
Application for an enforceable undertaking

In accordance with Part 4 of the Health and Safety at Work Act 2015

The commitments in this application are offered to WorkSafe New Zealand

by

McConnell Dowell Constructors Limited (**McConnell Dowell**)

Application for an enforceable undertaking

Part 4, Health and Safety at Work Act 2015

The commitments in this undertaking are offered to WorkSafe New Zealand (WorkSafe) by

Fraser Wyllie

On behalf of

McConnell Dowell Constructors Limited

This enforceable undertaking is given on the day and date that it is accepted and signed by WorkSafe. The undertaking and its enforceable terms will operate as a legally binding commitment on the part of the person from the date it is given.

Do not refer to the victim by name in this document. Please refer to the victim / worker / employee / volunteer / or other term as appropriate.

WorkSafe respects your privacy and is committed to protecting personal information. The information provided in this document is for the purpose of an undertaking given to WorkSafe under Part 4 of the *Health and Safety at Work Act 2015*. This information will be managed within the requirements of both the *Privacy Act 1993* and the *Official Information Act 1982*. **Contravention** means an action which offends against the *Health and Safety at Work Act 2015* and/or any Regulations made under it. It includes both health and safety contraventions. A contravention also includes an alleged contravention.

There is an expectation that WorkSafe will generally publish the undertaking in full on its website.

TERM	DEFINITION
Contravention	An action which offends against the <i>Health and Safety at Work Act 2015</i> and/or any Regulations made under it. It includes both health and safety contraventions. A contravention also includes an alleged contravention.
HSMS	Health and Safety Management System.
Person	An individual who or a legal entity which has a duty under the <i>Health and Safety at Work Act 2015</i> and can give a written undertaking. The term includes individuals, each partner in a partnership, corporations, trustees of trusts, and crown organisations.
Health and Safety Legislation	<i>Health and Safety at Work Act 2015</i> and associated regulations.
Enforceable undertaking	An enforcement pathway that allows a duty holder to voluntarily enter into a binding agreement with WorkSafe. The agreement outlines actions the duty holder will undertake to address the contravention. It is expected to deliver activities which benefit workers, the wider industry or sector and/or the community as well as acceptable amends to any victim(s).

Section 1: General Information

1.1 Details of the person / persons / entity giving the undertaking

Name of person(s) making this undertaking:

Fraser Wyllie

Name of Entity:

McConnell Dowell Constructors Limited

Type of Legal entity:

Registered company

Nominated contact person:

Fraser Wyllie

Physical address:

McConnell Dowell Constructors Limited
510 Mount Wellington Highway
Mt Wellington
Auckland 1060

Postal address (if different):

McConnell Dowell Constructors Limited
PO Box 2758
Shortland Street
Auckland 1140

Work phone:

+64 9 573 5891

Mobile phone:



Email:

[Redacted]@mcdgroup.com

Industry:

Construction and infrastructure

Workers (enter numbers):

Full-time

450

Part-time

6

Casual

5

Description of the products and services provided by the business or undertaking:

McConnell Dowell Constructors Limited ('**McConnell Dowell**') is a multi-disciplined construction and infrastructure contractor delivering complex projects across a variety of sectors including transport, energy, resources, water and wastewater. McConnell Dowell provides specialist construction services in New Zealand and the Pacific nations for the following:

- tunnels and underground works;
- marine and port works;
- roads and bridges;
- pipelines;
- mechanical and process engineering;
- structural steelwork fabrication; and
- general civil engineering works.

Comments:

At the time of the incident McConnell Dowell was undertaking a large-scale irrigation project for North Otago Irrigation Company Limited ('**NOIC**') which involved the following works being completed in the Waitaki region:

- Installation of approximately 112km of new pipelines;
- Construction of four new Booster Pump Stations;
- Upgrades to existing pump stations PS1 and PS2;
- Expansion of the Head Pond;
- Pipe crossings over/under the Kauru and Kakanui Rivers and Island Stream; and
- Related irrigation works.

1.2 Detail of the contravention

WorkSafe New Zealand ('**WorkSafe**') alleges that McConnell Dowell, as a Person Conducting a Business or Undertaking ('**PCBU**'), failed to ensure, so far as was reasonably practicable, the health and safety of workers who worked for McConnell Dowell, including the Injured Person, while the workers were at work for McConnell Dowell installing a switchboard in the Peaks Booster Pump Station. WorkSafe alleges that this failure exposed workers, including the Injured Person, to a risk of death or serious injury from exposure to the hazard of a falling switchboard.

WorkSafe says that there were three practicable steps that McConnell Dowell could and should have taken to ensure the health and safety of the workers:

- Ensure that risks were adequately identified;
- Ensure that adequate systems were in place to manage these risks; and
- Ensure appropriate consultation, co-operation and co-ordination between it and other PCBUs, including Plunket Electrical Oamaru Limited ('**Plunket**').

1.3 Detail the events surrounding the contravention

The NOIC project required the construction of four Booster Pump Stations: Dunrobin, Herbert, Incholme, and Peaks.

McConnell Dowell engaged various subcontractors to assist with the completion of the Booster Pump Stations. One of these subcontractors was Plunket, which was engaged to undertake the electrical works required for a number of switchboards which would be housed within the Booster Pump Stations, and for the installation of those switchboards.

The switchboards were supplied by Switchbuild Limited ('**Switchbuild**'), another subcontractor to McConnell Dowell.

In September 2016, after successfully installing the switchboards supplied by Switchbuild in three of the Booster Pump Stations, Plunket began the electrical

and installation work in the Peaks Booster Pump Station.

Plunket and Switchbuild arranged for the switchboard to be delivered to the Peaks Booster Pump Station on 14 September 2016.

The NOIC project involved work across an expansive geographical area, and no one from McConnell Dowell was present at the Peaks Booster Pump Station site, which was quite remote, that day.

Once at the Peaks Booster Pump Station, the crate containing the switchboard was unloaded using a truck loader crane into the side opening of the Pump Station building.

The intended location of the switchboard in the Peaks Booster Pump Station was different from the other three Booster Pump Stations, as it needed to be located in a corner of the switchroom between two perpendicular walls.

Plunket's employees positioned the crate containing the switchboard onto four load skates, which they had obtained from Palmers Mechanical Limited (another subcontractor working for McConnell Dowell on the project, doing unrelated work nearby), and proceeded to move the crate across the floor of the Booster Pump Station into the switchroom.

Once the switchboard had been moved adjacent to its final installation position (approximately one metre off the back wall of the switchroom) a trolley jack and an end lift bracket were used to lift the left-hand side of the switchboard, so that protective exterior packaging could be removed. Plunket's employees decided to use trolley jacks at one end only, as a trolley jack and lifting bracket could not be placed in the corner area to the right of the switchboard.

Before the switchboard was lowered back onto the load skates, the load skates (which were on wheels that could not change direction), were repositioned so that the switchboard could be pushed against the rear wall.

Plunket's employees then used two trolley jacks to lift the right-hand side of the switchboard and remove the packaging from that end. They then began to lower the switchboard back onto the load skates.

As the switchboard was lowered back down, one of the trolley jacks released quicker than the other, causing the switchboard to tilt forward and the load skates to move. The switchboard then tipped over falling towards the opposite wall of the switchroom, striking the Injured Person.

The switchboard caught on a steel frame fixed 600mm off the floor on the opposite wall and did not fall completely to the floor.

The Injured Person was treated at the site before being conveyed to the local hospital. He was then transferred to Dunedin Hospital for further treatment.

1.4 Detail any enforcement notices issued that relate to the contravention as detailed in term 1.2

DATE	NOTICE TYPE	NOTICE NUMBER	CONTRAVENTION OR PROHIBITED ACTIVITY	ACTION TAKEN IN RESPONSE TO NOTICE
None				

1.5 Detail the rectifications to the workplace or work practices made as a result of the contravention (1.2), events (1.3) and the enforcement notices issued (1.4)

As a result of the incident, McConnell Dowell has taken the following remedial steps to address the work practices which WorkSafe has alleged were deficient:

Actions to improve health and safety on the NOIC project

Actions immediately following the incident

- McConnell Dowell directed its workers to cease work on all operations involving the lifting of switchboards. Work only resumed on the basis that lifting and moving switchboards had to be directly supervised by McConnell Dowell Project Engineers.
- On 26 September 2016, McConnell Dowell issued a Safety Alert relating to the incident to all McConnell Dowell projects and business units.
- Learnings from the incident were shared with workers via presentations to project personnel at toolbox meetings and team briefings.
- A further Site Safety Systems Audit of the NOIC project was carried out.

Improved supervision of NOIC project

- McConnell Dowell increased supervision of subcontractors on the NOIC project for the remainder of the project, by allocating additional part-time resource from the National Health, Safety and Quality Management team, and by engaging additional Site Mechanical Supervisors and Engineers.

Reinstallation of Peaks Booster Pump Station switchboard

- McConnell Dowell directly managed the reinstallation of the Peaks Booster Pump Station switchboard. This included:
 - consultation with Plunket and Switchbuild on the installation method and associated risks, including ensuring sufficient lateral restraints were provided;
 - completing a review of the execution plan and risk analysis before the switchboard reinstallation work began;
 - holding Construction Risk Assessment Workshops ('**CRAWs**') on the switchboard installation with all relevant subcontractors; and
 - ensuring direct supervision of the work by McConnell Dowell personnel including a McConnell Dowell Health and Safety Advisor.

Improvements to health and safety in the wider McConnell Dowell business

Project safety system improvements

- McConnell Dowell took steps to improve supervision of subcontractors and risk management processes on all projects as follows:
 - Learnings from the NOIC project incident were shared at companywide team briefings;
 - McConnell Dowell held refresher sessions with its Project Managers to remind them of their responsibilities for implementing McConnell Dowell's risk assessment and management framework; and
 - McConnell Dowell reminded all project supervisors and engineers of the importance of ensuring Job Safety Environment Analysis ('JSEA') documentation is completed with subcontractors for all activities, and the need to also ensure high-risk activities are reviewed through a CRAW.

Review of other projects

- A review was carried out to identify other projects with switchboard installation activities planned and the following steps were taken:
 - McConnell Dowell reviewed all subcontractors with switchboard installation scope to verify their competence in such installations.
 - McConnell Dowell personnel developed a new electrical installation system to address the lessons learned from the NOIC project.
 - On one project where a switchboard installation was taking place, McConnell Dowell took over responsibility for the installation from the electrical installation subcontractor to ensure the installation occurred safely.

1.6 Total amount of money spent on rectifications

Direct and indirect costs cannot readily be quantified.

1.7 Detail the injury sustained or illness suffered by victim(s) or other(s) as a consequence of the contravention or, (as applicable) the *potential* for fatal injury or future fatal illness

The Injured Person suffered crushing injuries to his chest/abdomen and a laceration to his spleen.

1.8 Detail any offer of amends or payments made to the victim(s) who sustained injury or suffered illness (the total monetary amount here is also to be included in the table at 3.12.3)

Describe the victim(s) relationship to you / the entity in question –

At the time of the incident the Injured Person was an employee of Plunket, which was a subcontractor to McConnell Dowell.

Detail offer of amends or payments:

McConnell Dowell has engaged with the Injured Person and apologised to him for what occurred. McConnell Dowell has offered the Injured Person an assistance package in recognition of what occurred and to help him in his future career:

Item	Estimated cost
Provide financial assistance so the Injured Person can complete the remaining 2 years of his Electrical Apprenticeship	\$5000
Provide a new computer to assist the Injured Person during his apprenticeship training	\$1500
Provide trade tools to assist the Injured Person's career development	\$1500
Total	\$8,000

On 14 February 2018, the Injured Person accepted McConnell Dowell's proposal.

In addition to the above, McConnell Dowell has committed to provide a further \$5,000 to the Injured Person in recognition of the physical and emotional consequences of the incident for the Injured Person.

1.9 Detail any consultation with the victim(s) as to their views on whether an enforceable undertaking would be an acceptable alternative to prosecution

McConnell Dowell has explained to the Injured Person McConnell Dowell's proposal to give an enforceable undertaking as an alternative to prosecution and he has been given the opportunity to review and comment on the undertaking.

On 14 February 2018, the Injured Person confirmed that he is supportive of McConnell Dowell offering an enforceable undertaking to WorkSafe and approved of the initiatives being proposed by McConnell Dowell.

1.10 Detail any consultation with unions / sector / industry as to their views on whether an enforceable undertaking would be an acceptable alternative to prosecution

In developing this application McConnell Dowell has had discussions with Plunket and Switchbuild as both these entities were directly involved in the incident. Both Plunket and Switchbuild support McConnell Dowell agreeing an enforceable undertaking with WorkSafe as an alternative to prosecution.

McConnell Dowell also engaged with a number of industry representatives including:

- Lynn Electrical Co Limited – an Auckland supplier of switchboards.
- Master Electricians – the industry body for workers involved in electrical installations.
- Watercare Services – one of McConnell Dowell’s major clients (and which has a number of pumping stations and facilities).
- Beca Group Limited – a major New Zealand consulting engineering firm who work with McConnell Dowell on projects involving electrical equipment.

All these organisations are supportive of McConnell Dowell offering an enforceable undertaking. Many expressed an interest in being involved in helping to improve safety around electrical installations.

McConnell Dowell has not consulted directly with any unions in relation to the enforceable undertaking as the Injured Person was not a member of any union. However, Master Electricians has evolved from the NZ Electrical Contractors Federation (NZEFCF), which was an industrial union representing electricians.

1.11 Detail the support provided or proposed by the person to the victim(s), other(s)

DATE	DESCRIPTION OF SUPPORT	COMMENTS
April 2018	McConnell Dowell has committed to provide the Injured Person \$5,000 in recognition of the impact the incident had on him.	\$5,000
14 February 2018	McConnell Dowell has agreed to provide the Injured Person with assistance to complete his Electrical Apprenticeship, purchase a new computer to assist with his studies, and provide trade tools to assist with his career.	Estimated value of \$8,000
September 2016	McConnell Dowell’s Project Engineer contacted the Injured Person on several occasions to check on his welfare and recovery.	

1.12 Detail any current HSMS implemented and maintained by the person
Health and Safety Management Processes

McConnell Dowell Management System

The McConnell Dowell Management System ('**MMS**') is an integrated management system including a comprehensive system of policies and procedures designed to control risk activities consistently across all operations.

The MMS provides a comprehensive management system for health and safety which is driven by the company's Workplace Health and Safety Policy and supported by procedures setting out processes and requirements for planning, risk management, consultation, communication and coordination of risk controls and responsibilities, induction and training, performance monitoring including inspection and audit, and performance reporting and review.

The MMS is implemented on each project by way of a Project Execution Manual and the use of Health and Safety Management Plans.

Construction risk management

Construction risks are managed in the MMS through the development of project Health, Safety, and Environment ('**HSE**') Risk Registers, detailed Construction Execution Plans ('**CEPs**') that are subjected to risk reviews, and the use of JSEAs by work delivery teams.

McConnell Dowell's risk management processes follow the principles set out in AS/NZS ISO 31000:2009 Risk Management Principles, namely:

- Establish the context
- Identify, analyse, and evaluate the risk
- Treat the risk
- Monitor and review
- Communicate and consult

McConnell Dowell aims to address risks at each stage of a construction project, including:

- Project Selection
- Tendering
- Project Execution
- Project Close Out

Once McConnell Dowell has selected a project to pursue, a detailed risk review matrix (Tender and Project Risk Register ('**TPRR**')) is prepared during tendering.

If the project is won and proceeds to execution, the Project Risk Register is developed from the TPRR and includes a detailed HSE Risk Register which is maintained for each project and which forms the basis for risk management.

During project execution, CEPs are prepared for each key activity. For each CEP, there is a corresponding CRAW. The CRAW is a facilitated meeting to identify, risk assess, and plan controls for risks relevant to the scope of works covered by each new CEP.

The MMS includes certain Standard Operating Procedures ('**SOPs**') which give

specific instructions and minimum requirements on managing a number of common key critical risks. Supporting SOPs are Safe Work Instructions ('SWI'). SWIs are short instruction sheets on how to undertake tasks safely.

JSEAs are prepared for all site activities by the supervisor and team, with input from HSE staff. The JSEA will break a section of works down to individual steps, identifying risks and controls.

Where new hazards are identified or there are changes to the CEP, the supervisor and team are required to follow the "Stop, Think, Assess, Review and Talk about it" ('START') process. START Cards are used to identify and manage the risks resulting from changes to the CEP.

All workers are encouraged to report hazards on site using "See Say Do" cards. Hazards reported using "See Say Do" cards are addressed immediately wherever possible or are escalated to supervisors and project management for formulation and implementation of control measures.

Management oversight of HSE performance

Project Dashboards are the key means of reporting to senior management on health and safety performance of a project and include monthly reporting on project risks and HSE performance.

Project incidents, statistics, and lessons learned are reported in a Project Closeout Report.

Standards compliance

The MMS incorporates AS/NZS ISO 31000:2009 Risk Management Principles and is certified by Lloyds Register as compliant with AS/NZS4801:2001 and OHSAS18001:2007. The MMS is also accredited by the Office of the Federal Safety Commission under the Australian Government Building and Construction OHS Accreditation Scheme.

McConnell Dowell holds Tertiary Accreditation under the ACC Accredited Employers' Programme.

1.13 Detail the level of auditing undertaken on the HSMS, including compliance audits and audit frequency

The management of health and safety on McConnell Dowell project sites and facilities is subjected to regular internal and external audits.

Internal audits are conducted within the first 3-4 months from project commencement or at the 25% completion milestone (whichever occurs first) and thereafter at intervals determined by the initial audit results but not exceeding 12 months.

External audits of the system are completed by Lloyds Register Quality Assurance ('LRQA'). The current LRQA schedule involves 27 auditing days per year allowing a sample of project sites and offices to be audited as part of a rolling surveillance

audit program that underpins McConnell Dowell's 3-yearly certification against AS/NZS4801:2001 and OHSAS18001:2007. This involves annual project surveillance audits and a three-yearly re-accreditation audit.

Project Startup/Peer Review Audits are conducted at about 20% completion and include health and safety. Startup Audits seek to ensure that projects have been started effectively.

McConnell Dowell is also audited in New Zealand as part of the ACC Accredited Employers' Programme. The last accreditation audit was held in October 2017.

1.14 Detail the consultation undertaken or proposed to be undertaken, in relation to this undertaking

McConnell Dowell has discussed this application for an enforceable undertaking with the Injured Person (see Section 1.9).

McConnell Dowell has discussed this application with representatives of the electrical contracting and switchboard industry (see Section 1.10).

McConnell Dowell has also engaged with workers about this enforceable undertaking application and the proposed activities it contains. In particular, McConnell Dowell sought input on the enforceable undertaking application from its internal Safety Team which comprises a number of health and safety advisors and Health and Safety Committee members in addition to more senior Health and Safety Managers.

In addition, in preparing the content of this enforceable undertaking application, McConnell Dowell has consulted with the McConnell Dowell New Zealand and Pacific Business Unit Senior Leadership Team and the McConnell Dowell Group Executive Committee in Australia to seek their views and support for the proposed activities.

Section 2: General Terms

The person acknowledges and commits to the general terms set forth in the sub-terms below.

2.1 Acknowledgement that WorkSafe alleges a contravention occurred as detailed in term 1.2

McConnell Dowell acknowledges that WorkSafe alleges McConnell Dowell has contravened sections 36(1)(a) and 48(1) and (2)(c) of the Health and Safety at Work Act 2015.

2.2 Statement of regret that the contravention occurred

McConnell Dowell sincerely regrets that the incident on 14 September 2016 occurred and that the Injured Person suffered physical and emotional harm as a result.

McConnell Dowell is committed to ensuring (so far as is reasonably practicable) that no similar, or indeed different, workplace incidents occur in its work in the future.

2.3 Statement of the reasons why, on balance, the person considers this undertaking is the most appropriate response to the contravention

McConnell Dowell considers this undertaking is a more appropriate response to the contravention than a court-imposed sanction as there are longer-term benefits that will be achieved from the terms of the undertaking. The benefits will be shared across our company, our industry, and within the communities where we operate. These benefits include:

- the provision of appropriate support and assistance to the Injured Person;
- investment in improvements to McConnell Dowell's risk management and subcontractor management processes, which will have tangible benefits for McConnell Dowell employees and subcontractors who work with McConnell Dowell;
- the provision of additional training opportunities to develop McConnell Dowell workers and enhance the operational safety of its workforce;
- increasing knowledge and awareness within the industry about the risks associated with electrical installations and the need for effective collaboration and risk management on projects;
- the opportunity to provide support for community groups and organisations who contribute to enhanced health and safety in our communities.

2.4 Statement of commitment that the behaviour, activities and other factors which caused or led to the contravention has ceased and will not reoccur

McConnell Dowell makes a commitment that the behaviour, activities, and other factors which caused the alleged contravention have ceased, and McConnell Dowell will, so far as is reasonably practicable, ensure that such circumstances will not reoccur.

2.5 Acknowledgment of the policy published by WorkSafe for the acceptance of an undertaking

McConnell Dowell Constructors Limited has read and understood the Enforceable Undertakings Policy.

2.6 Acknowledgement that this undertaking will be published and publicised in full
McConnell Dowell Constructors Limited

acknowledges that the undertaking will, if accepted, be published on WorkSafe's website in full and referenced in WorkSafe material.

2.7 Statement of the person's ability to comply with the terms of this undertaking and meet the projected costs of the activities

McConnell Dowell Constructors Limited

2.7.1 has the financial ability to comply with the terms of this undertaking and have provided evidence by way of

The ultimate parent company of McConnell Dowell is Aveng Group. Aveng Group is a publicly listed company on the Johannesburg Stock Exchange in South Africa, and its financial information is publicly available on its website.

McConnell Dowell can provide additional financial information upon request.

with this undertaking to support this declaration.

2.7.2 In the event of impending receivership, liquidation or sale of the entity,

McConnell Dowell Constructors Limited

will advise WorkSafe of the relevant circumstances and its capacity to comply with the outstanding terms of this undertaking.

2.8 Statement outlining any relationship between the person and any corporations, officers, employees, contractors, proposed beneficiaries of donations or scholarship or other recipient of financial benefit contained in this undertaking

McConnell Dowell is not aware of any current relationships with the relevant parties or proposed beneficiaries affected by this undertaking except on an arm's length commercial basis.

2.9 Statement regarding Intellectual Property

McConnell Dowell Constructors Limited

grants WorkSafe a perpetual, non-exclusive, worldwide and royalty-free licence to use, for any purpose, all Intellectual Property Rights in relation to any material developed as a result of this undertaking. This licence includes the right to use, copy, modify and distribute the materials.

2.10 Acknowledgement that the person may be required to provide a statutory declaration

McConnell Dowell Constructors Limited

acknowledges that it may be necessary for WorkSafe to obtain a statutory declaration outlining details of any prior convictions (safety related) outside of New Zealand and that it will provide such declaration if required by WorkSafe

2.11 Statement of commitment from the person to participate constructively in all compliance monitoring activities for this undertaking

1. It is acknowledged that responsibility for demonstrating compliance with this undertaking rests with the person.
2. Evidence to demonstrate compliance with the terms will be provided to WorkSafe by the due date for each term.
3. The evidence provided to demonstrate compliance with this undertaking will be retained by the person until advised by WorkSafe, that this undertaking has been completely discharged.
4. It is acknowledged that any failure to meet the due date for an enforceable term will result in the matter being escalated and may lead to enforcement action.

5. It is acknowledged that WorkSafe may undertake other compliance monitoring activities to verify the evidence and compliance with an enforceable term, and cooperation will be provided to WorkSafe.
6. It is acknowledged that WorkSafe may initiate additional compliance monitoring activities, such as inspections, as considered necessary at WorkSafe's expense.
7. It is acknowledged that details of all seminars, workshops and training conducted by a non-registered training provider must be notified to WorkSafe, by email, at least one week prior. Notification should include time, date, location and the trainer/facilitator.

McConnell Dowell Constructors Limited

Section 3: Enforceable Terms

The person acknowledges all activities set forth in the enforceable terms below must be auditable and include a date for completion and an estimated cost for each activity.

The person commits to performing the activities below diligently, competently and by the respective completion date.

3.1 A commitment by the person to perform activities that will ensure the ongoing effective management of risks to health and safety in the future conduct of its business or undertaking

McConnell Dowell is committed to continuous improvement and the effective management of risks to health and safety in its work and workplaces.

In order to ensure risks to health and safety of workers and others are identified and managed during future business activities, McConnell Dowell (in addition to the other initiatives outlined in this undertaking) will:

- regularly review and improve (as appropriate) the processes for sourcing, contracting, communicating with, and managing subcontractors so that health and safety risks are managed more effectively;
- ensure regular and constructive engagement with employees and contractors about health and safety issues and expectations;
- continue to promote and reinforce a positive workplace culture on all projects and work McConnell Dowell is involved in;
- use (and improve as necessary) McConnell Dowell's processes for identifying risks (including high-risk activities) in all stages of project works;
- ensure incident learnings are shared throughout the business and with any subcontractors working with McConnell Dowell on all projects;
- continue to engage in both internal and external auditing activities to ensure consistent standards of health and safety are maintained.

Ongoing monthly reporting of project HSE performance to the New Zealand Senior Leadership Team and completion of regular Visiting Manager Reports by each Senior Leadership Team member will assist McConnell Dowell's officers and senior management to satisfy themselves that McConnell Dowell's commitment to improved health and safety is being met.

3.2 A commitment by the person to disseminate information about this undertaking to workers, and other relevant parties

Dissemination will be achieved by doing the following:

- McConnell Dowell commits to disseminating information about this undertaking to its employees and other relevant parties by:
 - McConnell Dowell’s Managing Director (NZ and Pacific) will include details of the undertaking in the McConnell Dowell Group Weekly Roundup email to all employees with a McConnell Dowell email address.
 - An article summarising the terms of the enforceable undertaking and a complete copy of the undertaking will be placed on the McConnell Dowell intranet site which is accessible by all McConnell Dowell employees.
 - Project management personnel who have been involved with the NOIC project and/or SLT Team Members will visit all projects and present findings on the accident and explain the commitments made in the undertaking to all McConnell Dowell personnel and subcontractors.
 - The Managing Director (NZ and Pacific) will provide updates on a quarterly basis for the term of the undertaking in the McConnell Dowell Group Weekly Roundup on progress implementing the commitments contained in the enforceable undertaking.

Dissemination will occur by

Initial distribution within 30 days of the date of this undertaking and quarterly updates thereafter until the term of the undertaking expires.

3.3 Activities to be undertaken to promote the objectives of the health and safety legislation that will deliver benefits for workers and/or work and/or the workplace

ACTIVITIES (outline the activity and the expected outcomes)	COSTS(\$)	TIMEFRAMES
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ACTIVITIES <i>Outline the activity and the expected outcomes</i>	COST (\$)	TIMEFRAME
<p><u>Subcontract management and high-risk work training workshops</u></p> <p>Scope: In response to the incident McConnell Dowell has undertaken work to revise and improve a number of its subcontract management and high-risk work procedures.</p> <p>McConnell Dowell now proposes to develop and provide formal training sessions to all relevant personnel on active sites in New Zealand on the revised procedures for:</p>	<p>\$10,000</p>	<p>Within 12 months of the date of this undertaking.</p>

<ul style="list-style-type: none"> • "Part B" subcontractor assessments (including safety systems and capability) which form part of the subcontractor prequalification process; • the inclusion of a health and safety requirements appendix to all major subcontract agreements; • identifying high-risk work activities; • effective management of subcontractors engaged in high-risk work activities; • the implementation of a mandatory permit procedure for high-risk work. <p>Delivery: McConnell Dowell management functional support teams will deliver training workshops to all Project Managers and Project Engineers on all current projects and any projects beginning in the period of the undertaking. Records of attendance will be taken at all training sessions.</p> <p>Outcome: It is intended that following the training workshops there will be an improved and consistent approach to health and safety management of subcontract works and high-risk works across all New Zealand projects undertaken by McConnell Dowell.</p>		
<p><u>Safety leadership training</u></p> <p>Scope: Provision of dedicated training sessions to ensure all McConnell Dowell project-based managers, engineers, superintendents, and supervisors fully understand the importance of their roles in ensuring effective safety and risk management on McConnell Dowell projects, and are competent to meet their responsibilities for this.</p> <p>Delivery: All McConnell Dowell management and supervisory personnel in engineering and operations will complete a one day training workshop called 'Leading Safety' presented by Lloyd-Jones Meakin Group Pty Ltd ('LJM').</p> <p>LJM is an Australian company that has a proven record of assisting companies to evolve into safer, more productive and</p>	<p>\$20,000</p>	<p>Within 12 months of the date of this undertaking.</p>

<p>competitive organisations. Safety becomes a core value integrated into how work is completed at all levels and in all functions.</p> <p>The Leading Safety course will be tailored to reflect New Zealand expectations, challenges, and legislative requirements and will aim to:</p> <ul style="list-style-type: none"> • support McConnell Dowell leaders to create great projects; • reflect the requirements of the MMS; and • clarify the role of participants in managing and leading safety. <p>The Leading Safety course is conducted in two parts:</p> <ul style="list-style-type: none"> • Part 1: LJM conducts an on-site session with McConnell Dowell employees and subcontractors which involves the completion of a culture survey that captures information about the health and safety culture and performance on site. • Part 2: A training workshop is held with management and supervisory personnel which teaches and reinforces positive leadership skills. Information from the culture survey is used to highlight 'real life' areas for improvement. <p>Outcome: The intended outcome is reinforced and improved safety culture at site supervision level.</p>		
<p><u>Supervisor Gold Card</u></p> <p>Scope: Provide the opportunity for all site supervisors to enhance their on-site leadership skills in order to better manage health and safety on McConnell Dowell project sites.</p> <p>Delivery: McConnell Dowell will arrange for all its site supervisors to attend a Supervisor Gold Card two-day training course provided by Site Safe.</p>	<p>\$30,000</p>	<p>Within 12 months of the date of this undertaking.</p>

<p>The course looks closely at the supervisor's role as a coach and leader, focusing on how to influence, train, and instruct staff.</p> <p>Participants will learn management techniques for developing a safety culture, and how to establish procedures to ensure employees act safely.</p> <p>Outcome: Participants receive a Supervisor Gold Card which is widely recognised throughout the industry.</p> <p>McConnell Dowell is confident that developing its project leaders will encourage increased productivity and improved health and safety standards, as site supervisors will have the skills to model and reinforce appropriate health and safety behaviours.</p>		
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Total estimated cost of benefits for workers / others -
\$60,000

3.4 Activities to be undertaken to promote the objectives of the health and safety legislation that will deliver benefits for the wider industry or sector

ACTIVITIES (outline the activity and the expected outcomes)	COSTS(\$)	TIMEFRAMES
<p>ACTIVITIES <i>Outline the activity and the expected outcomes</i></p>	<p>COST (\$)</p>	<p>TIMEFRAME</p>
<p>Electrical industry installation practice guide</p> <p>Scope: In conjunction with the electrical industry, McConnell Dowell aims to improve industry standards for the safe installation of switchboards and large items of electrical equipment. This will be achieved by the development of a simple practice guide for moving and positioning large items of electrical plant, such as switchboards.</p> <p>Delivery: McConnell Dowell will work with Master Electricians and switchboard manufacturers to produce and disseminate a simple practice guide for moving and</p>	<p>\$20,000</p>	<p>Within 12 months of the date of this undertaking.</p>

<p>positioning large items of electrical plant, such as switchboards. The development of the practice guide will take into account current industry practice in New Zealand, as well as international best practice and learnings arising from the incident.</p> <p><i>Stage 1: Collaborative workshop</i> McConnell Dowell will meet with representatives of Master Electricians and the participating manufacturers to discuss current issues surrounding large electrical installations and views on best practice installation methods both within New Zealand and overseas. The aim of the session will be to develop and agree the appropriate installation methodology and relevant health and safety considerations to be included in the practice guide.</p> <p><i>Stage 2: Production and distribution of practice guide</i> McConnell Dowell will work with a graphic design agency to produce the practice guide in physical and/or digital format for distribution by those who contributed to its development.</p> <p>Outcome: The practice guide will be made available to all Master Electricians' members and purchasers of the participant manufacturers' switchboards through their respective websites.</p>		
<p><u>Development of ConstructSafe certification for the electrical industry</u></p> <p>Scope: McConnell Dowell will partner with Master Electricians (and its subsidiary, The Electrical Training Company ('ETCO')) and ConstructSafe to research and develop a health and safety competency assessment programme specifically for the electrical industry to be implemented as part of the existing ConstructSafe programme.</p> <p>ConstructSafe (operated by the Construction Safety Council) is a recognised health and safety training and competency assessment provider, particularly within the construction industry. Many large clients (such as the New Zealand Transport Agency) require contractors to have obtained the ConstructSafe certification prior to</p>	<p>\$50,000</p>	<p>Within 12 months of the date of this undertaking.</p>

<p>commencing work on their projects.</p> <p>Delivery: The development of the ConstructSafe certification for the electrical industry will occur in five stages:</p> <p><i>Stage 1: Stakeholder/industry workshop</i></p> <p>McConnell Dowell will bring together a representative group of industry professionals (i.e. workers, trainers, and assessors working in the electrical industry) and key stakeholders (including representatives from Master Electricians/ETCO and ConstructSafe) for an initial collaborative session to discuss the key requirements of a health and safety competency assessment tool for the electrical industry.</p> <p><i>Stage 2: Develop terms of reference and overall framework for assessment criteria</i></p> <p>Using the feedback from the workshop session, terms of reference and an overall framework for the competency assessment programme will be developed that meet the requirements of both the electrical industry and the Construction Safety Council.</p> <p><i>Stage 3: Stakeholder/industry workshop to develop content of assessment</i></p> <p>Once the terms of reference and competency assessment framework is in place, a further workshop session will be held with the same stakeholder/industry group for the purposes of discussing and agreeing the key competencies that will be included in the assessment programme. This will include consideration of:</p> <ul style="list-style-type: none"> • key work tasks undertaken in the electrical industry (e.g. earthing electrical equipment, testing and commissioning) • critical risks involved in key work tasks and appropriate control measures • current New Zealand and international best practice approaches to electrical works. 		
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<p><i>Stage 4: Development of the competency assessment tool and supporting resources</i></p> <p>McConnell Dowell will work with ConstructSafe software developers to build the competency assessment tool and supporting resources (e.g. a record keeping tool for employers who put their employees through the ConstructSafe programme) based on the content agreed during the stakeholder/industry workshop sessions.</p> <p><i>Stage 5: Implement and promote the assessment tool to industry</i></p> <p>Once developed and tested, McConnell Dowell will work with ConstructSafe and Master Electricians to launch the competency assessment programme, and promote the programme to the electrical industry.</p> <p>Outcome: Developing a ConstructSafe certification specific to the electrical industry will help to improve the standard of health and safety in the industry and set consistent minimum expectations for those engaging in electrical work on projects.</p>		
<p><u>Articles for industry publications to share learnings about the incident</u></p> <p>Scope: McConnell Dowell intends to use industry publications to share information and learnings about the incident with the wider industry and provide recommendations in relation to the delivery and installation of switchboards and heavy electrical equipment to help improve safety.</p> <p>Delivery McConnell Dowell will prepare an article and arrange for it to be published in at least one industry publication (e.g. Electrolink Magazine, NZ Engineering News, or similar).</p> <p>Outcome: Increased industry awareness of the need to plan and supervise the safe installation of switchboards and heavy electrical equipment.</p>	<p>\$2,000</p>	<p>Within six months of the date of this undertaking.</p>

Total estimated cost of benefits for industry -
\$72,000

3.5 Activities to be undertaken to promote the objectives of the health and safety legislation that will deliver benefits for community

ACTIVITIES (outline the activity and the expected outcomes)	COSTS(\$)	TIMEFRAMES
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ACTIVITIES <i>Outline the activity and the expected outcomes</i>	COST (\$)	TIMEFRAME
<p><u>Donate to Otago Rescue Helicopter and Air Rescue Trust</u></p> <p>Scope: McConnell Dowell is grateful that there was prompt medical response available to evacuate the Injured Person locally and then to Dunedin Hospital. Accordingly, McConnell Dowell proposes to donate to two Charitable Trust Organisations that provide air ambulance air evacuations in isolated areas in the south of the South Island.</p> <p>Delivery: McConnell Dowell will donate \$5,000 to each of the Otago Rescue Helicopter Trust Lakes District and the Air Rescue Trust.</p> <p>Outcome: Continuation and improvement of air evacuation services in the south of the South Island.</p>	\$10,000	Within two months of the date of this undertaking.
<p><u>Improve local community first aid capability</u></p> <p>Scope: McConnell Dowell intends to help improve the first aid capability of those in the North Otago community, particularly those working in remote areas (e.g. farmers).</p> <p>Delivery: McConnell Dowell will sponsor a St John's Ambulance (or a similar provider) to run a first aid course for up to 20 people from the local farming community who have had involvement with or been affected by the NOIC irrigation project.</p> <p>Outcome: Improvement in local community first aid capability.</p>	\$5,000	Within six months of the date of this undertaking.

Total estimated cost of benefits for the community - \$15,000

3.6 Agreement to pay WorkSafe's recoverable costs

The actual dollar amounts will be provided by WorkSafe prior to finalisation of the enforceable undertaking

McConnell Dowell Constructors Limited

agrees to pay WorkSafe's costs associated with this undertaking, as itemised below, and it is acknowledged that payment is due 30 days after receipt of the WorkSafe invoice:

COSTS	MINIMUM SPEND (\$)
Administrative	
Legal	
Compliance Monitoring	
Publication (if any)	
Total recoverable costs	\$ 10,300

3.7 Acknowledgement regarding any promotion of the person in relation to this undertaking

McConnell Dowell Constructors Limited

agrees that it will not undertake any activities that may promote or benefit the person without explicitly linking that activity / benefit to this undertaking

3.8 Where WorkSafe considers appropriate in the circumstances, developing a commitment to (establish and maintain OR maintain) an HSMS

Please only complete the versions of 3.8.1 and 3.8.2 that apply in your particular circumstance. If required contact the WorkSafe Enforceable Undertakings Team to determine which options are appropriate

3.8.1

McConnell Dowell Constructors Limited

acknowledges there is a formal documented HSMS acceptable to WorkSafe that satisfies the principles of AS/NZS 4804:2001 Occupational health and safety management systems – General guidelines on principles, systems and supporting techniques

3.8.2

McConnell Dowell Constructors Limited

commits to ensuring that the HSMS remains compliant with AS/NZS 4804:2001 Occupational health and safety management systems – General guidelines on principles, systems and supporting techniques

3.9 If a HSMS is required, a commitment to ensure that the HSMS is audited by third party auditors

3.9.1

acknowledges that the auditors selected to perform HSMS audits must meet the qualification requirements as set by WorkSafe.

3.9.2

commits to ensuring the HSMS will be audited by certified third party auditors

3.9.3

acknowledges that details of the auditors' qualifications will be provided with audit reports submitted to WorkSafe

3.9.4

acknowledges that costs associated with these audits will be met by

as part of the undertaking

3.9.5

commits to ensuring the HSMS will be audited against criteria that meets the principles

Please only complete the version of 3.9.6 that applies in your particular circumstance. If required contact the WorkSafe Enforceable Undertakings Team to determine which options are appropriate

3.9.6

acknowledges that the current HSMS in place, as detailed in term 3.8.1 is acceptable to WorkSafe and commits to ensuring that an initial third party audit will be undertaken within three months of this undertaking being accepted

or

3.9.6

acknowledges that there is no HSMS in place, as detailed in term 3.8.1 that is acceptable to WorkSafe and commits to ensuring that an initial third party audit will be undertaken within six months of this undertaking being accepted

3.9.7

commits to ensuring at least two further third party audits will be undertaken at 12 month intervals, commencing 12 months after the initial audit

3.10 A commitment to provide a copy of each finalised HSMS audit report to WorkSafe

3.10.1 Acknowledges that audit reports received from the auditor will be sent to WorkSafe within 30 days of the audit along with written confirmation that the report has not been altered from the copy provided to the person by the auditor

3.10.2 Acknowledges that within 30 days of receipt of the auditor's written report, WorkSafe will be advised of the intended actions for addressing each of the report's recommendations

3.11 A commitment to implement the recommendations from third party audits

commits to ensuring the recommendations resulting from the HSMS audits will be fully implemented within six months of receiving the audit report, unless WorkSafe grants an exemption due to the actions being unreasonable.

3.12 Minimum spend

3.12.1

McConnell Dowell Constructors Limited

commits to a minimum spend of

\$170,300

for this undertaking.

3.12.2

McConnell Dowell Constructors Limited

agrees to spend any residual amount arising from an original term not being completed or being less costly than estimated in this undertaking. Agreement on how to spend this residual amount will be

sought from WorkSafe.

3.12.3

McConnell Dowell Constructors Limited

Acknowledges the minimum spend comprises of the:

TOTAL COST	MINIMUM SPEND (\$)*
Financial amends paid to victims (if applicable)	13,000
Benefits to workers / others	60,000
Benefits to industry	72,000
Benefits to community	15,000
WorkSafe's recoverable costs	10,300
Estimated cost of the undertaking	\$170,300

* plus GST (if any)

Section 4: Execution

This undertaking is given by the person on the date it is accepted by WorkSafe as set forth in section 5 below.

DIRECTOR OR AUTHORISED REPRESENTATIVE OF A COMPANY

Undertaking given by-

Fraser Wyllie

In my own right and in my capacity as -

Managing Director, New Zealand and Pacific Islands

Of -

McConnell Dowell Constructors Limited

On the -

24th day of May 2018

Signature of person

Undertaking given before me -

Witness Name	Witness Signature	Witness Address
PAUL BERNARD BROOME		

Section 5: Acceptance

This undertaking is accepted by WorkSafe

On the 15 day of May 2018

Signature of person accepting the undertaking:



Name of WorkSafe representative:

Simon Humphries

General Manager, WorkSafe (or delegate)