MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

# BRIEFING

## Plant, Structures and Working at Heights Regulatory Review Update

| | | | |
|---|---|---|---|
| **Date:** | 6 December 2019 | **Priority:** | High |
| **Security classification:** | In Confidence | **Tracking number:** | 1862 19-20 |

| **Action sought** | | |
|---|---|---|
| | **Action sought** | **Deadline** |
| Hon Iain Lees-Galloway<br>**Minister for Workplace Relations and Safety** | **Give direction** on the initial set of reforms proposed to be progressed into a draft Cabinet paper and on residual work for remaining proposals<br><br>**Note** that officials will report on the outcomes of residual work in February 2020<br><br>**Direct** officials to draft a Cabinet paper for Cabinet Economic Development Committee consideration for your review in March 2020, seeking approval to a consolidated package of regulatory reforms | 16 December 2019 |

| **Contact for telephone discussion (if required)** | | | | |
|---|---|---|---|---|
| **Name** | **Position** | **Telephone** | | **1st contact** |
| Lisa Collins | Acting Manager, Health and Safety Policy | 04 901 8569 | Privacy of natural persons | ✓ |
| Alannah MacShane | Principal Advisor, Health and Safety Policy | Privacy of natural persons | | |
| Bob White | Senior Advisor, Health and Safety Policy | Privacy of natural persons | | |

| **The following departments/agencies have been consulted** |
|---|
| WorkSafe New Zealand. |

**Minister's office to complete:**

☐ Approved ☐ Declined
☐ Noted ☐ Needs change
☐ Seen ☐ Overtaken by Events
☐ See Minister's Notes ☐ Withdrawn

**Comments**

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## Purpose

1. This briefing:

   a. provides **an update** on the widespread consultation and analysis of feedback received on the Plant, Structures, and Working at Heights Regulatory Review (the Review).

   b. seeks **your direction** on the next steps for the Review including the:

      i. proposals to be progressed into a draft Cabinet paper, as outlined in recommendations j-m below

      ii. further work / consultation we recommend be undertaken on the remaining proposals to support future decisions.

## Recommendations

2. The Ministry of Business, Innovation and Employment (MBIE) recommends that you:

   a **note** that MBIE has completed public consultation on the proposals that formed the Review and undertaken an in-depth analysis of the feedback received

   Noted

   b **note** that the proposals have generated diverse views but, on balance, broad support – primarily due to the additional clarity the proposals will provide regarding existing Health and Safety at Work Act 2015 (HSWA) obligations

   Noted

   c **note** that we advise proposals may now be progressed in two categories – those that can be developed into a draft Cabinet paper and others that require further work and / or consultation

   Noted

   d **note** that MBIE's assessment is that resulting business costs will be low – with the changes reinforcing expectations already provided by HSWA

   Noted

   e **note** that MBIE will undertake more extensive analysis of regulatory impacts to support Cabinet consideration of the changes, including direct costs of registration and any additional engineering work or consultancy required to meet additional obligations

   Noted

   f **note** that our intent is to complete further work / consultation by February 2020 – to enable us to provide you with a draft Cabinet paper in March seeking Cabinet approval to a consolidated package of reform proposals

   Noted

g note that while the approach to a number of proposals for regulatory reform is clear, there is a further level of detail that must be decided to enable drafting to occur

Noted

h **note** that the detailed design of the draft regulations in the next phase of the Review will not counteract the general support for the proposals

Noted

i **agree** to discuss this briefing in your upcoming policy session with MBIE officials, scheduled for 4.15 pm on 11 December 2019

Agreed

j **agree in principle** to the following proposals regarding general plant protections being progressed into a draft Cabinet paper:

| | |
|---|---|
| **Proposal 1A:** To ensure safe plant and structures are provided and maintained:<br>(i) Requiring general application of the Prescribed Risk Management Process (PRMP)[1]<br>(ii) Prescribing minimum guarding standards<br>(iii) Prescribing additional minimum standards targeting end-to-end life cycle risk management, re-design and alteration, and equipment safeguards. | Yes / Discuss |
| **Proposal 2A:** Customised operational and design requirements for plant used for lifting purposes – with your decision on the approach to forestry plant and structures being sought in our February 2020 briefing – so as to ensure that additional risks to safety, to the operator and others, are appropriately managed. | Yes / Discuss |

k **agree in principle** to the following proposals regarding mobile plant protections being progressed into a draft Cabinet paper:

| | |
|---|---|
| **Proposal 1B:** To ensure the health and safety of operators and others are not put at risk by mobile plant:<br>(i) Requiring the PRMP for specified key risks<br>(ii) Requiring, so far as reasonably practicable, effective operator protective devices – with your decision on the approach for exempt plant being sought in our February 2020 briefing<br>(iii) Requiring the use of appropriate warning devices and an appropriate field of vision for operators. | Yes / Discuss |
| **Proposal 2B**: Customised design and operational requirements for forklifts – to ensure that additional risks to safety, for the operator or bystanders, are appropriately managed. | Yes / Discuss |

[1] The Prescribed Risk Management Process refers to clauses 5-8 of the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, requiring PCBU to check for hazards, implement a hierarchy of control measures to manage risk, maintain effective control measures, and review them.

l **agree in principle** to the following proposals regarding upstream duties being progressed into a draft Cabinet paper:

| | |
|---|---|
| **Proposal 1C**: To better clarify existing obligations, define the roles and duties of "upstream" Persons Conducting a Business or Undertaking (PCBUs) – as applicable across designers, manufacturers, suppliers and those who construct, install and commission plant and structures. | Yes / Discuss |
| **Proposal 2C:** To improve information exchanges across the supply chain:<br>(i) Prescribing minimum health and safety information that must, as far as is reasonably practicable, be shared across the supply chain<br>(ii) Requiring PCBUs ordering plant or structures to supply a designer, manufacturer or constructor with information about relevant hazards and risk, so far as is reasonably practicable. | Yes / Discuss |
| **Proposal 3C**: To promote safety in design and early risk-management interventions:<br>• Specify that duties for upstream PCBUs include to:<br>(i) Ensure plant is manufactured, inspected and tested with regard to the information provided by the designer<br>(ii) Take action if hazards are identified during importation and / or the manufacturing process<br>• Introduce specific obligations on designers and manufacturers, with regard to safety features / guarding, to ensure they meet minimum standards. | Yes / Discuss |

m **agree in principle** to the following proposals regarding high-risk plant being progressed into a draft Cabinet paper:

| | |
|---|---|
| **Proposal 1D:** Replacing the Health and Safety in Employment *Pressure Equipment Cranes and Passenger Ropeway Regulations 1999* (PECPR Regulations) and Amusement Device Regulations 1978 with regulations for "high-risk plant" based on the Australian *Model Regulations*:<br>i. Retaining existing accreditations for inspection bodies and inspection personnel<br>ii. Using a risk-based approach to determine coverage of different classes of amusement devices<br>iii. Maintaining current type fault notifications for all categories of "high -risk plant". | Yes / Discuss |
| **Proposal 2D**: To promote greater oversight and accountability, establishing a WorkSafe New Zealand (WorkSafe) operated register of designs of "high-risk plant" and associated competencies and processes for design verification. Continuing coverage for amusement devices, and also pressure equipment, cranes and passenger ropeways currently inspected under HSWA regulations, and also include:<br>(i) Scaffolding systems.<br>(ii) Hoists, lifting and access equipment (other than that covered by the Building Act).<br>(iii) New classes of hydraulic boom lifting and concrete placement equipment.<br>Making it an offence for PCBUs to use or supply "high-risk plant" that is not design registered. | Yes / Discuss |

| | |
|---|---|
| **Proposal 3D:** To facilitate greater oversight and accountability, establishing a register of individual items of "high-risk plant", operated by WorkSafe, accessed and updated by accredited inspection bodies and inspection personnel (as under the current PECPR regulations). | *Yes / Discuss* |

n **agree in principle** to the following proposals regarding working at heights and excavations being progressed into a draft Cabinet paper:

| | |
|---|---|
| **Proposal 1E:** To promote best practice risk management for work at heights:<br>(i) Requiring the PRMP for work at heights in all workplaces<br>(ii) Introducing a new regulation requiring a mandatory hierarchy of controls for work at heights in construction work<br>(iii) Revising the definition of "construction work" to align with the Australian *Model Regulations* including prefabrication, and excluding certain maintenance and cleaning activities. | *Yes / Discuss* |
| **Proposal 2E:** Clarifying requirements for scaffolding by:<br>(i) Amending the regulations to reflect the competency requirements for scaffolding over 5 metres in height and / or with a work surface over 5 metres in height to be constructed by an appropriately certified scaffolder<br>(ii) Requiring scaffolding systems to be registered designs of "high-risk plant" (see Annex 5). | *Yes / Discuss* |
| **Proposal 1F:** To promote best practice risk management, develop regulations for excavation work that:<br>(i) Require the PRMP for excavations in construction work<br>(ii) For excavations over 1.5 metres in depth, require the management of specified risks, in line with the Australian *Model Regulations*<br>(iii) Include an explicit duty for the PCBU with management or control of excavation work to obtain current underground services information. | *Yes / Discuss* |

o **agree** that officials progress further work / consultation, as identified in this briefing paper.

Agree / discuss

Lisa Collins
**Acting Manager, Health and Safety Policy**
Labour and Immigration Policy, MBIE
6 / 12 / 19

Hon Iain Lees-Galloway
**Minister for Workplace Relations and Safety**
17 / 12 / 19

## Matters for your approval

3. Public consultation on MBIE's Plant, Structures and Working at Heights Regulatory Review (the Review) closed on 4 October. Involving a comprehensive programme of work to modernise and clarify seminal health and safety regulatory settings, the Review is considering a series of proposed changes to the Health and Safety regulatory system, based on the Australian *Model Work Health and Safety* Regulations.

4. With our review of submissions now complete, we have reached a point where your direction is needed to progress the proposals under consideration. We have assessed these – on the basis of submitter feedback – as falling into two categories:

    a. proposals we wish to develop into a draft Cabinet paper

    b. proposals requiring residual work and / or consultation.

5. This briefing seeks your endorsement of this approach and our expected March 2020 timeframe for the completion of this work. Initially it focuses on describing the background to the Review and the input we've received. We then provide an overview in later sections of our more detailed analysis of submitter feedback, outlining as part of this specific matters for your consideration, across each of the six categories of proposals. This briefing is accompanied by Annex one – providing a high level summary of submissions received – and two – seven, providing more in-depth information in support of our recommendations regarding specific proposals.

## Drivers and objectives for the Review

6. The Review is the latest step in a process of regulatory reform prompted by the Pike River Coal Mine tragedy. The regulations under review are outdated in key areas, lack clarity and coherency, and contain significant gaps. By way of example, specific guarding requirements for plant have applied only in limited circumstances since the 2016 repeal of the *Machinery Act 1950*. Also a current area of focus, the Health and Safety in Employment *(Pressure Equipment Cranes and Passenger Ropeway) Regulations 1999* (PECPR Regulations have yet to be reviewed since their promulgation.

7. Plant and structures remain as a prevalent source of harm across all high-risk sectors. As a proportion of overall work fatalities for the 2008-2017 period, 76% of cases involved plant and/or structures (on a sum total of 690, excluding those from Pike River). Upwards of 80% of deaths in the construction, agricultural, and transport, postal and warehousing sectors for the same period involve work with plant and structures.

8. To deliver the improvements that are needed, the **Review aims** – as referenced in CAB-19-MIN-0275 – are to produce new HSWA regulations that:

    a. Make the rules clear while retaining flexibility to do what is best in each case

    b. Improve risk management

    c. Make sure people have the right information to ensure health and safety at work

    d. Improve oversight and transparency of very high risk work.

9. The Review is one element of MBIE's multi-year programme to improve Health and Safety at Work regulatory settings more broadly. Among other areas of focus, workplace use of hazardous substances and youth in hazardous work are set to be considered further in this wider programme of work.

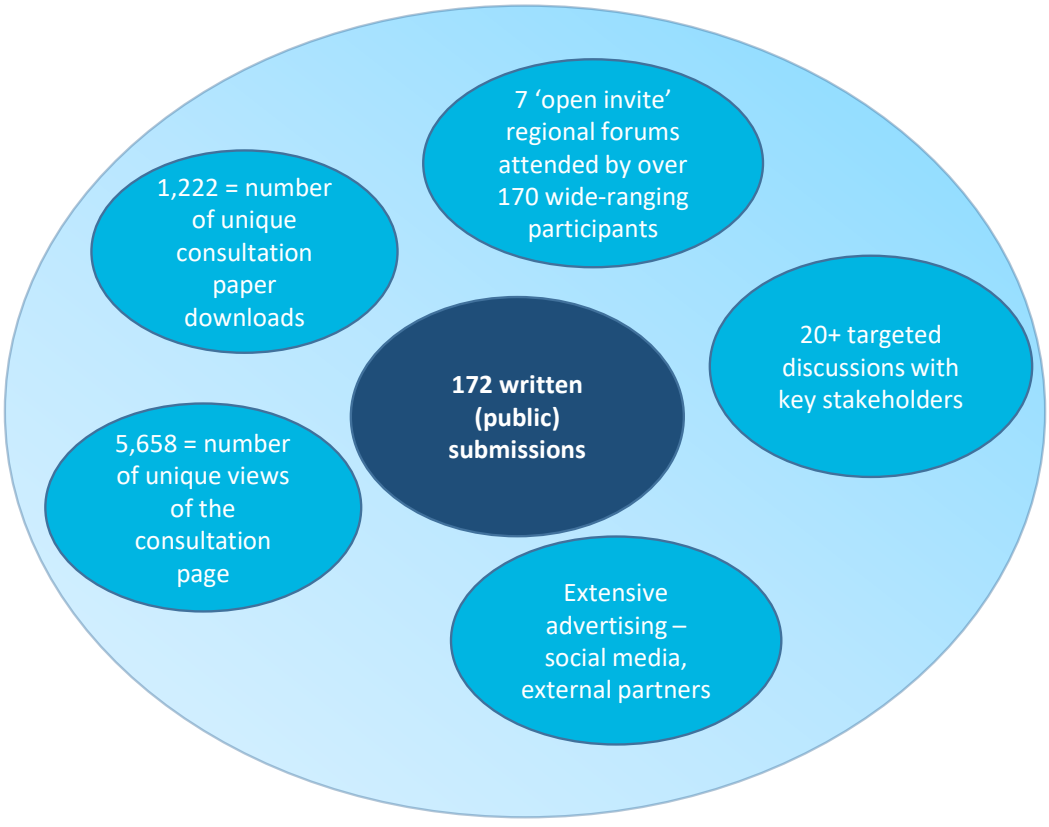
## Stakeholder input into the Review

8. With relevance to almost all sectors, the Review has required extensive stakeholder engagement across a variety of different stakeholder groups. An open and proactive approach to consultation has been adopted – with a number of MBIE-convened stakeholder events run prior to, and in parallel to, the public consultation process.

9. Advertising for the public consultation was delivered through multiple channels, including via the initial media launch, on MBIE's website, and using social media. External partners (such as Dairy New Zealand and Construction Health and Safety New Zealand (CHASNZ)), also assisted by promoting the consultation in industry communications and publications.

10. In some cases, our external partners also facilitated sector-based meetings and submissions. The Scaffolding, Access and Rigging New Zealand (SARNZ) submission, for instance, was developed in consultation with SARNZ members and stakeholders through an on-line survey (with 47 participants), workshops in Auckland and Wellington (with 25 participants), and direct discussion with industry participants. We leveraged the assistance of our external partners to help manage the general consultation fatigue which appears to be prevalent.

*Figure 1: Summary of the outcomes of the engagement process – Plant, Structures, and Working at Heights Review*




11. In progressing the Review, MBIE has also worked in close collaboration with WorkSafe – as agency responsible for implementation and also to ensure the full depth of WorkSafe's specialist knowledge is brought to the fore. WorkSafe provided us with a comprehensive response on each of the proposals, based on internal consultation with technical experts and the inspectorate. WorkSafe broadly supports the proposals under consideration.

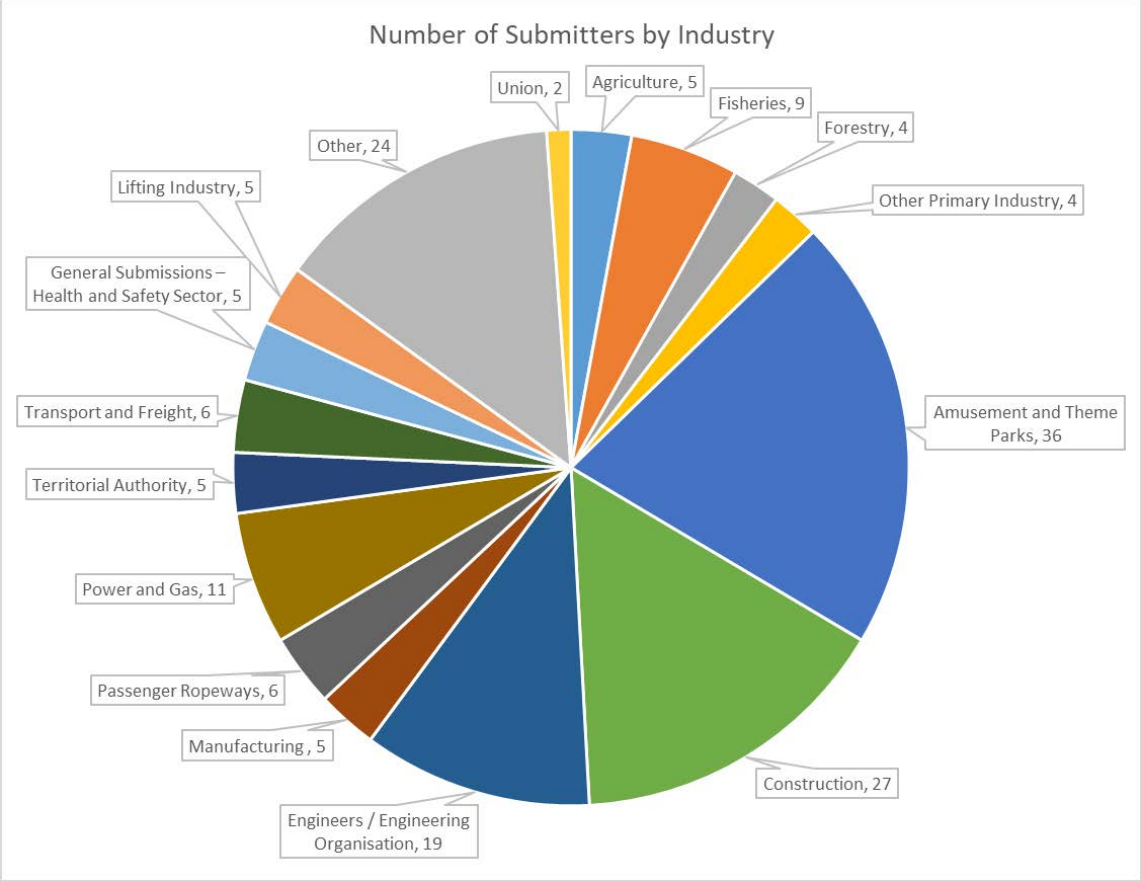
12. We are still working with WorkSafe on several matters. This work will focus on the workability and enforceability of certain specific details, including in relation to maintenance standards, Operator Protective Devices (OPDs – particularly for mobile plant under 700 kg), and the hierarchy of controls for work at heights in construction. We will continue to keep you

informed on the outcome of these investigations – as part of our intended February 2020 progress update.

### Submissions – general information

13. As an outcome of recent public consultation, MBIE received 172 written submissions representing a broad range of interests and sectors. Submissions received were predominantly from companies or sector representatives. In addition to the union submissions from the New Zealand Council of Trade Unions (NZCTU) and E tū Union, there were also 11 submissions made by workers. Further details regarding the submissions are provided in the chart below, categorised by industry. A detailed list of submitters by industry, alongside thematic responses for each group is provided at **Annex one**.

*Figure 2: Summary of submitters by Industry*




14. MBIE is generally satisfied with the level of stakeholder participation in the Review, which (as per paragraph 8 above) was enabled through the submissions process and MBIE-facilitated stakeholder sessions more broadly. The number of submissions, on its own, under-represents the stakeholder input provided. Where we are proposing further engagement, under the '*Submissions analysis summary'* section below, this will be targeted and require only marginal resourcing.

## Submissions analysis summary

15. The discussion in this section focuses on summarising the feedback we received from submitters. More detailed analysis across each of the individual categories of proposals is set out in **Annexes two to seven**.

## Summary of general submitter feedback

16. Consultation has shown a high level of support for the proposals for plant and structures, and broad acceptance by stakeholders that the Australian Model Regulations offer the best foundation for new regulations. The **additional clarity and detail** provided by the proposals as to the obligations of PCBUs was confirmed to be of broad appeal, across business and worker groups alike. Echoing this sentiment, the NZCTU, for instance, fed back that:

> Our submission is in support of a strong framework of regulation for plant, structures, and working at heights…Our concern is that when health and safety practices are left to the industry to develop in isolation from guiding regulation, then codes of practice and guidance will often serve business interests over the health and safety of those in the system.

Comments that "we do this anyway" were also made frequently across a number of proposals (especially by those that have responsibility for high-risk plant).

17. **Core presenting issues / problems** – as identified across each proposal category – were generally endorsed by submitters, with poor quality imported plant, deficient guarding, maintenance, and risk management a particular focus of many submissions.

18. **The ability of businesses to access necessary specialist advice** on compliance was commonly cited as a perceived issue. MBIE notes that the Health and Safety Association of New Zealand's (HASANZ's) active programme of work to deliver an additional 2,100 health and safety professionals within the next decade will assist. This can be expected to provide more generalist and human factors advice. MBIE will, in addition, be working with Engineering New Zealand's specialist groups to deepen expertise available for design verification, and with the Certification Body for Inspection Personnel (CBIP) to ensure machinery inspectors are available for new classes of plant included in regulations.

19. A significant number of submitters referred to **current approved codes of practice and guidance being incomplete or out of date**. Some submitters expressed the view that updated or otherwise improved guidance was more important than new regulations, and a significant number stressed the need for developing new or updated guidance to support new regulations. In response, in developing proposals and during consultation we have worked closely with WorkSafe to clarify which outcomes require mandatory controls in regulations, and the supporting codes and guidance that are needed. Submissions on this aspect of proposals fell along a clear spectrum, with labour groups, professional groups and specialists, and businesses purchasing equipment or services favouring mandatory controls set in regulations, while industry groups and larger organisations tended to submit against regulations, preferring codes or guidance to regulations.

20. **Aspects of worker/operator competency requirements** were discussed by many submitters, and some provided detailed commentary for their particular areas of interest. We will be able to frame the regulations to be consistent with, and provide a basis for approved codes, or high-risk work licences to be developed with regulations for "high-risk work".

21. A number of submitters provided **constructive, technical advice** on how the regulations could best cater to the specifics of different industries or classes of equipment. We will make use of this advice at the drafting stage of formulating regulations.

## Summary of feedback on specific consultation proposals

22. The discussion document highlighted significant gaps in the coverage of existing regulations and proposed increased coverage of some types of plant, and new approaches to regulation to address them. The majority of these extensions of coverage and changes of approach were supported at consultation meetings and by individual submitters. Our view is that there is sufficient support across all sectors and different interest groups to develop the regulations proposed in the discussion document.

23. Some aspects of the proposals, concerning particular sectors or types of plant, received mixed responses from submitters. These will require more engagement with sector groups, some owners of significant engineering assets (particularly large-scale manufacturers and the energy sector), and specialist groups within the engineering profession to develop changes to the regulations that will address their concerns while achieving intended outcomes. In most cases this involves details of the coverage of particular types of equipment or the details of processes, rather than significant policy questions.

24. Proposed requirements regarding appropriate guarding, training of operators and record-keeping associated with proposals regarding **plant in general** were well supported, with a variety of stakeholder groups taking the view these will serve to reinforce best practice. **Enhanced protections for mobile plant** (discussed in detail in Annex three) were also predominantly supported, although aspects of the proposals require further investigation – most notably to engage on counter views regarding the general application of operator protective device requirements.

25. An underlying theme of the consultation document, confirmed through submissions, is the age of plant in New Zealand, and the importance of regular and thorough inspection and maintenance to maintain safety. Most plant is sourced from overseas, and often purchased second-hand and/or modified when installed in workplaces. There was therefore strong support for retaining inspection practices and competencies under current regulations and codes, while improving consistency and filling gaps in coverage (as enabled by proposals pertaining to **"high-risk" plant** – discussed in Annex five – and **life-cycle risk management requirements for general plant** – discussed in Annex two). There was also strong support for **new duties for "upstream" importers and suppliers of plant** (discussed Annex four) – as a means of achieving better balance in the way responsibilities are assigned across the supply chain and to aid early risk interventions 'at source'.

26. The changes proposed for **working at heights and excavations** were widely endorsed, including the adoption of a mandatory "hierarchy of controls" framework for managing the risks of work at heights in construction work. Whether this hierarchy should apply generally (irrespective of the height), or be subject to a minimum 2 metre height threshold is, however, contested and an area we wish to examine further.

27. From our analysis of submissions, the table below summarises the full set of proposals endorsed in their broad form as consulted:

*Proposals for which broad policy design has been validated by submissions*

| Category | Endorsed proposals | Comment |
|---|---|---|
| General plant protections | 1A) Specifying in regulations minimum standards – for risk management, appropriate guarding, and end-to-end lifecycle controls.<br><br>2A) Customised design and operational requirements for plant used for lifting purposes. | Generally supported by a diverse cross-section of industry groups – across manufacturing and more broadly.<br><br>Proposals respond to submitters' support for encouraging an ongoing focus on maintenance, and allowing for measures (including in relation to guarding) which are best for the given circumstances.<br><br>Plant used for lifting purposes widely recognised as involving more extensive risks, and to therefore warrant further specific requirements. |
| Mobile plant protections | 1B) Requiring appropriate risk management, operator protective devices, and visual controls.<br><br>2B) Customised design and operational requirements for forklifts. | Generally considered an appropriate response to the elevated risks forklifts and other forms of mobile plant present – across a variety of high-risk sectors and wider stakeholder groups.<br><br>Current ≤ 700 kg exemptions from mobile plant rollover and seatbelt requirements are, however, an area of divided opinion (and that we are proposing to further investigate). |
| "Upstream" duties for plant and structures | 1C) Clarifying "upstream" PCBU roles and duties<br><br>2C) Minimum information requirements, to promote the exchange of relevant information across the supply chain<br><br>3C) Requirements for safety by design – including minimum standards for safety features / guarding. | Targeting an area of common concern (visibility over the safety of imported plant), these proposals received wide endorsement across a variety of submitter groups. |
| High-risk plant requirements | 1D) New regulations based on the Australian *Model Regulations*:<br>(i) Retaining existing accreditations for inspection.<br>(ii) Risk-based coverage of amusement devices.<br>(iii) Maintaining current type fault notifications.<br><br>2D) Register of designs of certain "high-risk plant" (design verification), covering a new offence for PCBUs to use or supply "high-risk plant" that is not design registered.<br><br>3D) Register of items of "high-risk plant", operated by WorkSafe, accessed and updated by accredited inspection bodies and inspection personnel. | Overall support for proposals and the consistency they represent.<br><br>Strong support for retaining existing inspection accreditations and processes while introducing new transparency and consistency with central registers.<br><br>Strong support for including most new types of plant proposed, but more work needed with forestry sector.<br><br>Issues with inclusion existing / legacy equipment in both registers, and more work needed with owners of large scale pressure equipment, i.e. meat processing, energy and pulp and paper sectors. |

| Category | Endorsed proposals | Comment |
|---|---|---|
| Protections for working at heights and scaffolding | 1E) Promoting best practice risk management for work at heights by:<br>(i) Requiring the PRMP for work at heights, and a mandatory hierarchy of controls in construction work<br>Improving and clarifying the definition of “construction work”<br>2E) Clarifying requirements for scaffolding by:<br>(i) Specifying when a certified scaffolder must be involved<br>(ii) Requiring design registration of scaffolding systems as “high-risk plant” | Overall support for proposals to clarify risk management expectations and impose a mandatory hierarchy of controls for the construction sector.<br>Construction-sector submissions indicated a hierarchy of controls for construction was consistent with good industry practice.<br>Further work needed with sector on the best way to include the use of ladders in the hierarchy of controls and remove the need for a threshold.<br>Strong support for codifying existing industry practice with scaffolding and requiring design registration of scaffolding systems. |
| Protections for excavation work | 1F) Promoting best practice risk management in excavation work by:<br>(i) Requiring the PRMP and the management of specified risks for excavations over 1.5m depth<br>(ii) A new explicit duty to obtain underground services information. | Overall support from the construction sector for moving the regulations to a more risk-based approach.<br>General support for retaining a 1.5m threshold for managing specified risks.<br>High level of support for the proposed duty to obtain underground services information. |

28. There was limited feedback on **offence** provisions, with submissions generally noting that more development of the regulations was needed prior to setting penalties. Some submissions reinforced the value of "on the spot" penalties for some offences. We will develop advice on appropriate levels of offences and penalties as decisions are made on policy choices.

29. **Transitional provisions** were raised by several submitters, particularly in connection with proposed design verification/registration provisions for "high-risk plant". They were requested specifically for pressure equipment, cranes and passenger ropeways, currently registered amusement devices, and other classes of existing equipment which will become subject to new requirements. We will continue to work with industry and professional groups to develop transitional provisions that provide for the staged introduction of new requirements, while maintaining the safety of legacy equipment.

30. Submitters expressed mixed views as to **overall costs**, but predominantly considered these would most likely be offset by the benefits of safer workplaces and work, and reduced harm. There will be some additional direct costs to businesses as charges for registration of designs or items of plant, but these will be limited and will be able to be accurately estimated by WorkSafe. There will be some further costs of mechanical engineering and consultancy for businesses requiring reassessment and/or modifications to meet some new requirements, but many of these are being met currently as "good practice" and transitional provisions will allow changes to be made as part of routine maintenance.

31. Limited quantitative information was provided by submitters as to the costs and benefits of the proposals. MBIE will undertake more extensive analysis of regulatory impacts to support Cabinet consideration of the changes. Due to extensive overlap with pre-existing HSWA obligations, this assessment of impacts will be carried out as incremental analysis i.e. focussing on those proposals expected to elicit substantive change and adjustment, as distinct from serving to reinforce existing duties.

# Next steps

## Taking forward specific proposals for development into a draft Cabinet paper

32. Based on submissions, we recommend progressing the consultation proposals in two parts:

    a. Proposals to further develop into a draft Cabinet paper – that is, proposals for which there is broad stakeholder support and for which core policy design features have been validated (through public consultation)

    b. Proposals requiring further work or consultation – that is, proposals involving further substantive policy considerations requiring further assessment and / or stakeholder input.

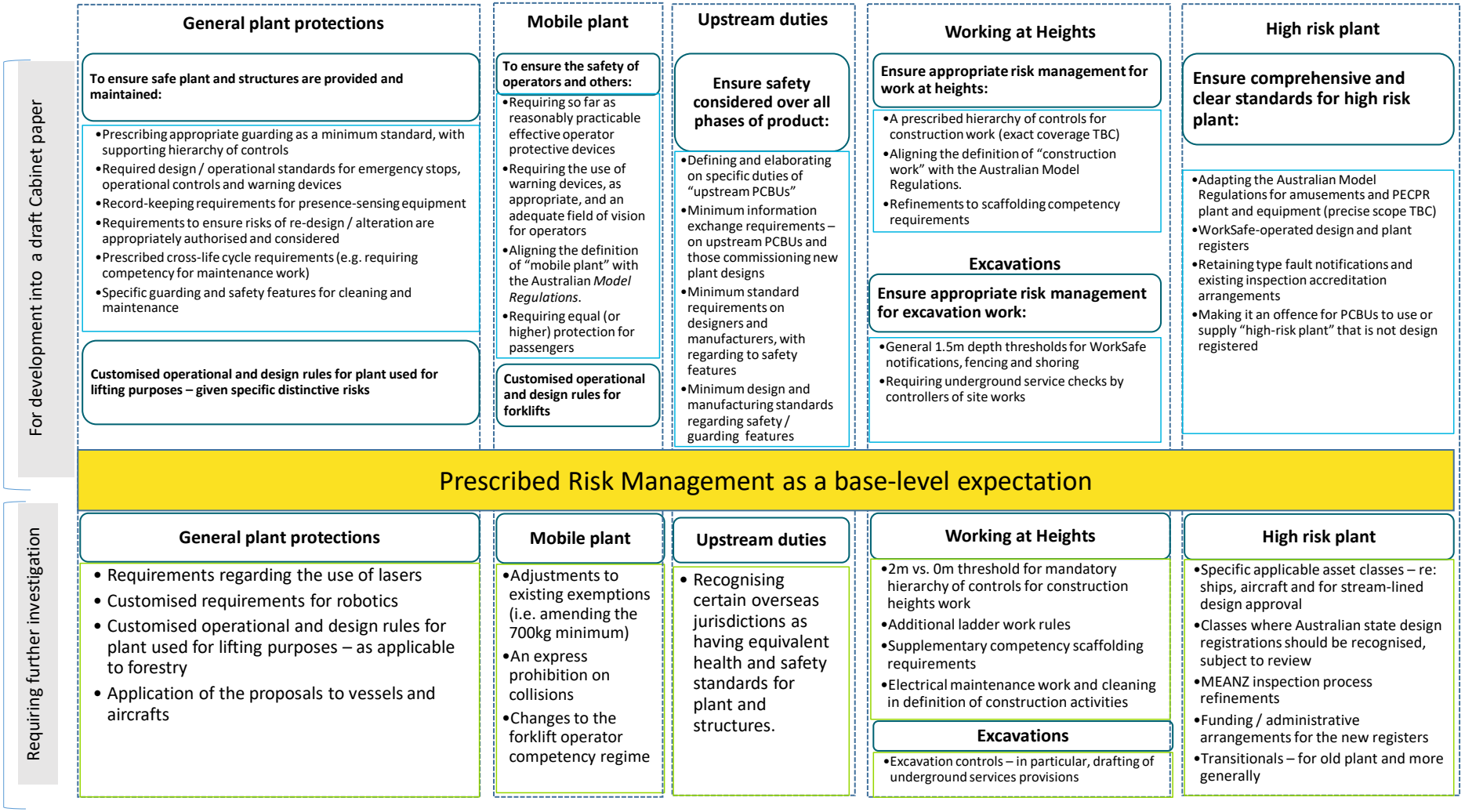
33. As proposals are developed we will also:

    a. work with WorkSafe to prepare estimates of the costs to government (and associated fee requirements), and with stakeholders to prepare cost-benefit analysis of the proposals themselves.

    b. develop appropriate levels of penalties for any offences under the regulations and include advice on this to enable Cabinet decision making.

34. A high-level summary of the specific changes we are proposing for each category – based on the detailed assessments presented in attached annexes – is presented below.

*Summary of initial submissions analysis*



## Progressing areas for further investigation

26. Primarily, the areas requiring further investigation detailed above concern second-order matters of scope and technical design features. Given the specialist nature of these considerations, we intend to undertake the following targeted programme of consultation supported by WorkSafe:

| Sector group | Intended approach |
|---|---|
| Agriculture | Work with the Agricultural Leaders' Health and Safety Group (ALHSAG) and other relevant stakeholders to further investigate general operator protective standards for quad bikes and other forms of mobile plant (supported by ALHSAG, but opposed by Federated Farmers and the Motor Industry Association of New Zealand (MIA)). |
| Construction | Work with:<br>a) SARNZ, Industry Training Organisations, CHASNZ, Site Safe, and sector groups to refine proposals for work at heights and scaffolding – including competencies of scaffolders and the hierarchy of controls for managing the risks of work at heights in construction work.<br>b) Civil Contracting New Zealand, local authorities and utilities to clarify expectations for a duty to identify underground services. |
| Forestry | Work with the Forestry Owner's Association (FOA), the Forestry Industry Safety Council (FISC), and WorkSafe to explore how requirements for lifting plant, and steep slope and mechanical harvesting equipment could be introduced for forestry. |
| Engineering | Work with Engineering New Zealand specialist groups, CBIP, International Accreditation New Zealand (IANZ) and specialist equipment organisations to clarify appropriate authorisations for inspection, design verification and operator competencies for different classes of plant. |
| Energy and large scale manufacturers | Work with owners of large scale pressure equipment to explore ways for them to maintain their own registers of large scale, "bespoke" pressure equipment, while allowing third party or regulator audits. |
| Amusements | Work with:<br>a) New Zealand Operators of Amusement Devices (NZOAD), Recreation Safety Engineering, and territorial authorities to clarify role of the authorities in permitting, refine coverage and develop proposals for improving operator training and amusement device inspection; and<br>b) Model Engineering Association of New Zealand to improve accreditation processes and quality of inspections for model engineering. |
| Fisheries / Aviation | Work with Maritime New Zealand (MNZ) and the Civil Aviation Authority (CAA) to further investigate how appropriate health and safety standards can best be delivered – whether through Plant and Structures Health and Safety regulations or sector-specific rules. |

## Pursuing Cabinet approval

35. Subject to your approval, we will advance the two strands of proposals above.

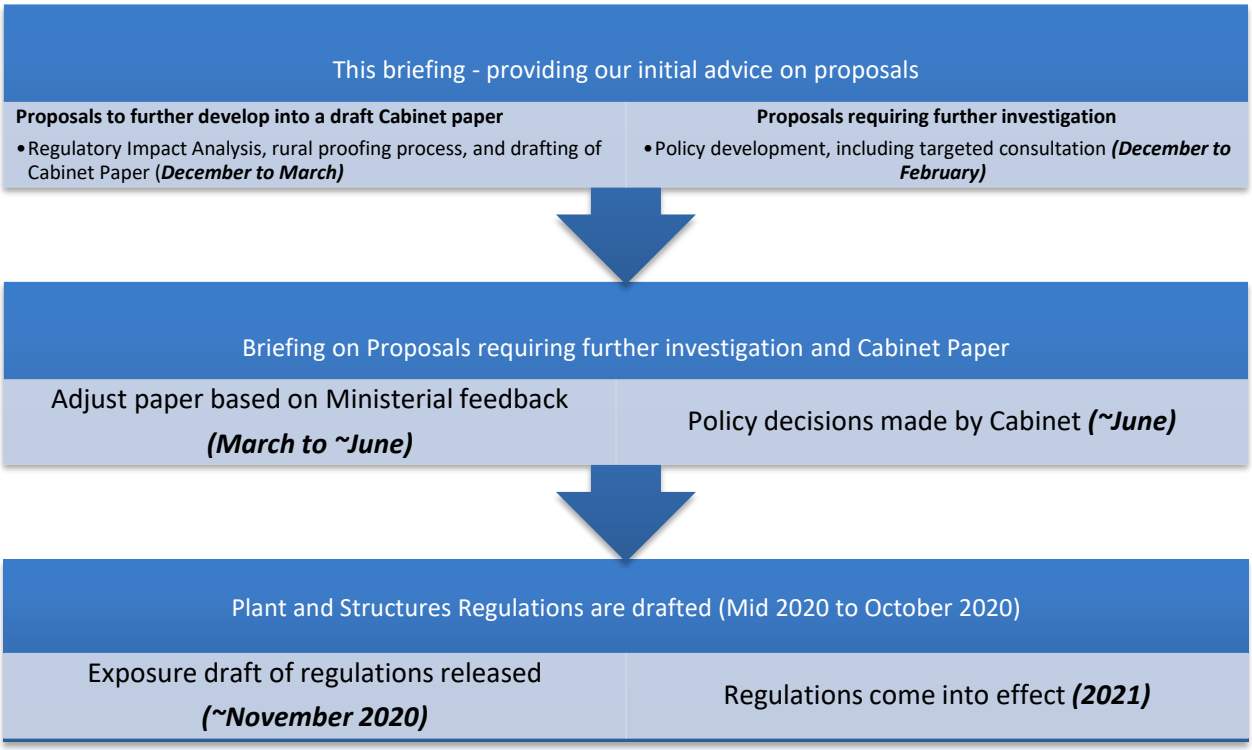
36. **For those proposals for which your in-principle agreement is sought**, we will develop the Regulatory Impact Analysis to be included in a Cabinet paper that will seek policy decisions. This will include information on the costs and benefits of the proposal, including any costs to the Crown.

37. **For the proposals that require further investigation**, we will continue working through the policy development process, including incorporating changes based on targeted consultation with the sectors that are impacted. We will provide, in separate reporting, analysis of preferred options on these areas when policy work has sufficiently progressed (February 2020 is anticipated for this).

38. We will merge these two strands of work together into one comprehensive package of regulations to cover all plant and structures, and prepare a Cabinet paper for your consideration and consultation with agencies in March. Timeframes from there will depend on the outcomes of consultation, with agencies and at the Ministerial level, although we anticipate that meeting a target of March for preparing a draft Cabinet paper will allow for Cabinet approvals by mid-June 2020.

39. Our timeline for our recommended process is set out below.

*Timeline for the development of regulations*




40. This is a different timetable, assessed with regard to submitter feedback, to that originally envisaged – contemplating initial policy decisions in "early 2020". Pursuing Cabinet decisions by June, however, maintains the "mid-year" commitment for decisions on final remaining policy matters.

41. We are wary of risks of reducing the coverage of this set of regulations (i.e. adopting a phased approach to further progressing the Review), as this would leave a gap in coverage across prevalent areas of risk. This could exacerbate the patchwork nature of prior regulations, and create difficulty in the process of regulatory design for the future stages of regulation development under HSWA, particularly relating to the regulation of hazardous work. In any event, we estimate the difference to be as little as 4 weeks under an alternative, two-phased approach, with RIS approval processes and consultation – across agencies and at a Ministerial level – representing the most extended elements of our proposed forward timetable.

42. Free and frank opinions

## Annexes

Annex One: Detailed list of submitters by industry and cross-sector summary of submissions

Annex Two: Protections for people working with plant

Annex Three: Protections for people working with mobile plant

Annex Four: “Upstream” duties for plant and structures

Annex Five: High-risk plant requirements

Annex Six: Protections for working at heights and scaffolding

Annex Seven: Protections for excavation work

## Annex One: Detailed list of submitters by industry and cross-sector summary of submissions

| Industry | Submitters | Summary of views |
|---|---|---|
| Agriculture (5) | ALHSAG, Federated Farmers of New Zealand, Core H&S Limited, Private Individual, one submitter requesting confidentiality | • Limitations in the ability to pass on costs and proportionate requirements for older plant impressed as a key areas of concern.<br>• A key proposal of contention, general requirements for operator protective device standards (i.e. adjustments to the ≤ 700 kg existing limits) attracted divided opinions – with ALHSAG in favour, but Federated Farmers against.<br>• Supportive of enhanced supplier duties – targeting an improved exchange of information regarding the design and manufacture of plant / structures and their safety risks. |
| Fisheries (9) | E tū members, New Zealand Fishing Health and Safety Forum, seven business submitters requesting confidentiality | • Divergent views across submitters on the proposals.<br>• Interactions with Maritime rules are a matter of primary concern – with the NZ Fisheries Health and Safety Forum submitting in favour of removal from proposed regulations. |
| Forestry (4) | Forest Industry Safety Council (FISC), Stubbs Contractors Ltd, two business submitters requesting confidentiality | • Divergent views across submitters on the proposals.<br>• Contrary to the views of most submitters, FISC disputes the need for new regulations, as distinct from revised, *Approved Code of Practice*, Standards. |
| Other Primary Industry (4) | Kiwifruit Industry Health and Safety Forum, Horticulture New Zealand Incorporated, Meat Industry Association, The New Zealand Arboricultural Association Inc. | • Providing for operator protective devices opposed as a general requirement (more specifically in circumstances where height restrictions apply), but otherwise general support for the adoption of the proposals.<br>• In broad agreement to enhanced supplier duties. |

| Industry | Submitters | Summary of views |
|---|---|---|
| Amusement and Theme Parks (36) | Regional Facilities Auckland, Tauranga Model Marine and Engineering Club, Steam Traction Society Inc, New Plymouth Model and Experimental Engineering Club Inc, Southland Steam Engine Club, Whangarei Model Engineering Club Inc, National Traction Engine Association, Southbrook Traction Engine Club, Confidentiality Cambridge Model Engineering Society, Thames Small Gauge Railway Society Inc., Auckland Society of Model Engineers Incorporated ("ASME"), Otago Miniature Road and Rail Society Inc., Southland Society of Model Engineers, Manukau Live Steamers Incorporated ADR No 1209, Canterbury Society of Model and Experimental Engineers, Model Engineering Association of New Zealand, Rainbows End, AJ Hackett Bungy New Zealand, Consultant, Smile Inflatables, Mahon's Amusements Ltd, Auckland Adventure Park, Boulder Park Ltd, Highlands Motor Park, Totara Springs Christian Centre, Sentinel Inspection Services Ltd, Private Individuals (7), Off Road New Zealand, two business submitters requesting confidentiality | • Generally supportive of a risk-based definition of "amusement device" to achieve better coverage.<br>• Endorsement of continued Territorial Authority involvement.<br>• Widespread requests for more training of operators.<br>• Model engineering groups were strongly opposed to any changes from existing registration requirements |
| Construction (27) | Scaffolding, Access and Rigging New Zealand, Edge Protection NZ Ltd, Scaffcon Ltd, Hilti (New Zealand) Limited, New Zealand Metal Roofing Association, Roofing Association of New Zealand, Civil Contractors New Zealand Inc, Construction Health and Safety New Zealand, SA, Mendo Construction Limited, Mr Shelf, Universal Homes Ltd, LiftX Ltd, (WSP-Opus), Private Individual (2), eleven business submitters requesting confidentiality | • Broad support for proposals – including mandatory controls to prevent falls from heights in construction and regulated design requirements for scaffolding and crane equipment.<br>• A key area of contention, submitters are divided on whether the mandatory hierarchy should apply as a general rule (irrespective of the height of the works) or be subject to a 2 metre minimum threshold.<br>• Supportive of enhanced supplier duties and traffic control measures. |
| Engineers / Engineering Organisation (19) | Electricity Engineers Association, Engineering New Zealand, New Zealand Society for Safety Engineering, Recreation Safety Engineering, ETS Engineers Ltd, Rhodes Engineering and Design Ltd, Confidentiality Rhodes Engineering and Design Ltd, Talley's Group Ltd Nelson - Deep-Sea Division, EHL Group Ltd, Private Individual (7), two business submitters requesting confidentiality | • Supportive of new duties for designers and suppliers.<br>• Keenly interested in steps being taken to ensure that regulatory requirements don't prevent innovation. |
| Manufacturing (5) | Layher Limited, Employers and Manufacturers Association Northern Inc, Oji Fibre Solutions, Private Individual, one business submitter requesting confidentiality | • General support for proposals, including those targeting minimum guarding standards and minimum operator protections for mobile plant. |

| Industry | Submitters | Summary of views |
|---|---|---|
| Passenger Ropeways (6) | Doppelmayr Lifts NZ Ltd, Ski Area Association New Zealand, Private Individual, Ruapehu Alpine Lifts Ltd, Cardrona Alpine Resort, one business submitter requesting confidentiality | • General support for proposals from principal suppliers of equipment, engineers and Confidentiality |
| Power and Gas (11) | Transpower New Zealand Ltd, Genesis Energy Ltd, Powerco, Mercury, Todd Energy, Contact Energy, Methanex, four business submitters requesting confidentiality | • Support for retaining existing inspection regime under PECPR regulations.<br>• Owners of large pressure equipment plant do not support centrally held registers of designs or items of plant.<br>• Concerned that current emphasis on risk-based inspection processes are replaced by "design life" criteria (not proposed). |
| Territorial Authority (5) | Tauranga City Council, Christchurch City Council, Dunedin City Council, Auckland Council, one council requested confidentiality | • General support for proposals for work at heights and excavations.<br>• Mixed views on retaining territorial authority permits for amusement devices. |
| Transport and Freight (6) | Private Individual (2), Ports of New Zealand, Road Transport Forum New Zealand, KiwiRail, + one business submitter requesting confidentiality | • Wide support for mobile plant proposals targeting avoidance of collision.<br>• Supportive of proposals regarding upstream duties and registration of designs.<br>• Separate requirements requested for mobile cranes, sideloaders etc. on trucks (not supported by MBIE – on the basis that the equipment's portability is inconsequential to the risks).<br>• Supportive of customised forklift requirements, incl. training requirements. |
| Union (2) | E tū Union, New Zealand Council of Trade Unions - Te Kauae Kaimahi | • Strongly supportive of the impetus provided by the proposals towards clear, enforceable standards. In favour of regulations ahead of codes / guidance as the means of achieving this. |
| General Submissions – Health and Safety Sector (5) | Private Individual, Workplace Safety Systems Ltd, New Zealand Institute of Safety Management (NZISM), two business submitters requesting confidentiality | NZISM surveyed members in developing their submission. The submission suggested a risk-based approach be used for all workplace activities, with the rationale for new regulations requiring strengthening in some areas. |
| Lifting Industry (5) | The Lifting Equipment Engineers Association, Confidentiality Hoist and Garage Equipment, two business submitters requesting confidentiality | • Support proposals for registration of designs of new types of hoists and lifting equipment as "high-risk plant"<br>• Confidentiality fully supportive of central registers |

| Industry | Submitters | Summary of views |
|---|---|---|
| Other (24) | Private Individual (6), Sims Pacific Metals, MinEx, Southern Architecture Ltd, E Training, IANZ, New Zealand Association of Metal Recyclers Inc, the NZ Motor Industry Association (MIA), Children's Convention Monitoring Group, Certification Board for Inspection Personnel Inc, Bureau Veritas New Zealand Pty Ltd, Seen Safety Limited, Entertainment Production Services Ltd, Upper Hutt Hire Ltd, Sky + four business submitters requesting confidentiality | • Within this group of submitters, there are a range of views, reflecting the varied background and interests of submitters.<br>• The MIA noted that New Zealand is a technology taker of vehicles and has limited influence on design. The submission focused on agricultural vehicles, opposed some proposals (such as removing the below 700kg exemption) and instead suggested risks be managed through a focus on training and compulsory helmets. |

# Annex Two: Protections for people working with plant

## The problem requiring change:

Pre-dating the Health and Safety at Work Act 2015, **existing regulations are now out of step** with the re-engineered, performance-based legislation

Existing regulations are **incomplete in their coverage** of core risks

The 2016 **repeal of the Machinery Act 1950** has left a major gap in base-level requirements regarding machine safety

Presenting as core risk areas for improvement:

- Guarding standards/usage
- Extended life-cycle risk management
- General maintenance and cleaning and maintenance
- Improper design modifications

## Key statistics:

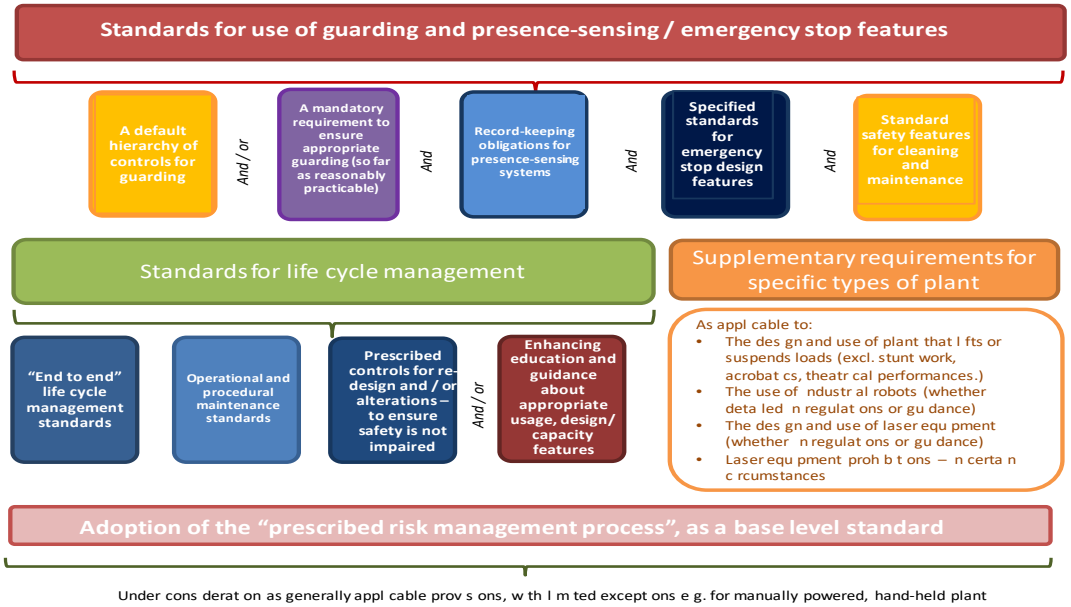
**Fatalities from machinery and tool use injuries correspond to:***

- **77% (59 deaths) in agriculture**
- **43% (14 deaths) in manufacturing**

**24% = the proportion of fatalities caused by being trapped between machinery and equipment in manufacturing**

***As calculated from 2008-2017 SWIFT data, adjusted to exclude fatalities from Pike River.***

## What we consulted on:




## What we heard from submitters:

1. Approximately 80 submitters provided views on this section of the Discussion Paper, from across a mix of manufacturing and wider industries (inclusive of energy sector companies, construction, and waste management, among others). In the main, these submissions endorsed the core risks as we described them.

2. Requiring the general application of the PRMP received broad support, with a number of submitters suggesting they saw the requirements as providing a helpful elaboration of pre-existing HSWA duties. For clarity purposes, formally ascribing key risks was put forward for consideration as a possible variant from what was proposed.

3. Proposals regarding guarding standards attracted wide support from submitters – contingent on mandatory elements only needing to be adopted 'so far as reasonably practicable' (as is proposed). Standards for presence-sensing and emergency stop features were also widely supported, with many submitters seeing these as reinforcing best practice.

4. Proposals addressing cross life-cycle risk management of plant were met with different views. Submitters were predominantly in support of proposals targeting improved maintenance standards, and controls for plant that is re-designed / altered or no longer in use, but generally neutral on introducing obligations for PCBUs to address risks across the life-cycle of plant. Ensuring the appropriate assignment of risk management responsibilities on PCBUs relative to others who may be involved in the supply/commissioning of plant was signalled as central to alleviating concerns regarding this proposal (the intent of the proposals we consider can be better clarified, as a way forward). Submitters requested the provision of clear standards for "competent persons" – as they would apply under proposals to maintain plant and assess alteration and re-design risks.

5. Customised requirements for plant that lifts or suspends loads – as a clear category of plant defined in regulations – was predominantly supported, although claims of potential incompatibilities in relation to common-use forestry equipment is something we propose to further investigate.

6. Submitters were divided in their opinions on the need for additional regulations targeting robotic plant and lasers. The relative ease of updating alternative instruments – such as Approved Codes of Practice – was referred to in several submissions in favour of an alternative, non-regulatory approach.

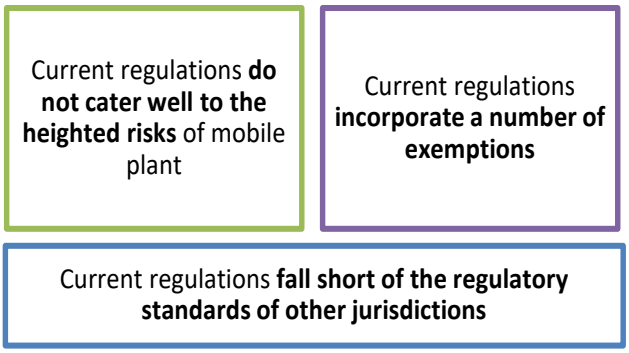
7. In recognition of their in-built safety features, more recently produced powder-actuated tools were recommended as warranting more proportionate treatment.

8. Having the proposed requirements apply broadly across plant (excepting manually-powered hand-held plant, and for at heights stunt/theatrical work) was widely endorsed. How proposals should apply in the case of fisheries and aviation (as sectors with dual regulatory arrangements) we believe requires further consideration.

| Proposals we are seeking to progress: | Proposals that require further work: |
| --- | --- |
| • Specifying in regulations standards regarding:<br>  o application of the PRMP.<br>  o guarding features – wherever practicable – and with regard to a prescribed a hierarchy of guarding measures.<br>  o presence-sensing and emergency stop features – as per Australian *Model Regulations*.<br>  o end-to-end life-cycle management, including maintenance requirements and minimum controls for re-design and/or alteration.<br>• Minimum record-keeping requirements for presence-sensing safeguard systems.<br>• Setting out customised requirements regarding the operation and design of lifting plant, with the coverage of forestry plant to be further considered. | • Prescribed lifting requirements as they may apply for forestry equipment.<br>**WHY?** *Excavators and other hydraulic equipment are frequently used to load vehicles and move product. The sector has requested exclusion of situations where people are not likely to be at risk.*<br>• Further customised requirements for robotics – for inclusion in regulations – and questions about competency requirements for powder-actuated tools.<br>**WHY**? *As niche areas, additional expert advice from WorkSafe is needed to determine our position.*<br>• Requirements for lasers.<br>**WHY**? *Another niche area that requires additional expert advice from WorkSafe.*<br>• Application of the proposals to vessels and aircraft.<br>**WHY?** *Particularly in regard to specialist aviation advice, there is a need to seek additional input before our position can be determined.* |

# Annex Three: Protections for people working with mobile plant

### The problem requiring change:




### Key statistics:

**Mobile plant fatalities from injury:***

- **53% of overall work fatalities (366 deaths)**
- **73% of deaths in agriculture (involving quad bikes and tractors predominantly)**
- **41% (30 deaths) in construction**
- **28% of deaths (9 deaths) in manufacturing**

** As calculated from 2008-2017 SWIFT data, adjusted to exclude fatalities from Pike River.*

### What we consulted on:

- Requiring the PRMP to be followed for specified key risks arising from the use of mobile plant.
- Requiring PCBUs to ensure, so far as reasonably practicable, that a suitable combination of operator protective devices is provided, maintained, and used on mobile plant.
- To ensure the risks of collision are managed effectively, prescribing in regulations:
    - The expectation that collisions are to be avoided and that warning devices are used (as appropriate)
    - A requirement to ensure an adequate field of vision – through the provision of vision devices as needed.
- Whether passengers should be provided an equivalent (or higher) level of protection as operators and / or banned from plant not specifically designed to carry passengers.
- Aligning the definition of "powered mobile plant" (the coverage of the regulations) with the Australian *Model Regulations* – that is, defining mobile plant as that which is 'provided with some form of self-propulsion that is ordinarily under the direct control of an operator'.
- Amending current exemptions from operator protection standards – for instance, applicable to plant ≤ 700kg.
- Specific additional design and operational requirements for forklifts – to supplement the existing "ticket" operator competency requirements.

### What we heard from submitters:

1. We received about 70 submissions on this chapter of the Discussion Paper (about 40 percent of total submissions received), from across a diverse range of groups. Approximately half of those who responded were affiliated with the construction, agriculture, manufacturing, and transport and freight sectors. The Motor Industry Association (MIA) also provided input. Submissions from private persons included one individual who had lost a child to a quad bike accident.

2. Those we heard from within the agricultural sector included Federated Farmers and ALHSAG. Some of those that participated in our meetings, including Dairy New Zealand, did not provide written submissions. Wider competing demands (for instance, the progressing of

Zero Carbon legislation, combined with the time-intensive shearing season) will likely have contributed to this outcome. Further targeted engagement is something we would like to progress in response – as we discuss further in paragraph 17 below.

3. There was broad support for mandatory application of the PRMP for key specified risks, with the clarity and focus this would provide commonly cited as driving this support.

4. There was a good level of support from submitters for requiring a suitable combination of operator protective devices 'within reason' and appropriate to the peculiarities of the given item of plant and its risks. In reference to the agricultural sector, one submitter pointed to the current ACC funding scheme for quad bike crush protective devices as already having started to spur a process of continuous improvement in this area. Agile provisions, accommodating of technology developments, were cited as important by several submitters.

5. While widely supported by submitters, a general requirement on PCBUs to prevent collisions was also considered unduly onerous by some in certain circumstances (reckless driving of vehicles onto a rail line, for instance). Requirements to ensure suitable warning devices were also generally supported. The suggestion these would need to apply as commensurate requirements (i.e. only where there the risk of collision is demonstrably clear) was made in submissions taking a counter view.

6. Submitters strongly supported requiring equivalent protections for passengers and operators, (or even higher protections for passengers), wherever reasonably practicable. An express ban on passengers being carried on plant that is not designed for that purpose was supported in similar numbers but attracted marginally more opposition, primarily on the grounds that this would not be appropriate in certain specific circumstances (practical operator training, for instance).

7. There was strong support for aligning the definition of "mobile plant" with the Australian *Model Regulations*. With reference to several specific examples (vehicle mounted plant, and tractor implement attachments, for example), submitters queried, however, how this definition would be intended to apply in certain circumstances.

8. Under current regulations, mobile plant under 700kg is exempted from the requirement to have rollover protective structures and seatbelts. This exemption exists because rollover protective structures and / or seatbelts are not appropriate for some smaller plant, like quad bikes. Some submitters requested a similar 700kg exemption from the proposed requirement that mobile plant must have a 'suitable combination' of operator protective devices (OPDs).

9. WorkSafe opposes exemptions, because the proposed regulation is flexible and would allow different types of OPD to suit different types of plant. WorkSafe's view is that extending the existing exemption so that mobile plant under 700kg (including quad bikes) would be exempt from the proposed general requirement to have a suitable combination of OPDs would work against efforts here and in Australia to increase use of crush protection devices (CPDs) on quad bikes. In New Zealand this includes ACC's subsidy for CPDs, and WorkSafe's policy clarification promoting the use of CPDs.

10. We would like to continue to work through these viewpoints by undertaking further targeted consultation.

11. Additional proposed requirements for forklifts were broadly endorsed by submitters, given the prevalence of associated harm. Submitters asked that the Approved Code of Practice be updated to provide more comprehensive coverage across areas of acute risk. The operator competency system was also suggested by a number of submitters as in need of review.

**Proposals we are seeking to progress:**

- Requiring:
    - The PRMP for specified key risks.
    - So far as reasonably practicable, an effective combination of operator protective devices (exact coverage TBD).
    - Equivalent (or higher) protections for passengers.
    - The use of warning devices, as appropriate, and devices to ensure an adequate field of vision for operators.
    - Customised design and operational requirements for forklifts.
- Aligning the definition of "mobile plant" with the Australian *Model Regulations*.

**Proposals that require further work:**

- An express prohibition on collisions and passenger prohibitions.

  **WHY?** *We need to further investigate possible refinements, given the prospect of the requirements being impracticable in some circumstances.*

- Whether any mobile plant should be exempted from the requirement to have OPDs – through further targeted consultation.

  **WHY?** *With Federated Farmers favouring exemptions and ALHSAG disagreeing, we would like to engage more with these and other relevant groups on their different view points.*

- Changes to the forklift operator competency regime.

  **WHY?** *We can review this in detail, alongside other issues to do with competency, through our 'Hazardous' work investigations.*

# Annex Four: "Upstream" duties for plant and structures

## The problem requiring change:

There are significant challenges to **imposing** and **enforcing upstream PCBU's duties**, especially where a designer, manufacturer, importer or supplier is located **overseas**

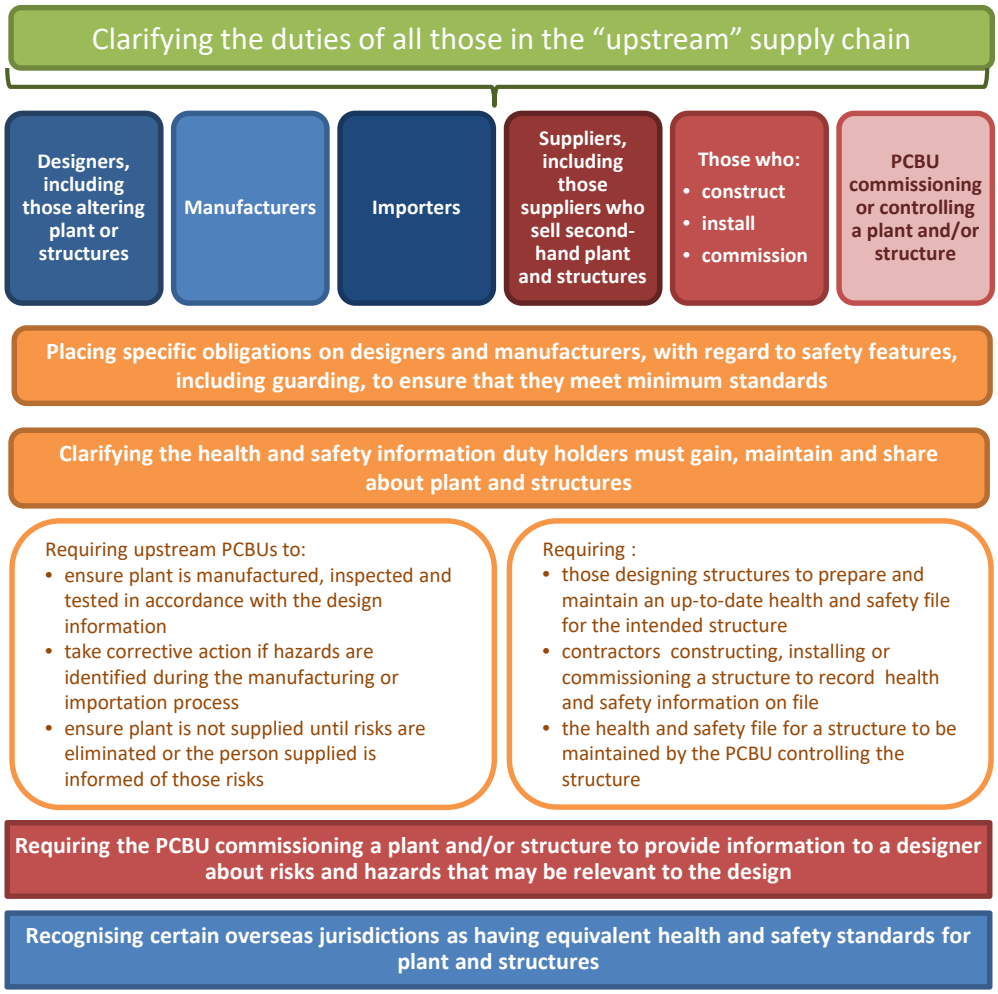
**Imported** and **second-hand plant** and **structures may not meet** New Zealand's health and safety **expectations**

**Adequate information about risks** associated with plant and structure **is not always provided** to, **or implemented** by, downstream PCBUs

**Plant** and **structures are** often **altered in ways that create new risks** to health and safety that are not adequately considered or mitigated

There is **limited or confused understanding** of upstream PCBU's duties and how they may comply with their duties, especially for **alterations** to plant and the **construction** of structures

## What we consulted on:




## What we heard from submitters:

1. Approximately one quarter of submitters provided feedback on this section of the discussion document, with representation across the range of sectors consulted. There was feedback received from a number of engineers who might be involved in the design and manufacture

of plant and structure, as well as two submitters involved in working with Standards and Conformance.

2. Submitters broadly agreed with risks associated with the designing, manufacturing, importing, supplying and constructing, installing or commissioning of plant and structures, and with our proposals for change. Key themes in the submissions included the challenges associated with imposing and enforcing New Zealand health and safety expectations and upstream duties, especially where a duty holder was overseas.

**Proposals we are seeking to progress:**

- Defining roles of "upstream PCBUs" and placing specific duties on them in regulations, including those that:
    - modify plant and structures (in ways that impact health and safety)
    - import and/or supply second-hand plant and structures.
- Setting out the minimum information requirements we expect upstream PCBUs to provide, maintain and share including information:
    - a designer needs to provide to a manufacturer or those constructing, install or commissioning a plant or structure
    - manufacturers, importers and suppliers must take reasonable steps to obtain and pass on
    - a PCBU constructing, installing or commissioning a plant or structure must place on file and make available.
- Requiring PCBUs ordering plant or structures to a supply designer, manufacturer or constructor with information about relevant hazards and risk, so far as reasonably practicable.
- Placing specific obligations on designers and manufacturers, with regard to safety features, including guarding, to ensure that they meet minimum standards.

**Proposals that require further work:**

- Recognising certain overseas jurisdictions as having equivalent health and safety standards for plant and structures.

  **WHY?** *We need to further consider if a focus on jurisdictions or international Standards might be more appropriate, and whether it would be possible to implement such a proposal without requiring a considerable resource commitment.*

# Annex Five: High-risk plant requirements

## The problem requiring change:

| | |
|---|---|
| Gaps and inconsistencies in coverage under existing regulations, with lack of transparency for system participants and regulator. | Uncertainty of which standards apply, and inconsistent application of standards, including by local authorities. |
| High risk plant altered or moved without considering risks to health and safety, including seismic risks. | Uncertain quality of imported plant. |

## What we consulted on:

- Replacing the current *PECPR Regulations* and *Amusement Devices Regulations 1978* with new regulations for "high-risk plant".
- That the new regulations require the registration of designs of certain types of "high-risk plant" and that only equipment of an approved design may be used in workplaces. Questions were also asked regarding:
    - the types of plant and equipment that requirements should apply to.
    - who should be able to approve designs and how best to maintain professional standards of design verification for different classes of equipment.
    - standards that should apply, and whether equivalent overseas registers or other authorisations should be accepted in New Zealand.
- That the new regulations require the registration of individual items of certain types of "high-risk plant", and
    - whether it should apply to amusement devices that are currently required to be registered and/or other types of amusements.
    - whether it should apply to pressure equipment, cranes and passenger ropeways currently subject to the inspection regime under the PECPR Regulations and/or other types of equipment, including some forestry equipment.
    - who should operate and who should maintain the register.
    - whether the current authorisations of inspection bodies and inspection personnel should be maintained.
- Whether **changes** should be made to the regulation of amusement devices to:
    - provide for the inclusion of rides or activities based on the level of risk they present and include new rides and amusements as they are developed or introduced into New Zealand
    - achieve the optimum level of territorial authority involvement required for maintaining public safety with amusement devices
    - specify requirements for operator training, inspection and maintenance of plant

- Whether “type fault” and/or other notification requirements should continue to apply to “high-risk plant”.

## What we heard from submitters:

1. Proposals concerning “high-risk plant” received the highest number of submissions, with between 60 and 70 submissions received on the more significant changes, and extensive submissions from a range of industry and professional groups, specialist engineers or interest groups and several significant engineering asset owners.

2. There has been a high level of support and engagement from the engineering profession involved with “high-risk plant”. Detailed submissions were received from Engineering New Zealand, specialist professional groups concerned with the different classes of equipment industry groups and trade associations, and several significant asset owners of pressure equipment.

3. With WorkSafe’s support, we had a good level of engagement with amusement device operators and received detailed submissions from the industry group (NZOAD), several individual operators, and the specialist engineering group. Twelve model engineering clubs and societies submitted and four traction engine enthusiast groups.

*Overall levels of support*

4. In summary, there was good support for replacing the current PECPR Regulations and *Amusement Device Regulations 1978* with modernised regulations for “high-risk plant”. Support was particularly clear from the engineering profession and specialist groups concerned with different types of equipment who consistently supported the regulations being made more transparent through registration processes, and suggested there are gaps in coverage currently that need to be addressed. The only body of opposition was from the 12 model engineering clubs and 11 individual enthusiasts submitting.

5. Support for accreditation and inspection processes being retained in new regulations was almost unanimous. There was support for including most of the new categories of plant as proposed, but opposition to some others, most notably the various types of steep slope forestry harvesting equipment.

6. A range of significant purchasers or users of “high-risk plant”, including the construction sector, ports, property interests, territorial authorities, and other types of manufacturing were supportive of both registers.

7. There was a good level of support for establishing a register of designs from both users and suppliers of plant.

8. Each of the amusement device, cranes and lifting equipment, and passenger ropeway industries provided clear support for central registration of both types.

9. Some owners of large scale pressure equipment were opposed to both design registration and registration of items of plant. These included meat processors, a paper and board manufacturer, and power generators – some of which operate older equipment that is inspected under the PECPR regulations but if installed before 1999 may not have been design verified or any reassessment completed of their design or service life, which is proposed. There was similar opposition from operators of vintage steam traction engines. We wish to work with these asset owners and interest groups to determine how we can achieve more transparency for the regulator, while maintaining intellectual property rights and not creating undue administrative or engineering consultancy costs.

*Design register*

10. There was good support for a design register for equipment currently required to be design verified under *PECPR Regulations*, and for most of the types of access equipment, scaffolding systems etc. that were proposed:

    a. There was support for the equipment prescribed in the Australian *Model Regulations* but resistance to including forestry equipment. In contrast to the views of MBIE and WorkSafe, the sector would prefer to maintain an *Approved Code of Practice* over specifying requirements in regulations. We will as a result need to engage more with the sector on this aspect.

    b. Engineering New Zealand have indicated support for improving professional standards for design verification of different classes of equipment, and we received other detailed submissions on how to do this

    c. There was mixed support for accepting Australian state registrations. We will work with WorkSafe and engineering bodies to ensure design verification quality standards and seismic performance standards are not compromised by any recognition of other registers.

    d. There was good support for a provision making it an offence for a PCBU to supply high-risk plant that is not design registered

*Registration of individual items of plant*

11. There was good support for introducing a register of items of plant, with:

    a. Strong support for retaining the registration of amusement devices, while keeping CPEng as responsible for inspection.

    b. Good support for introducing a new register of pressure equipment, cranes and passenger ropeways currently subject to the inspection regime under the PECPR Regulations and/or other types of equipment, including some forestry equipment.

    c. Mixed support from larger pressure equipment asset owners, as noted above.

    d. Strong support for retaining existing inspection body and inspection personnel accreditations and processes for inspection.

    e. General support for maintaining existing “type fault” notification requirements for all categories of “high-risk plant”

12. Some submitters, particularly owners of large quantities of plant, or large scale plant, referred to costs of registration as an issue. We will work with WorkSafe to determine the desirable level of functionality with the registers and to clarify costs to users.

*Amusement devices*

13. A majority of submissions on proposals for amusement devices were from model engineering clubs and societies. They are opposed to any changes to the system of Model Engineering Association of New Zealand Incorporated (MEANZ) accredited inspections (i.e. rather than by a Chartered Professional Engineer (CPEng)) under the current regulations, as is required for other amusement devices. We would like to undertake further work with this group to determine whether regulations can maintain and encourage improvements in the standards of inspection.

14. From the remaining submitters there was good support for:

    a. adopting the risk-based definition of "amusement device" from the Australian *Model Regulations* that is, defining such regulations as applying to a broader range of engineered recreational activities, according to risk. The definition will need to be modified to preserve the split between amusement devices and adventure activities, because Australian states do not have an adventure activities regime

    b. retaining territorial authority involvement for mobile amusement devices only (we will need to work with Local Government NZ to better define this and consider applicable fees).

    c. introducing new requirements for operator training, inspection and maintenance of plant.

| **Proposals we are seeking to progress:** | **Proposals that require further work:** |
|---|---|
| • Replacing the *Amusement Device Regulations 1978* with regulations for "high-risk plant" based on the Australian Model Regulations, and using a risk-based approach to determine coverage of different amusement devices.<br>• Replacing the *PECPR Regulations* with regulations for "high-risk plant" based on the Australian Model Regulations, while retaining existing accreditations for inspection bodies and inspection personnel.<br>• Establishing a (WorkSafe operated) register of designs of "high-risk plant" and associated competencies and processes for design verification. Coverage to continue for amusement devices, and also pressure equipment, cranes and passenger ropeways currently inspected under HSWA regulations, and:<br>o Scaffolding systems<br>o Hoists, lifting and access equipment (other than that covered by the Building Act)<br>o New classes of hydraulic boom lifting equipment<br>• Establishing a register of items of "high-risk plant", operated by WorkSafe, accessed and updated by accredited inspection bodies and inspection personnel (i.e. as accredited under the current PECPR regulations).<br>• Maintaining current type fault notifications for all categories of "high –risk plant". | • Whether to include the registration of designs and/or items of certain classes of "high-risk plant", including:<br>o steep slope forestry harvesting equipment<br>o large scale and "bespoke" pressure equipment (or whether there should be scope for asset owners to maintain their own records)<br>o thresholds for some classes of lifting equipment, hoists etc. for item registration<br>o thresholds for registration and inspection of piping associated with pressure equipment<br>• Classes of equipment for which Australian state design registrations should be recognised in New Zealand and/or be subject to further seismic performance requirements or other review by an engineering professional.<br>• Transitional provisions for moving existing plant onto both registers – including requiring an assessment of "design life" or "service life" as a prerequisite to registration, and excluding legacy equipment where appropriate.<br>• Maintaining existing MEANZ accredited inspection processes for model engineering clubs etc. while formalising and improving the auditing of engineering inspection. |

| Proposals we are seeking to progress: | Proposals that require further work: |
| --- | --- |
| • Making it an offence for PCBUs to use or supply “high-risk plant” that is not design registered. | • Operator training, maintenance and inspection requirements, and associated record keeping and amusement devices.<br>• Clarifying the coverage of “high-risk plant” on ships and aircraft.<br>• Funding and administrative arrangements for the registers. |

# Annex Six – Protections for working at heights and scaffolding

## The problem requiring change:


## What we consulted on:

- Requiring the PRMP for work at heights in all workplaces, including construction.
- For construction work, requiring a mandatory hierarchy of controls for work at height, in the order of – safe working platform, followed by fall prevention, and finally, fall arrest.
- Whether "reasonably practicable" should be the standard for moving between steps in the hierarchy.
- Whether there is a height threshold below which the hierarchy should not apply.
- Whether there is a minimum duration below which the hierarchy should not apply.
- Aligning the definition of "construction work" and coverage of the construction-specific regulations – with the Australian *Model Regulations*.
- Whether the current competency requirements for scaffolding work should be retained or modified.
- Whether scaffolding systems and/or components should be registered designs as "high-risk plant".
- Who should design, notify and inspect scaffolding in specified circumstances.

## What we heard from submitters:

1. We received about 60 submissions on the work at heights and scaffolding proposals (about 30 percent of all submitters). Half of those were from the construction sector and half from other sectors, many of which commissioned construction works or were responsible for work at heights in non-construction workplaces.

2. Engagement with the construction sector involved SARNZ and CHASNZ, Civil Contractors NZ and individual scaffolding and rigging businesses, and a small number of construction firms. We heard from only one larger construction firm, and no trades bodies, ITOs or peak bodies such as Registered Master Builders or Site Safe. But the sector is experiencing consultation fatigue, and we engaged with these groups before public consultation, when they expressed broad approval with the proposals. Larger firms said they were already meeting the standards and practices proposed, and certain key groups indicated that they would engage with SARNZ, who consulted within the sector and provided a comprehensive and supportive submission. In response to this, we would like to engage further with key sector groups as proposals are developed.

3. There was broad support for requiring the PRMP for work at heights in all workplaces, including construction. Submitters from the forestry, meat processing, electrical supply and other sectors referred to the particular needs of their sector and that codes or best practice guidelines were already in place or should be developed. Several sector groups said that the construction hierarchy of controls we are proposing for construction would not necessarily be helpful for their sector.

4. There was, on the other hand, strong support for requiring a mandatory hierarchy of controls for work at heights in construction work. Numerous submitters said that this was already accepted practice and was consistent with the current WorkSafe best practice document.

5. While most submitters agreed that "reasonably practicable" should be the standard for moving between steps in the hierarchy, WorkSafe has some reservations about this language and we will continue to work with them to confirm what the standard for moving between steps in the hierarchy should be.

6. Submitters were divided on whether there should be a height threshold below which the hierarchy of controls should not apply. Of 43 submitting, 19 said there should not be one, and 16 said there should. Of the 16 in favour, ten preferred 2 metres and two preferred 3 metres as a threshold.

7. There was overall opposition to regulations setting a duration below which the hierarchy does not apply. But nearly a third of the 41 submitters on the topic expressed a preference for a fourth step in the hierarchy that provides criteria for determining situations where work may be carried out from a ladder and/or minimum standards for ladder work.

8. There was strong support for aligning the definition of "construction work" with the Australian *Model Regulations*. Submitters asked for electrical maintenance work and cleaning to be excluded from the definition.

9. There was strong support for amending the regulations to reflect the competency requirements for scaffolding currently in WorkSafe's best practice guidance, i.e. elementary, intermediate, advanced and suspended. There was corresponding support for SARNZ retaining its role as issuing agency.

10. There was strong support for scaffolding systems (but not individual components) to be registered designs of "high-risk plant". The proposal was supported by SARNZ and the country's largest manufacturer/supplier.

11. There was strong support for retaining a requirement for a competent person to inspect scaffolding weekly when in use and monthly when not in use. There was some support for an additional requirement for PCBUs that supply scaffolding to workplaces to be licensed.

12. Most submitters suggested a certified scaffolder should carry out inspections, but SARNZ proposed the development of a certificate of competency to inspect (i.e. not construct) scaffolding.

13. Submissions supported a regulatory requirement for an engineer to review the design of larger or more complex scaffolds, or where wrap increased the wind load on structures. There was support for a risk-based approach, but not a clear minimum height or type of scaffold that a requirement could apply to.

14. Submitters questioned the need for notifying WorkSafe of all scaffolding work over 5m in height.

| Proposals we are seeking to progress: | Proposals that require further work: |
| --- | --- |
| • Requiring the PRMP for work at heights in all workplaces.<br>• Requiring a mandatory hierarchy of controls for work at heights in construction work.<br>• Aligning the definition of “construction work” with the Australian Model Regulations.<br>• Amending the regulations to reflect the competency requirements for scaffolding over 5 metres in height or with a work surface over 5 metres in height to built by a certified scaffolder of the appropriate type, ie elementary, intermediate, advanced and suspended.<br>• Scaffolding systems (but not individual components) to be registered designs of “high-risk plant”. | • Exploring a possible fourth step in the hierarchy of controls that provides criteria for determining situations where work may be carried out from a ladder and/or minimum standards for ladder work, while considering further whether “reasonably practicable” should be the standard for moving between steps.<br>• Exploring the removal of electrical maintenance work and cleaning from the definition of “construction work”.<br>• Exploring with SARNZ a certificate of competency to inspect scaffolding.<br>• Exploring the potential for requiring the licensing of PCBUs that supply scaffolding to workplaces.<br>• Explore a regulatory requirement for an engineer to review the design of larger or more complex scaffolds. |

# Annex Seven: Protections for excavation work

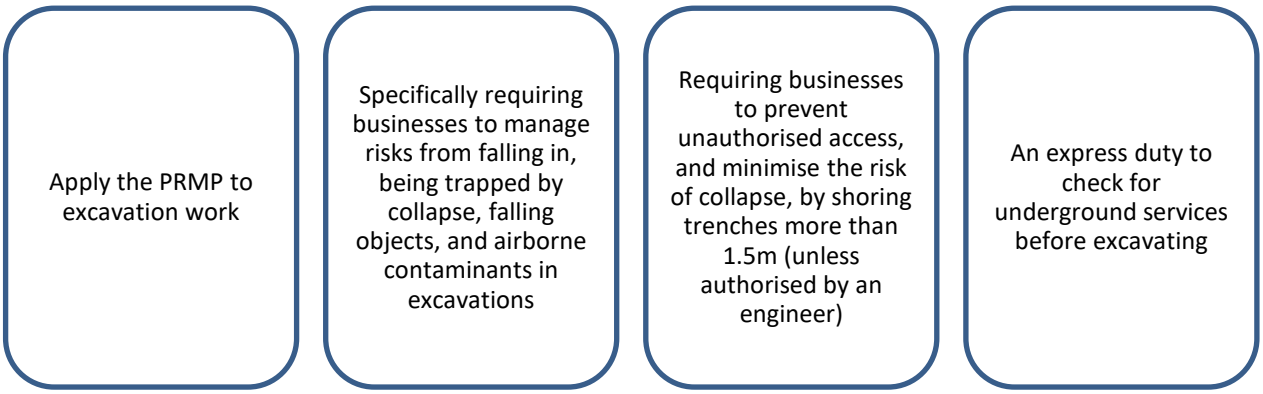
## The problem requiring change:

Excavations and trenches pose risks of collapsing and burying workers, falls into them, unsafe atmospheres, water and other hazards, and striking underground services and we have heard about some problems regarding both how this area is regulated and how this work is carried out.

## Key statistics:

In the ten years from 2008 to 2017, there were four deaths caused by falls of ground/collapse and 27 serious injuries, all of which involved workers in the construction sector.

## What we consulted on:




## What we heard from submitters:

1. Submitters widely supported regulations moving to a risk-management based approach in line with the PRMP for carrying out all excavation work, regardless of depth.

2. Approximately two-thirds of submitters who provided responses on this Chapter supported retaining the existing 1.5 metre depth threshold in guidance for each area where a threshold would apply i.e. notifying WorkSafe, shoring an excavation, and fencing around an excavation. Those who felt the current requirement should be removed pointed to the PRMP being sufficient.

3. Most submitters supported depth thresholds applying to all excavations, not just trenches.

4. The majority of submitters supported that the determination of whether the faces of a trench are “of proven good standing” should be a competent person and / or an engineer.

5. The majority of the submitters indicated that the current requirements for determining the adequacy of shoring were sufficient.

6. Submitters almost universally agreed with the proposal to create an explicit duty to identify underground services, with most of the submitters considering this should be the responsibility of a Person Conducting a Business or undertaking (PCBU). There was debate in submissions between this being the responsibility of the PCBU in charge of the excavation work, or in charge of the workplace. In addition to the PCBU duties above, some submitters suggested further duties, with utility asset and land owners also responsible for ensuring there was information available to be checked. Others suggested overlapping responsibilities between the PCBU with control of the workplace, as well as the PCBU with responsibility for the excavation work.

7. Submitters suggested that this duty could take the form of requiring PCBUs to have documentation that indicated how they had identified underground services. Existing guidance (such as the *WorkSafe Excavation Safety Good Practice Guide*, and the *Guide for*

*Safety with Underground Services*) was suggested as a useful base for how this duty should be carried out.

8. Most submitters indicated that changes proposed would not add significant costs to their operations, as this is consistent with their existing practice.

| **Proposals we are seeking to progress:** | **Proposals that require further work:** |
|---|---|
| • Requiring the PRMP for all excavation work.<br><br>• Implement 1.5 metre depth thresholds for each of notifiying WorkSafe, fencing, and shoring, applying these to all types of excavation.<br><br>• Including an explicit duty for PCBUs with site control over the excavation to check for underground services. | • Supplementary obligations for Utility Asset owners to maintain information on the services underground so that PCBUs can carry out a duty to check for underground services efficiently.<br><br>***WHY**: Having a duty on asset owners was not included in the consultation document, though having access to information may be necessary for a PCBU to carry out a duty to check for services. This is likely to be of particular value for emergency work where a duty to check must be carried out at haste. Targeted consultation on this point with asset owners would be useful.* |