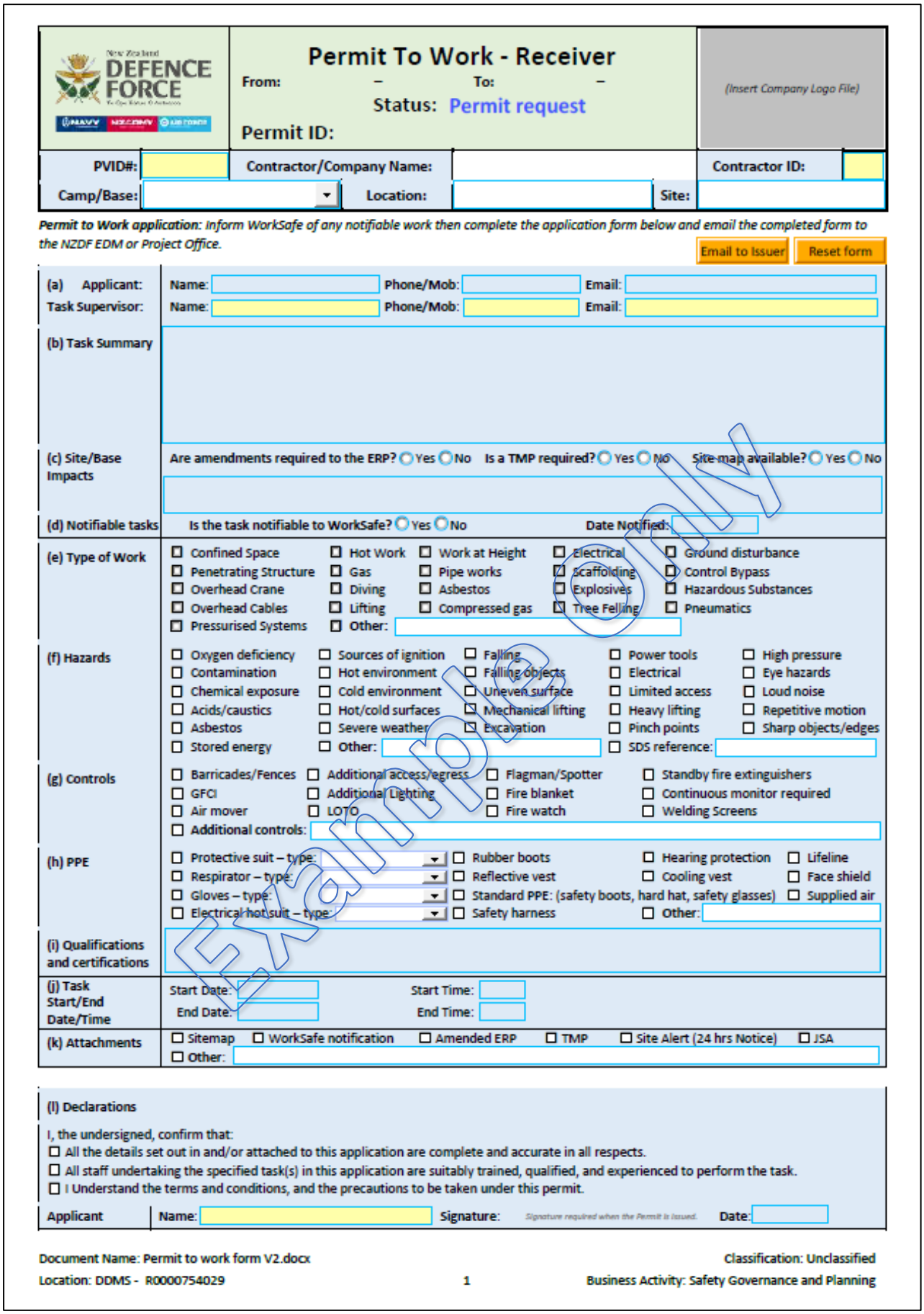
225. Sections and fields of the form will be highlights and set as required fields depending on entries elsewhere on the form. Buttons are provided to assist in emailing the form to the Issuer and Receiver at various stages of the process.

226. In order to encourage discussion and consultation between the issuer and receiver, the completed for must be printed when the permit is issued, to allow both the Issuer and Receiver to sign it. It is then displayed in a prominent position on site, while the Permit is active.

227. This form is referenced in most sections of CHESS Policy and Specifications Volume One, and is described in section 4.3.

228. Download a soft copy of the PTW template from https://jars.nz/chess.html.

PERMIT TO WORK FORM (PG.1).



DEFENCE FORCE

Permit To Work - Receiver

From: – To: –

Status: Permit request

Permit ID:

(Insert Company Logo File)

PVID#:		Contractor/Company Name:		Contractor ID:	
Camp/Base:		Location:		Site:	

Permit to Work application: Inform WorkSafe of any notifiable work then complete the application form below and email the completed form to the NZDF EDM or Project Office.

Email to Issuer | Reset form

(a) Applicant:	Name: Phone/Mob: Email:
Task Supervisor:	Name: Phone/Mob: Email:
(b) Task Summary	
(c) Site/Base Impacts	Are amendments required to the ERP? ○ Yes ○ No Is a TMP required? ○ Yes ○ No Site map available? ○ Yes ○ No
(d) Notifiable tasks	Is the task notifiable to WorkSafe? ○ Yes ○ No Date Notified:
(e) Type of Work	☐ Confined Space ☐ Hot Work ☐ Work at Height ☐ Electrical ☐ Ground disturbance ☐ Penetrating Structure ☐ Gas ☐ Pipe works ☐ Scaffolding ☐ Control Bypass ☐ Overhead Crane ☐ Diving ☐ Asbestos ☐ Explosives ☐ Hazardous Substances ☐ Overhead Cables ☐ Lifting ☐ Compressed gas ☐ Tree Felling ☐ Pneumatics ☐ Pressurised Systems ☐ Other:
(f) Hazards	☐ Oxygen deficiency ☐ Sources of ignition ☐ Falling ☐ Power tools ☐ High pressure ☐ Contamination ☐ Hot environment ☐ Falling objects ☐ Electrical ☐ Eye hazards ☐ Chemical exposure ☐ Cold environment ☐ Uneven surface ☐ Limited access ☐ Loud noise ☐ Acids/caustics ☐ Hot/cold surfaces ☐ Mechanical lifting ☐ Heavy lifting ☐ Repetitive motion ☐ Asbestos ☐ Severe weather ☐ Excavation ☐ Pinch points ☐ Sharp objects/edges ☐ Stored energy ☐ Other: ☐ SDS reference:
(g) Controls	☐ Barricades/Fences ☐ Additional access/egress ☐ Flagman/Spotter ☐ Standby fire extinguishers ☐ GFCI ☐ Additional Lighting ☐ Fire blanket ☐ Continuous monitor required ☐ Air mover ☐ LOTO ☐ Fire watch ☐ Welding Screens ☐ Additional controls:
(h) PPE	☐ Protective suit – type: ☐ Rubber boots ☐ Hearing protection ☐ Lifeline ☐ Respirator – type: ☐ Reflective vest ☐ Cooling vest ☐ Face shield ☐ Gloves – type: ☐ Standard PPE: (safety boots, hard hat, safety glasses) ☐ Supplied air ☐ Electrical hot suit – type: ☐ Safety harness ☐ Other:
(i) Qualifications and certifications	
(j) Task Start/End Date/Time	Start Date: Start Time: End Date: End Time:
(k) Attachments	☐ Sitemap ☐ WorkSafe notification ☐ Amended ERP ☐ TMP ☐ Site Alert (24 hrs Notice) ☐ JSA ☐ Other:

(l) Declarations

I, the undersigned, confirm that:

☐ All the details set out in and/or attached to this application are complete and accurate in all respects.

☐ All staff undertaking the specified task(s) in this application are suitably trained, qualified, and experienced to perform the task.

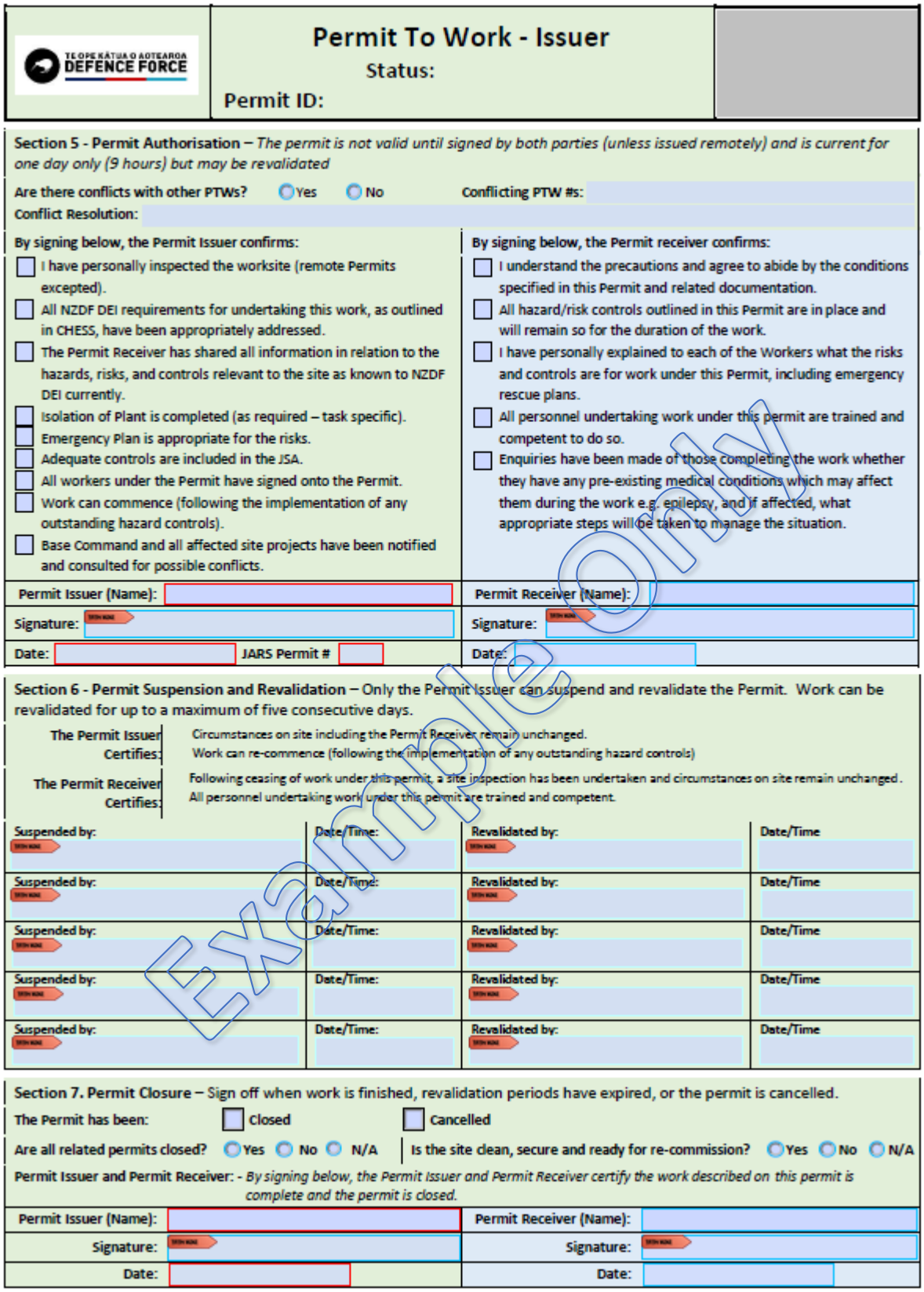
☐ I Understand the terms and conditions, and the precautions to be taken under this permit.

Applicant | Name: | Signature: *Signature required when the Permit is issued.* | Date:

Document Name: Permit to work form V2.docx | Classification: Unclassified

Location: DDMS - R0000754029 | 1 | Business Activity: Safety Governance and Planning

PERMIT TO WORK FORM (PG.2).



TE OPE KĀTUA O AOTEAROA DEFENCE FORCE

Permit To Work - Issuer

Status:

Permit ID:

Section 5 - Permit Authorisation – *The permit is not valid until signed by both parties (unless issued remotely) and is current for one day only (9 hours) but may be revalidated*

Are there conflicts with other PTWs? ○ Yes ○ No **Conflicting PTW #s:**

Conflict Resolution:

By signing below, the Permit Issuer confirms:

- ☐ I have personally inspected the worksite (remote Permits excepted).
- ☐ All NZDF DEI requirements for undertaking this work, as outlined in CHESS, have been appropriately addressed.
- ☐ The Permit Receiver has shared all information in relation to the hazards, risks, and controls relevant to the site as known to NZDF DEI currently.
- ☐ Isolation of Plant is completed (as required – task specific).
- ☐ Emergency Plan is appropriate for the risks.
- ☐ Adequate controls are included in the JSA.
- ☐ All workers under the Permit have signed onto the Permit.
- ☐ Work can commence (following the implementation of any outstanding hazard controls).
- ☐ Base Command and all affected site projects have been notified and consulted for possible conflicts.

By signing below, the Permit receiver confirms:

- ☐ I understand the precautions and agree to abide by the conditions specified in this Permit and related documentation.
- ☐ All hazard/risk controls outlined in this Permit are in place and will remain so for the duration of the work.
- ☐ I have personally explained to each of the Workers what the risks and controls are for work under this Permit, including emergency rescue plans.
- ☐ All personnel undertaking work under this permit are trained and competent to do so.
- ☐ Enquiries have been made of those completing the work whether they have any pre-existing medical conditions which may affect them during the work e.g. epilepsy, and if affected, what appropriate steps will be taken to manage the situation.

Permit Issuer (Name):	**Permit Receiver (Name):**
Signature:	**Signature:**
Date: **JARS Permit #**	**Date:**

Section 6 - Permit Suspension and Revalidation – Only the Permit Issuer can suspend and revalidate the Permit. Work can be revalidated for up to a maximum of five consecutive days.

The Permit Issuer Certifies:	Circumstances on site including the Permit Receiver remain unchanged. Work can re-commence (following the implementation of any outstanding hazard controls)
The Permit Receiver Certifies:	Following ceasing of work under this permit, a site inspection has been undertaken and circumstances on site remain unchanged. All personnel undertaking work under this permit are trained and competent.

Suspended by:	**Date/Time:**	**Revalidated by:**	**Date/Time**
Suspended by:	**Date/Time:**	**Revalidated by:**	**Date/Time**
Suspended by:	**Date/Time:**	**Revalidated by:**	**Date/Time**
Suspended by:	**Date/Time:**	**Revalidated by:**	**Date/Time**
Suspended by:	**Date/Time:**	**Revalidated by:**	**Date/Time**

Section 7. Permit Closure – Sign off when work is finished, revalidation periods have expired, or the permit is cancelled.

The Permit has been: ☐ Closed ☐ Cancelled

Are all related permits closed? ○ Yes ○ No ○ N/A | **Is the site clean, secure and ready for re-commission?** ○ Yes ○ No ○ N/A

Permit Issuer and Permit Receiver: - *By signing below, the Permit Issuer and Permit Receiver certify the work described on this permit is complete and the permit is closed.*

Permit Issuer (Name):	**Permit Receiver (Name):**
Signature:	**Signature:**
Date:	**Date:**

5.17 Specification Amendment Request

229. A Specification Amendment Request is an editable PDF form that must be completed when there is a requirement to deviate from the specifications defined in CHESS.

230. The specification amendment request is to be sent to DEI prior to the deviation occurring and may either be a temporary or permanent deviation. The deviation to specifications cannot occur until it is approved by DEI.

231. The Regional Health and Safety Representative or DEI official can provide a soft copy of this form.

232. Download a soft copy of the SPA form from https://jars.nz/chess.html.

233. This form is referenced in many sections of *CHESS Policy and Specifications Volume One*, and is described in section 4.10.

SPECIFICATION AMENDMENT REQUEST FORM

New Zealand DEFENCE FORCE

DEI C.H.E.S.S.

Specification Amendment Request

(Insert Company Logo File)

Date: 01/02/21		Document ID#:		Version #:	1
PVID#:		Contractor/Company Name:		Contractor ID:	
Camp/Base:		Location:		Site:	

Instructions: Complete the request form below, then print, sign, and deliver it to the DEI RHSS. Email form Reset form

Note: The granting of this amendment request is strictly limited to this specific project and period, and is not to be regarded as a precedent.

Status		Valid From Date:		Time		Valid To Date:		Time	

(a) Application Details:

Revision? ○ Yes ○ No Previous Doc. ID: - - - - -

Site map available? ○ Yes ○ No

(b) Specification Details:

CHESS Document: Section: Paragraph: Specification description: ***(below)***

(c) Requested Amendment and Justification:

(d) Amendment Period:

Start Date: Start Time:

End Date: End Time:

(e) Risk Profile:

Probability of an Incident Occurring		Possible Impact of an incident?		Calculated Risk: *(Impact * Probability)*
☐ Almost Certain	(1:10)	☐ Extreme	(Permanent/ loss of personnel)	*(see DEI Construction Hazard Risk Matrix)*
☐ Likely	(1:10+)	☐ Major	(Hospitalisation/long term injury)	
☐ Possible	(1:100+)	☐ Moderate	(medical attention offsite/short term lost time)	
☐ Unlikely	(1:1,000+)			
☐ Rare	(1:10,000+)	☐ Minor	(First Aid injury/no long term effect)	

(f) Additional Mitigation Controls:

(g) Remaining Risk

Resulting Probability of an Incident		Possible Impact of an Incident?		Calculated Risk: *(Impact * Probability)*
☐ Almost Certain	(1:10)	☐ Extreme	(Permanent/ loss of personnel)	*(see DEI Construction Hazard Risk Matrix)*
☐ Likely	(1:10+)	☐ Major	(Hospitalisation/long term injury)	
☐ Possible	(1:100+)	☐ Moderate	(medical attention offsite/short term lost time)	
☐ Unlikely	(1:1,000+)			
☐ Rare	(1:10,000+)	☐ Minor	(First Aid injury/no long term effect)	

Contractor:

(h) Requestor Details: Name: Phone/Mob: Email: Signature:

(i) Authorizer Details: Name: Phone/Mob: Email: Signature:

DEI:

(j) Approver Details: Name: Phone/Mob: Email: Signature: ☐ Approved ☐ Rejected Reason:

Document Name: Specification Amendment Request form base document.docx
Location: DDMS - R0000754029

1

Classification: Unclassified
Template Version: 20210201

5.18 Site Visitor/Induction Register (SVI)

234. The Site Visitor/Induction Register is an editable "smart" PDF form. Its purpose is to provide a standard layout and "look and feel" for logging all visitors to sites across Defence Estate construction sites. Information in the register includes a declaration that visitors are provided with appropriate Health and Safety information prior to entering the site.

235. Download a soft copy of the SVI template from https://jars.nz/chess.html.

SITE VISITOR/INDUCTION REGISTER (SVI)

Defence Estate and Infrastructure	**Site Visitor/Induction Register** UNCLASSIFIED	

Date: 21/03/20	**Document ID#:**			**Version #:**	1
PVID#:		**Contractor/Company Name:**		**Contractor ID:**	
Camp/Base:		**Location:**		**Site:**	

Reset Project Details

IN SIGNING THIS REGISTER AND ENTERING THIS SITE YOU ACKNOWLEDGE:

- Permission has been granted by an authorised ***representative***;
- You have been advised of and understand the ***site specific hazards*** that exist on this site, the ***location*** of the hazards and the methods of control;
- You have been advised of the site ***emergency evacuation procedures***;
- You will not enter the site without the appropriate ***Personal Protective Equipment (PPE)***.

Date	Name	Organisation	Authorised By	Time in	Time out	Signature

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5.19 Training and Competency Register (TCR)

236. The *Training and Competency Register (TCR)* is an editable "smart" PDF form. Its purpose is to provide current training and competency information relating to all employees across Defence Estate construction sites.

237. Download a soft copy of the TCR template from https://jars.nz/chess.html.

TRAINING AND COMPETENCY REGISTER (TCR)

Defence Estate and Infrastructure	**Training and Competency Register** UNCLASSIFIED	New Zealand DEFENCE FORCE

Date:		**Document ID#:**		**Version #:**	0
PVID#:		**Contractor/Company Name:**		**Contractor ID:**	
Camp/Base:		**Location:**		**Site:**	

Save the Form | Reset Project Details

Employee:

Topic/Course/Competency / Endorsement	Training level	Date Competency Received (Date and sign where applicable)			
Site Safe Passport	Rec'd Training	Date:		Location:	
NZDF Induction	Rec'd Training	Date:		Location:	
Camp/Base Induction	Rec'd Training	Date:		Camp/Base:	
Site Induction	Rec'd Training	Date:		Signed:	
EXAMPLE: "Ladders" - Site Safe (Describe type of training this covers: "eg: step ladders, tie-on, safety check etc")	Rec'd Traini	Date: Location	20/02/20	Company: Signed:	
		Date: Location		Company: Signed:	
		Date: Location		Company: Signed:	
		Date: Location		Company: Signed:	
		Date: Location		Company: Signed:	
		Date: Location		Company: Signed:	
		Date: Location		Company: Signed:	
		Date: Location		Company: Signed:	
		Date: Location		Company: Signed:	
		Date: Location		Company: Signed:	
		Date: Location		Company: Signed:	
Training levels:	Received Training | Under Supervision | Competent | Trainer/Assessor | Licenced				

Complete the relevant training, competency and licencing details and dates for each employee on site. Signatures are only required for on-site training.
Other competencies and licencing examples may include scaffolding, the Site Safe 'Height and Harness Safety' training, class 4 licence, etc.
File this form with relevant certificates and "proof of completion" documents.

Page 1

5.20 Vehicle, Plant and Equipment Register (VPE)

238. *The Vehicle, Plant and Equipment Register (VPE)* is a macro enabled Excel spreadsheet. Its purpose is to provide Contractors with a standard register listing all vehicles, plant and equipment on site, with details relating to maintenance and certificate currency.

239. Download a soft copy of the VPE template from https://jars.nz/chess.html.

VEHICLE, PLANT AND EQUIPMENT REGISTER (VPE)

Vehicle, Plant and Equipment Register

UNCLASSIFIED

Date:	21/05/2020	Document ID:		Version #:	1
PVID:		Contractor/Company:		Contractor ID:	
Camp/Base:		Location:		Site:	

Construction Vehicles, Plant and Equipment		Operator Requirements Y/N			Visual Inspections	Test/Tag Requirements			Service Requirements			End Of Use
Vehicle/Plant/Equipment	Purchase Date	Induction	Training	CoC	Frequency	Frequency	Last Test	Next Test	Frequency	Last Service	Next Service	Disposal

5.21 Inspection Checklists and Evaluations Template

240. DEI Construction Project Managers and Regional Health and Safety Specialists (RHSS) will carry out inspections on a regular basis across all construction sites on Defence Estate.

241. The following pages provide examples of the checklists and associated items the RHSS will use from time to time. Where possible, these checklists are aligned with the Construction Health, Environment and Safety Specifications (CHESS) and provide the minimum expectations DEI has of contractor construction sites on Defence Estate.

242. Download a soft copy of the Excel based template containing the latest version of all the checklists available from https://jars.nz/chess.html for your examination and use.

INSPECTION CHECKLISTS

243. Regional Health and Safety Specialists (RHSS) can also provide an Excel based template containing the latest version of all the checklists available, for your examination and use.

244. The Inspections, Checklists and Evaluations (ICE) Macro enabled Excel template contains over 50 individual checklists that are used by DEI Construction Project Managers and Regional Health and Safety Specialists to insect work sites across Defence Estate. Following is a list of all the checklists contained in the ICE template.

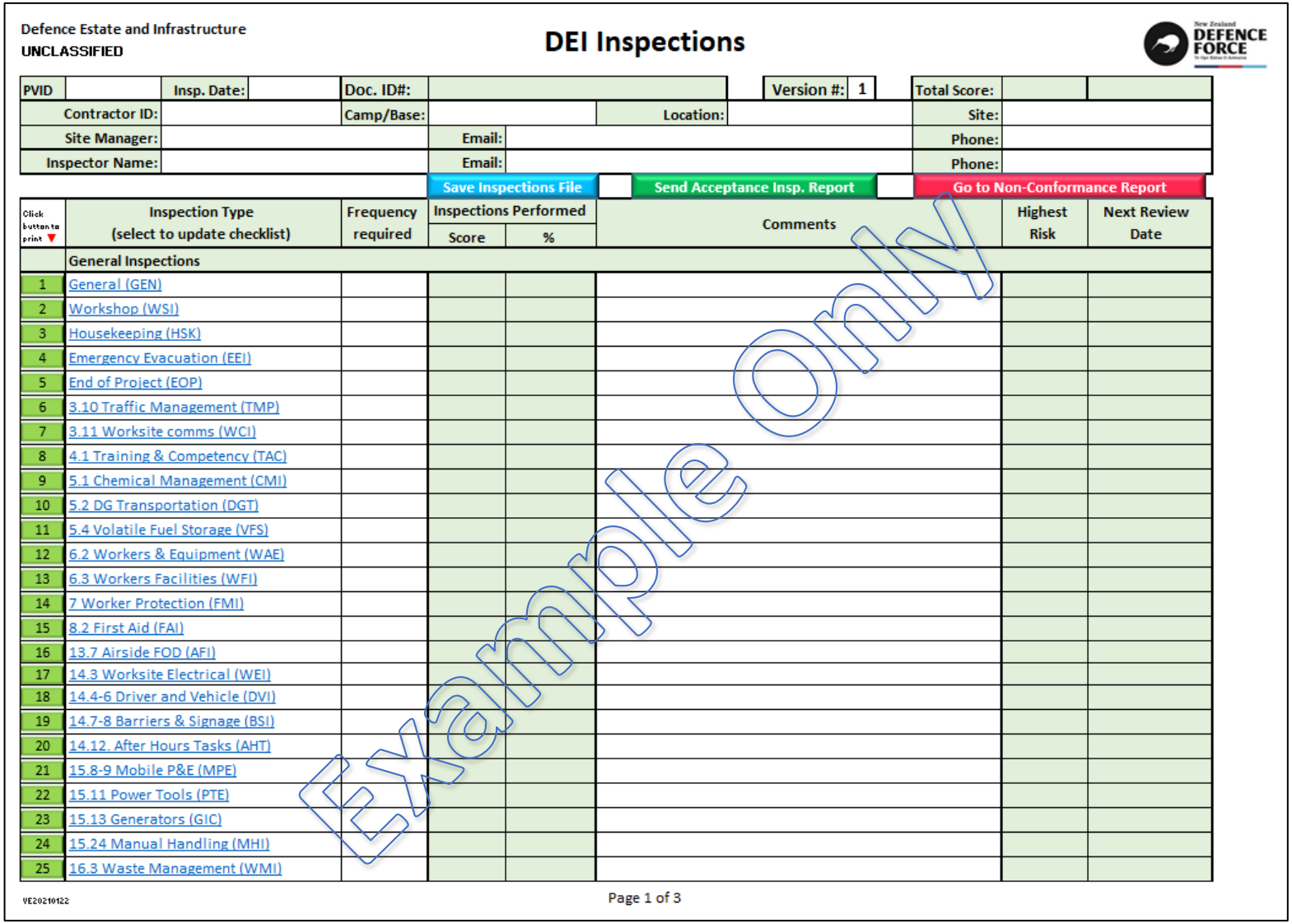
ICE	Inspection Checklists and Evaluations	Macro enabled Excel spreadsheet
ICE	14.2 Inspection Checklists and Evaluations	Checklist
AFI	15.7 Airside FOD Inspection Checklist	Checklist
AHT	16.2 After Hours Task Inspection Checklist	Checklist
AMI	15.6 Asbestos Management Inspection Checklist	Checklist
BPE	17.18 Boiler and Pressure Equipment Inspection Checklist	Checklist
BSI	16.7- Barriers and Signage Inspection Checklist	Checklist
CLE	17.14 Cranes and Lifting Equipment Inspection Checklist	Checklist
CMI	9.1 Chemical Management Inspection Checklist	Checklist
CSI	17.29 Confined Spaces Inspection Checklist	Checklist
CWI	17.5 Concrete Works Inspection Checklist	Checklist
DAI	17.30 Diving Activity Inspection Checklist	Checklist
DGT	5.3 Dangerous Goods (DG) Transportation Inspection Checklist	Checklist
DVI	16-4 Driver and Vehicle Inspection Checklist	Checklist
DUS	18.2 Dust Management Inspection Checklist – to create	Checklist
ECI	9.2 Explosives Controls Inspection Checklist	Checklist
EEI	Emergency Response Inspection Checklist	Checklist
EOP	End Of Project Inspection Checklist	Checklist
ERO	18.1 Erosion and Sediment Control Plan Checklist – to create	Checklist
FAI	12.2 First Aid Inspection Checklist	Checklist
FLI	17.16 Forklift Inspection Checklist	Checklist
FMI	7 Worker Protection Inspection Checklist	Checklist
FM	3 Facilities Maintenance	Checklist

GDW	17.1 Ground Disturbance Works Inspection Checklist	Checklist
GEN	General Site Inspection Checklist	Checklist
GIC	17.13 Generators Inspection Checklist	Checklist
HCS	15.2 Historic and Cultural Site Inspection Checklist	Checklist
HPP	17.15 High Pressure Transmission Pipelines Inspection Checklist	Checklist
HPS	17.10 High Pressure Systems Inspection Checklist	Checklist
HSI	15.3 HAIL Site Inspection Checklist	Checklist
HSK	Housekeeping Inspection Checklist	Checklist
HWI	17.34 Hot Work Inspection Checklist	Checklist
ISO	16.2 Isolation Inspection Checklist	Checklist
LAS	17.20 Laser Inspection Checklist	Checklist
LBP	15.5 Lead Paint Works Inspection Checklist	Checklist
MHI	17.24 Manual Handling Inspection Checklist	Checklist
MPE	17.8 Mobile Plant and Equipment Inspection Checklist	Checklist
PAT	17.12 Powder Actuated Tools Inspection Checklist	Checklist
PER	4.3 Permits Inspection Checklist	Checklist
PTE	17.11 Power Tools & Equipment Inspection Checklist	Checklist
REI	11.6 Respiratory Equipment Inspection Checklist	Checklist
RIC	17.25 Radiation Inspection Checklist	Checklist
ROV	17.31 Remotely Operated Vehicle Inspection Checklist	Checklist
SCA	17.7 Scaffolding Inspection Checklist	Checklist
TAC	4.9 Training and Competency Inspection Checklist	Checklist
TMP	4.5 Traffic Management Inspection Checklist	Checklist
UXO	13.4 Unexploded Ordnance Inspection Checklist	Checklist
VLM	17.37 Vehicle Load Management Checklist – to create	Checklist
VFS	9.4 Volatile Fuel Storage Inspection Checklist	Checklist
WAE	10.2Workers and Equipment Inspection Checklist	Checklist
WAH	17.21 Working at Heights Inspection Checklist	Checklist
WCI	4.6 Worksite Communications Inspection Checklist	Checklist
WEI	17.3 Worksite Electrical Inspection Checklist	Checklist
WEL	17.19 Welding Inspection Checklist	Checklist
WFI	10.3 Worker Facilities Inspection Checklist	Checklist
WMI	18.3 Waste Management Inspection Checklist	Checklist
WSI	Workshop Inspection Checklist	Checklist

Each checklist title is preceded by the chapter/section number of the ***CHESS Policy and Specifications*** document

Examples of two of these templates can be found on the following pages. Download the complete set of ICE checklists from https://jars.nz/chess.html

GENERAL INSPECTION CHECKLISTS



Defence Estate and Infrastructure
UNCLASSIFIED

DEI Inspections

PVID		Insp. Date:		Doc. ID#:		Version #:	1	Total Score:	
Contractor ID:		Camp/Base:		Location:		Site:			
Site Manager:		Email:				Phone:			
Inspector Name:		Email:				Phone:			

Save Inspections File | Send Acceptance Insp. Report | Go to Non-Conformance Report

Click button to print	Inspection Type (select to update checklist)	Frequency required	Inspections Performed		Comments	Highest Risk	Next Review Date
			Score	%			
	General Inspections						
1	General (GEN)						
2	Workshop (WSI)						
3	Housekeeping (HSK)						
4	Emergency Evacuation (EEI)						
5	End of Project (EOP)						
6	3.10 Traffic Management (TMP)						
7	3.11 Worksite comms (WCI)						
8	4.1 Training & Competency (TAC)						
9	5.1 Chemical Management (CMI)						
10	5.2 DG Transportation (DGT)						
11	5.4 Volatile Fuel Storage (VFS)						
12	6.2 Workers & Equipment (WAE)						
13	6.3 Workers Facilities (WFI)						
14	7 Worker Protection (FMI)						
15	8.2 First Aid (FAI)						
16	13.7 Airside FOD (AFI)						
17	14.3 Worksite Electrical (WEI)						
18	14.4-6 Driver and Vehicle (DVI)						
19	14.7-8 Barriers & Signage (BSI)						
20	14.12. After Hours Tasks (AHT)						
21	15.8-9 Mobile P&E (MPE)						
22	15.11 Power Tools (PTE)						
23	15.13 Generators (GIC)						
24	15.24 Manual Handling (MHI)						
25	16.3 Waste Management (WMI)						

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Download the Inspection Checklist and Evaluation Template.xltm from https://jars.nz/chess.html - NOTE: THIS IS A MACRO ENABLED EXCEL TEMPLATE

PERMIT INSPECTION CHECKLISTS

Defence Estate and Infrastructure
UNCLASSIFIED

DEI Inspections

PVID#:		Insp. Date:		Doc. ID#:			Total Score:		
Contractor ID:			Camp/Base:		Location:		Site:		
Site Manager:			Email:				Phone:		
Inspector Name:			Email:				Phone:		

Save Inspections File | Send Acceptance Insp. Report | Go to Non-Conformance Report

Click button to print	Inspection Type (select type for checklist)	Frequency required	Inspections Performed		Comments	Highest Risk	Next Review Date
			Score	%			
	Permit Inspections						
26	3.8 Permits (PER)						
27	5.3 Explosives Controls (ECI)						
28	7.6 Respiratory Equipment (REI)						
29	13.5 Lead Paint Works (LBP)						
30	13.6 Asbestos Management (AMI)						
31	14.2 Isolation (ISO)						
32	15.1 Ground Disturbance (GDW)						
33	15.5 Concrete Works (CWI)						
34	15.7 Scaffolding (SCA)						
35	15.10 High Pressure (HPS)						
36	15.12 Powder Actuated (PAT)						
37	15.14 Cranes and Lifting (CLE)						
38	15.15 HP Pipelines (HPP)						
39	15.16 Forklifts (FLI)						
40	15.18 Boilers & Pressure (BPE)						
41	15.19 Welding (WEL)						
42	15.20 Laser (LAS)						
43	15.21 Working at Heights (WAH)						
44	15.25 Radiation (RIC)						
45	15.29 Confined Spaces (CSI)						
46	15.30 Diving Activity (DAI)						
47	15.31 ROV (ROV)						
48	15.34 Hot Work (HWI)						

Download the Inspection Checklist and Evaluation Template.xltm from https://jars.nz/chess.html - NOTE: THIS IS A MACRO ENABLED EXCEL TEMPLATE

Document Control

Document criteria

Document criteria	Details
Security classification	Unclassified
Status	Published
Template version	
Storage location	http://ddms-r/ds/D0-0221/14/Forms/AllItems.aspx

Record of Change

Version	Authors	Date	Amendments or changes
Draft 11	Brian Matthews		Initial Draft
Draft 13	Brian Matthews	22/06/20	Jason Stapp review updates. Update to HSA & PTW form
Draft 14	Brian Matthews	5/9/20	Asbestos, preface, and procedural updates.
V1.00	Brian Matthews	13/10/2020	Remove authorisation page, align Risk Matrix with DFI 0.81, and set date for final version
V1.1	André Chatvick	30/09/2022	CDF Health and Safety Statement, Commitment to Worksite Safety, corrected form links to Volume 1, minor formatting edits
V2.0	André Chatvick	1/03/2024	
V2.0	Brian Matthews	16/05/2024	Update PTWA Process map and procedure, add PTWC and CHIPS process maps and procedures, reformat and repair footers

Document Dependencies

The following related documents may require review or amendment if this document changes.

Document name	Location (link/path)
CHESS forms and templates	http://ddms-r/ds/D0-0221/14/Forms/AllItems.aspx
CHESS - Policies and Specifications	http://ddms-r/ds/D0-0221/14/Forms/AllItems.aspx
CHESS – DEI health and Safety Guide	http://ddms-r/ds/D0-0221/14/Forms/AllItems.aspx
ICE-A Contractor Non-Policy Reporting Procedure	http://ddms-r/ds/D0-0221/14/Forms/AllItems.aspx
IMS-A Incident Response Procedure (Contractor)	http://ddms-r/ds/D0-0221/14/Forms/AllItems.aspx
DEI Incident Management System – Incident Response Process Map	http://ddms-r/ds/D0-0221/14/Forms/AllItems.aspx
DEI Job Safety Analysis Process Map	http://ddms-r/ds/D0-0221/14/Forms/AllItems.aspx
JSA-A Job Safety Analysis procedure	http://ddms-r/ds/D0-0221/14/Forms/AllItems.aspx
DEI PTW Process Map	http://ddms-r/ds/D0-0221/14/Forms/AllItems.aspx
PTW-A Permit to Work - Application Procedure	http://ddms-r/ds/D0-0221/14/Forms/AllItems.aspx
SPA Specification Amendment Request Process Map	http://ddms-r/ds/D0-0221/14/Forms/AllItems.aspx
SPA-A Contractor Specification Amendment Request Procedure	http://ddms-r/ds/D0-0221/14/Forms/AllItems.aspx