



H2

Summary of submissions – *Enabling Hydrogen: technical changes to safety regulations*

JUNE 2026



Ministry of Business, Innovation and Employment (MBIE)

Hikina Whakatutuki – Lifting to make successful

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Contents

About the consultation	3
Submissions received	3
Summary of submissions	3
Proposals under the Gas (Safety and Measurement) Regulations 2010	4
Proposals under the Electricity (Safety) Regulations 2010	7
Proposals under the Health and Safety at Work (Hazardous Substances) Regulations 2007.....	8
Other work health and safety regulations	11
Next steps	13
Appendix One: Consultation document – <i>Enabling Hydrogen: technical changes to safety regulations</i>	14

About the consultation

MBIE undertook targeted consultation on 10 proposals in the consultation document, *Enabling Hydrogen: technical changes to safety regulations*, between 12 June and 31 July 2025. MBIE invited stakeholders with strong interests in hydrogen, including industry and academia.

The 10 proposals related to technical amendments to the *Gas (Safety and Measurement) Regulations 2010*, *Electricity (Safety) Regulations 2010*, and *Health and Safety at Work (Hazardous Substances) Regulations 2017*. The proposals aimed to support the uptake of hydrogen, mitigate the new safety risks associated with it, address regulatory barriers, reduce compliance costs, and streamline the adoption of standards and frameworks.

MBIE also asked for feedback on any additional changes stakeholders considered should be made to the mentioned regulations, or other regulations that may also have issues in how they apply to hydrogen, or why hydrogen should be treated differently to other flammable gases for these requirements.

Submissions received

Eleven submissions were received from the following stakeholder groups:

- Hydrogen businesses
- Gas Industry
- Standards developer
- Construction
- Transport
- Chemical management

Summary of submissions

Submitters generally agreed that addressing the known issues set out in the consultation document would remove immediate barriers and help to enable the hydrogen sector to safely develop. They reiterated the need for the government to be able to make quick regulatory changes and align with international standards and practices.

The table below sets out the summary of feedback from submitters.

Detail of the proposals and the questions that were asked can be found in the consultation document at **Appendix One**.

Proposals under the Gas (Safety and Measurement) Regulations 2010

Status quo	What was being proposed?	Submitters' feedback summary
Proposal 1: Allowing alternatives to odourisation requirements		
<p>Existing regulations require all gas to be odourised to manage and detect leaks.</p> <p>Odourisation can cause problems for some hydrogen uses and impact operations (e.g. hydrogen for fuel cells requires 100 percent purity).</p> <p>Alternatives to odourisation are not currently permitted by the regulations and businesses need to get an exemption from WorkSafe which adds cost, time, and complexity.</p>	<p>Amend the gas safety regulations to enable safety instruments to be made that could, in the future, provide alternatives to the requirements for gases to be odourised.</p>	<p>The majority of submitters responded to the questions and agreed with this proposal, considering it to be the most practical approach. Feedback included:</p> <ul style="list-style-type: none"> • consider risks associated with gas leakage and detection in road corridors and other publicly accessible locations • permit controls for the movement, storage, and use of 'necessarily un-odourised' gas • alternatives should not be prescriptive. <p>Suggested alternatives included:</p> <ul style="list-style-type: none"> • remove odourisation requirements for hydrogen produced for refuelling as hydrogen for fuel cell vehicles requires 100% purity • consider ultrasonics, mass balance pressure and flow monitoring, and other un-odourised options • consider gas detectors, however they could be at a cost to the consumer.
Proposal 2: Providing for easier approval of hydrogen appliances and fittings		
<p>The existing certification regime and endorsement process is not suitable for appliances and fittings for hydrogen or hydrogen blend. As hydrogen businesses grow, the current alternative</p>	<p>Amend the gas safety regulations to:</p> <ol style="list-style-type: none"> 1. enable safety instruments to be made that could add or modify the certification standards and bodies listed in Schedule 2A of 	<p>The majority of submitters responded to the questions and agreed with the proposals. Feedback included:</p> <ul style="list-style-type: none"> • use the latest standards and versions

Status quo	What was being proposed?	Submitters' feedback summary
<p>endorsement process may also become unavailable.</p> <p>There is a need for alternative criteria specifically for endorsing hydrogen or hydrogen blend appliances.</p>	<p>the gas safety regulations relevant to hydrogen as they develop; and</p> <p>2. allow certain appliances operating on hydrogen or hydrogen blends, to be endorsed by approved practitioners instead of being certified, even if not 'small production appliances'.</p>	<ul style="list-style-type: none"> • ensure appropriate safeguards, and establish clear processes for endorsement accessible to product importers and manufacturers • use an industry Code of Practice (CoP) instead of safety instruments. <p>Some noted the following issues in relation to the 'endorsement by an approved practitioner' proposal:</p> <ul style="list-style-type: none"> • consider cost of the endorsement process to the end-users • provide training facilities and curriculum for approved practitioners, as there are currently none with the required competence.
Proposal 3: Establishing specific requirements for hydrogen fuelling stations		
<p>The current requirements are not suitable for hydrogen fuelling stations on matters such as measurement, maximum filling pressures of dispensers, maintenance and operating requirements.</p>	<p>Develop a package of specific requirements for hydrogen fuelling stations similar to that used for compressed natural gas (CNG) stations, with specialised requirements in place of the more general obligations under the current gas safety requirements.</p>	<p>The majority of submitters responded to the questions and agreed with the proposal. Feedback included:</p> <ul style="list-style-type: none"> • develop a specific package for hydrogen encompassing only the points of difference to already robust fuelling station requirements • develop requirements that are broad and ensure availability of suitable people for calibration • using standards for certification can add costs and barriers to innovation • consider aligning the requirements with international practices and

Status quo	What was being proposed?	Submitters' feedback summary
		<p>relevant standards – several are already adopted</p> <ul style="list-style-type: none"> • develop requirements for hydrogen production facilities as well. <p>Technical feedback included:</p> <ul style="list-style-type: none"> • maximum filling pressures for dispensers may not be required • include gas fuel quality analysis and product specification • disparities exist in some of the standards • consider consumer rights by ensuring precise weights and measurements when hydrogen is dispensed.
Proposal 4: Providing for gas safety instruments to future-proof regulations		
<p>Certain other requirements may not be suitable for hydrogen use and application.</p>	<p>Certain requirements, as in the table under Proposal 4 of the consultation document, to be supported by safety instruments to future-proof the regulations and provide clarity.</p>	<p>The majority of the submitters responded to the questions and agreed with the proposal. Feedback relating to risks included:</p> <ul style="list-style-type: none"> • safety instruments should not be unnecessarily prescriptive • the use of safety instruments carries the risk that they may be overlooked, as they are not set out in regulations • some of the listed standards in the consultation document are out of date • ensure consultation with industry before determining safety instruments • gas measurement is not a safety issue, and there is a need to consult with the co-regulator responsible for

Status quo	What was being proposed?	Submitters' feedback summary
		<p>implementing governance rules</p> <ul style="list-style-type: none"> • add 'low-risk' and 'high-risk' gas fittings. <p>Feedback relating to unnecessary barriers included:</p> <ul style="list-style-type: none"> • reference the standards only, and not their date, so that constant updates will not be required • remove potential technical and process barriers to help build investor confidence and reduce costs • explicitly include hydrogen in the <i>Gas Act 1992</i> • conflicting requirements across all regulations make compliances impossible without exemptions.

Proposals under the Electricity (Safety) Regulations 2010

Status quo	What was being proposed?	Submitters' feedback summary
Proposal 5: Providing for electricity safety instruments to future-proof regulations		
<p>Certain other requirements may not be suitable for hydrogen use and application.</p>	<p>Certain requirements, as in the table under Proposal 5 of the consultation document, to be supported by safety instruments to future-proof the regulations and provide clarity.</p>	<p>Some submitters responded to these questions and agreed with the proposal. Feedback related to risks included:</p> <ul style="list-style-type: none"> • safety instruments should not be unnecessarily prescriptive • without an index or catalogue of safety instruments, there is a risk that requirements may be missed • ensure consultation with industry before determining safety instruments

Status quo	What was being proposed?	Submitters' feedback summary
		<ul style="list-style-type: none"> • alignment with international standards and best practice. <p>Feedback related to unnecessary barriers:</p> <ul style="list-style-type: none"> • reference only the standards, and not their date so constant updates won't be required • could remove barriers by permitting the use of ATEX-certified equipment to facilitate the introduction of hydrogen infrastructure, reduce maintenance costs and costs of hydrogen per unit.

Proposals under the Health and Safety at Work (Hazardous Substances) Regulations 2007

Status quo	What was being proposed?	Submitters' feedback summary
Proposal 6: Enabling the use of multiple-element gas containers (MEGCs)		
<p>Several requirements in the regulations relating to separation of containers effectively prevent MEGCs being used to store hydrogen, and alternative means are not enabled to manage the risks of leaks or containment breaches.</p>	<p>Amendments to the regulations to allow MEGCs and similar storage containers to be treated as a single system for separation requirements, and set requirements to better manage the risks of leaks through alternative means, including system design controls and separation of MEGCs from protected and public places.</p> <p>Specific proposed changes included:</p> <ul style="list-style-type: none"> • remove MEGCs from the exclusion in the definition of 'stationary tank' to allow MEGCs to 	<p>Some submitters responded to the questions, and they supported the proposal.</p> <p>Specific feedback included:</p> <ul style="list-style-type: none"> • removing any conflicting requirements related to the <i>Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) regulations 1999</i> (PECPR) • classifying MEGCs vessels as cylinders • retaining separation requirements while enabling a MEGC to be classified as a single 'stationary tank' by definition, subject to those requirements

Status quo	What was being proposed?	Submitters' feedback summary
	<p>be used as permanent storage for hydrogen</p> <ul style="list-style-type: none"> • remove MEGCs and similar hydrogen containers from the requirements for tanks containing flammable gases to be separated • aggregate quantities of gas stored across multiple containers containing flammable gases to be separated from public and protected places. 	<ul style="list-style-type: none"> • amending regulations to allow MEGCs and hydrogen storage containers to be considered as a single tank • not completely excluding MEGCs at (c)(ii) as proposed, include at (b) with specifications.
Proposal 7: Recognising MEGCs meeting ADR standards		
<p>The <i>European Agreement concerning the International Carriage of Dangerous Goods by Road (2023)</i> (ADR) provides requirements for transporting dangerous goods (including hydrogen) by road.</p> <p>The <i>United Nations Recommendations on the Transport of Dangerous Goods</i> (UNRTG) is required by regulations, but the ADR is not.</p>	<p>Amendments to the regulations to provide that a MEGC that complies with the ADR (and meets all other relevant requirements) may be used as a transportable container for hydrogen and other hazardous substances.</p>	<p>Submitters generally agreed with the proposal.</p> <p>One submitter disagreed with the proposal and suggested using the updated version of the UNRTG (2025).</p>
Proposal 8: Setting requirements for cryogenic liquid hydrogen		
<p>Several projects and businesses are considering manufacturing and using liquid hydrogen.</p> <p>Liquid hydrogen is not currently authorised in New Zealand, but several companies are considering applying for approval to import or manufacture under the existing <i>Hazardous</i></p>	<p>Setting requirements for cryogenic liquid hydrogen in the regulations to prepare for its likely use in the future.</p>	<p>Submitters agreed with the proposal. Feedback included:</p> <ul style="list-style-type: none"> • a suite of internationally adopted standards is available to support the use of storage tanks expressly designed for liquid hydrogen • further consideration of transportation requirements, including for use onboard and transporting liquid hydrogen,

Status quo	What was being proposed?	Submitters' feedback summary
<i>Substances and New Organisms Act 1996.</i>		<p>guided by relevant international standards</p> <ul style="list-style-type: none"> • consider that tank pressure, when storing liquid hydrogen, is not significantly different from LPG • ensure requirements are easy to navigate to support compliance.
Proposal 9: Providing for Safe Work Instruments to future proof regulations		
Some other requirements may not be suitable for hydrogen use and application.	<p>Some areas of the Hazardous Substances Regulations, as identified in the table under Proposal 9 of the consultation document, should be supported by Safe Work Instruments to provide a mechanism for requirements to be altered as standards and hydrogen practices develop. These relate to:</p> <ul style="list-style-type: none"> • managing risks of ignition of flammable gasses and liquids • modifying or adding to the requirements for hydrogen fuelling stations • providing additional standards or requirements for approving a dispenser for use for the retail sale of a flammable gas or liquid 	Submitters agreed with the proposal and did not identify any additional risks.
Proposal 10: Updating references to Standards		

Status quo	What was being proposed?	Submitters' feedback summary
Two standards in the regulations with relevance to hydrogen, are outdated and as new versions have been issued.	<p>Update references to new versions of two standards in the regulations:</p> <ol style="list-style-type: none"> Version 23 of the <i>United Nations Recommendations on the Transport of Dangerous Goods Model Regulations</i> (UN Model Regulations) Standard AS/NZS 60079.01 referenced from the 2009 version to the 2022 version (including Supplement 1 (2022)). 	<p>Submitters agreed with the proposal and did not identify any additional risks. Feedback noted:</p> <ul style="list-style-type: none"> version 24 of the UN Model Regulations was adopted in July 2025 the need to ensure the correct citation is referenced for the standard AS/NZS 60079.10.1.

Other work health and safety regulations

Status quo	What was being proposed?	Submitters' feedback summary
Other work health and safety regulations		
<p>Previous industry engagements and consultations raised concerns about two other sets of work health and safety regulations:</p> <ul style="list-style-type: none"> the <i>Health and Safety at Work (Major Hazard Facilities) Regulations 2016</i> the <i>Health and Safety in Employment (Pressure Equipment, Cranes and Passenger Ropeways) Regulations 1999</i>. <p>Submitters were asked to provide feedback under these regulations they considered should be made to remove unnecessary barriers to the use of hydrogen.</p>	<p>As noted in the consultation document, MBIE did not identify any specific issues with the regulations related to hydrogen.</p>	<p>Submitters provided feedback that MBIE should:</p> <ul style="list-style-type: none"> review requirements across all regulations as currently some conflict and make compliance difficult without seeking exemptions amend various notification periods under Regulation 10.26, relating to <i>duty of PCBU to establish hazardous substance location</i> increase the onsite hydrogen volume threshold that triggers the Location Compliance Certificate (LCC) requirement harmonise New Zealand's approach with Australian

Status quo	What was being proposed?	Submitters' feedback summary
		<p>standards to improve regulatory consistency</p> <ul style="list-style-type: none"> • reduce the separation area for hydrogen in cylinders from protected places and public places to reflect proposed changes • introduce hydrogen-specific additions (similar to the approach taken for LPG) to relevant regulations that adjust volume triggers • implement flammable gas signage/ placarding where hydrogen is used as a component in a process within a system • have leak testing routines and environment monitoring in enclosed locations and auto-ignition of high-pressure relief device release, due to gas velocity • evaluate requirements related to other areas including Maritime Rules, Pressure Equipment, Cranes, and Passenger Ropeways, and pipework.
<p>Submitters were asked if there were any requirements under other energy safety, or work health and safety regulations, they consider should be changed to remove unnecessary barriers to the use of hydrogen.</p>	<p>As noted in the consultation document, MBIE did not identify any specific issues with the regulations related to hydrogen.</p>	<p>Submitters provided feedback that MBIE should:</p> <ul style="list-style-type: none"> • review all applicable regulations and ensure any requirements are outlined in one set of regulations • ensure New Zealand certification standards align with those used in Europe and other countries and align with the site signage and placarding required by Safe Work Australia

Status quo	What was being proposed?	Submitters' feedback summary
		<ul style="list-style-type: none"> • set requirements for approval of vapourisers as liquid hydrogen requires vapourisers • evaluate requirements for testing of cylinders and fittings to ensure testing to international standards for the high pressures involved • prohibit underground storage potentially requiring different levels of control/different risks across several classification categories under the Globally Harmonised System (GHS).

Next steps

We thank all submitters for their time and consideration they put into making their submissions.

MBIE incorporated the feedback and views into advice to the Minister for Energy and Minister for Workplace Relations and Safety.

In December 2025, Cabinet agreed to the proposals. The Cabinet paper is available at: <https://www.mbie.govt.nz/dmsdocument/31767-regulatory-changes-to-support-development-of-the-hydrogen-sector-proactiverelease-pdf>.

Amendment regulations are in the process of being developed to implement these decisions. Some of the technical issues raised in feedback will be addressed through the development and implementation of the proposals.

Appendix One: Consultation document – *Enabling Hydrogen: technical changes to safety regulations*

Enabling Hydrogen: technical changes to safety regulations

Background to this consultation

In November 2024 the Government released the [Hydrogen Action Plan](#), setting out its vision and commitment to enabling the hydrogen sector. One of the key priorities in the Action Plan is to create an enabling regulatory environment that allows businesses to choose the best technology for their needs, while keeping workers and the public safe.

This consultation is a first step towards addressing this priority. Technical amendments to energy safety and work health and safety regulations can help address unnecessary barriers, streamline the adoption of international standards, and better allow for future development of the sector.

Alongside these technical amendments, Standards New Zealand has an ongoing programme of work to identify and adopt joint and international standards for good practices in the hydrogen sector.¹

What is this consultation about?

This consultation focuses on potential changes to the *Gas (Safety and Measurement) Regulations 2010*, *Electricity (Safety) Regulations 2010* and *Health and Safety at Work (Hazardous Substances) Regulations 2017*.

In the sections below we identify and suggest changes to address a number of technical issues and inefficiencies in these regulations, based on feedback from previous consultations and work with the sector. In addition to your comments on these, we would also like to hear any other suggestions you have for where energy safety or health and safety at work regulations do not reflect hydrogen technologies, are unclear in how they apply to hydrogen, or otherwise may not be fit for purpose.

The changes we are focusing on in this process are quick, targeted amendments to existing regulations, rather than major system changes. While we are happy to receive any feedback on how you think overall safety regulation for hydrogen is performing and should evolve, at this stage we want to focus on addressing known issues and targeted fixes that can be made and start producing benefits quickly.

Note this consultation does not include changes to **transport rules and regulations**. The Ministry of Transport also intends to review regulatory barriers to uptake of low emissions heavy vehicles, including as these relate to hydrogen-fuelled vehicles.

¹ For more information on this, see www.standards.govt.nz/assets/documents/news/hydrogen-report-v2.pdf

Contents

Enabling Hydrogen: technical changes to safety regulations	14
Background to this consultation	14
What is this consultation about?	14
Contents	15
Changes to the Gas (Safety and Measurement) Regulations 2010	16
Proposal 1: Allowing alternatives to odourisation requirements.....	16
Proposal 2: Providing for easier approval of hydrogen appliances and fittings.....	17
Proposal 3: Establishing specific requirements for hydrogen fuelling stations.....	18
Proposal 4: Providing for Gas Safety Instruments to future-proof regulations.....	19
Changes to the Electricity (Safety) Regulations 2010	22
Proposal 5: Providing for Electricity Safety Instruments to future-proof regulations.....	22
Changes to the Health and Safety at Work (Hazardous Substances) Regulations 2017 ...	24
Proposal 6: Enabling the use of multiple-element gas containers	24
Proposal 7: Recognising MEGCs meeting ADR standards.....	26
Proposal 8: Setting requirements for cryogenic liquid hydrogen.....	26
Proposal 9: Providing for Safe Work Instruments to future proof requirements	28
Proposal 10: Updating references to Standards	30
Other work health and safety regulations	32
Next steps	32

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Use and sharing of information

The Official Information Act 1982 and Privacy Act 1993 apply to submissions. Please clearly indicate in your cover letter or email if you object to the release of any information in your submission. MBIE will take such objections into account and consult with submitters when responding to requests.

MBIE will use the information provided in submissions to develop policy advice. Information provided may be shared with WorkSafe to assist in policy development.

Changes to the Gas (Safety and Measurement) Regulations 2010

The *Gas (Safety and Measurement) Regulations 2010* (the GSM Regulations) provide requirements for the safe supply and use of gas. This includes setting minimum safety standards for gas installations, distribution systems and appliances, and for work conducted on these. These regulations apply to installations, distribution systems and appliances using hydrogen as a fuel.

In most areas, we consider the GSM Regulations are suitable in how they regulate hydrogen. However, there are several areas we consider changes can be made to help future-proof requirements and generally better enable these regulations to support a growing hydrogen industry. The four changes we are proposing to these regulations are set out below.

Background information: Safety Instruments

A number of the changes we are proposing to the GSM and Electricity Safety Regulations involve adding provisions for 'Safety Instruments' to be made. Safety Instruments are a regulatory tool that can be made by WorkSafe (after consultation with industry and agreement by the relevant Minister) that can add to or modify the requirements of a regulation. A common use of Safety Instruments is to provide a list of Standards that a business or operation can follow to comply with a regulation.

Because Safety Instruments can be made by WorkSafe, they are generally quicker and easier to make and keep up to date than requirements that are listed directly in regulations. This makes Safety Instruments useful for matters like referencing Standards that regularly have new versions issued or where further Standards may need to be added to a regulation over time.

Safety Instruments are a well-established tool in the Health and Safety at Work system and were added to transport regulatory systems in 2021. However, their general use in gas and electricity safety regulations has only been recently enabled by the *Regulatory Systems (Immigration and Workforce) Amendment Act 2025*, which was enacted in March 2025. You can read this Act [here](#).

Proposal 1: Allowing alternatives to odourisation requirements

Regulations 16 to 19 of the GSM Regulations provide requirements for all gas supplied into a distribution system or installation, or supplied from a container, to be odourised.²

Odourisation is a well-established method to detect and manage the risks of gas leaks.

However, odourisation is problematic for some hydrogen uses. For example, common odourants can cause damage to fuel cells and may impact the efficacy of some hydrogen storage methods. Alternative means to manage risks of leaks, such as gas detectors, may be options to avoid these issues, but are not currently permitted by the regulations.

At this time, we have not identified a fully appropriate alternative requirement or Standard to adopt in place of odourisation for hydrogen. However, we consider it likely that

² Subject to limited exceptions for gas transmission systems and large-scale installations.

appropriate alternative risk control standards will be developed, and want to enable the GSM Regulations to easily recognise these alternatives as they emerge.

We propose amending the GSM Regulations to allow Gas Safety Instruments to be made that can, in the future, provide alternatives to the requirement for gases to be odourised.

A Safety Instrument approach will also have the advantage of allowing alternatives to odourisation requirements to be specifically tailored to particular gases, or blends of gases, where required.

Q1	Do you agree with the proposal to allow odourisation requirements to be modified by a Gas Safety Instrument? Why/why not?
Q2	Are there any alternatives to odourisation for hydrogen and/or hydrogen-blend systems you think the regulations should permit?

Proposal 2: Providing for easier approval of hydrogen appliances and fittings

Subject to some limited exceptions, all gas appliances manufactured in, or imported into, New Zealand must be certified to a relevant safety standard. WorkSafe can also specify gas fittings that must be certified (regulations 54 and 64).

Regulation 55 sets out the requirements for an appliance or fitting to be considered 'certified'. An appliance or fitting must be certified to one of the Standards relevant to that appliance or fitting listed in Schedule 2A, by one of the certifying bodies identified in that Schedule.

Regulation 57 provides an alternative to certification for some appliances. This regulation allows some appliances to be endorsed as safe by a person approved by WorkSafe, rather than certified to a Standard. However, this endorsement option is only available for 'small production appliances' that either are of limited quantity (21 or fewer supplied in New Zealand each year) or that form part of an imported gas installation.

These requirements can be problematic for hydrogen as many of the certification Standards currently listed in Schedule 2A do not apply to, or are not suitable for, appliances and fittings that use hydrogen or hydrogen blends above a low blend ratio. As hydrogen businesses grow and more appliances are supplied, the alternative endorsement process under regulation 57 may also become unavailable.

To address these issues, we propose:

- **Allowing Gas Safety Instruments to be made that can add to or modify the certification Standards and bodies listed in Schedule 2A.** This change will allow additional Standards and certification bodies relevant to hydrogen to be recognised under the regulations as they develop.
- **Amending the regulations to allow certain appliances that operate on hydrogen or hydrogen blends to be endorsed by an approved practitioner instead of certified, even if not 'small production appliances'.**

Specifically, we suggest appliances that operate on hydrogen or hydrogen blends that fall outside the scope of the Wobbe limits specified in NZS 5442 (Int):2024³ should have the option of being endorsed by an approved practitioner rather than certified. This would apply even if the appliance is not a ‘small production appliance’ (eg, where more than 21 appliances are supplied each year).

This change would provide flexibility and recognise that such hydrogen appliances may not yet all have appropriate Standards to be certified to.

Q3	Do you agree with the proposal to allow the Standards and certification bodies for certifying gas appliances and fittings (ie Schedule 2A) to be modified by a Gas Safety Instrument? Why/why not?
Q4	Do you agree with the proposal to allow appliances that operate on hydrogen or hydrogen blends to be endorsed by an approved practitioner, rather than certified? Why/why not?

Proposal 3: Establishing specific requirements for hydrogen fuelling stations

Part 7 of the GSM Regulations establishes specific requirements for compressed natural gas (CNG) fuelling stations. CNG stations are excluded from general requirements under the Regulations on matters such as gas measurement and installation safety, with more specific requirements applied under Part 7 instead.

We propose a similar approach is adopted for hydrogen fuelling stations, with specialised requirements in place of the more general obligations under the GSM Regulations.

This more prescribed, specific approach could provide greater certainty for businesses operating hydrogen fuelling stations about what is expected for their installations. Given hydrogen stations will generally be locations accessible to the public and will involve equipment operating with very high gas pressures, more prescriptive requirements may be appropriate to provide assurance that safety risks to workers and the public are being managed appropriately.

The detail of requirements that would apply to hydrogen fuelling stations under this proposed approach will need further development, but could include requirements relating to:

- **the design and installation of equipment and installations** – for example, regulations could require stations to comply with Standards in the ISO 19880 series regarding gaseous hydrogen fuelling stations (currently being considered for adoption in New Zealand), or other appropriate New Zealand or international Standards.
- **measurement requirements** – for example, specific requirements could be applied for equipment to be calibrated, sealed and tested. More flexible margin of error thresholds could also be applied, to reflect the lower density of hydrogen compared to other gases.

³ That is, outside the range of 46.0 MJ/m³ to 52.0 MJ/m³.

- **maximum filling pressures of dispensers** – given the safety risks associated with overfilling due to the high pressures at which hydrogen is dispensed, it may be appropriate for regulations to set maximum filling pressures. For example, we understand pressures of 35 MPa are commonly used for heavy transport and 70 MPa for light transport.
- **maintenance and operating requirements** – to reflect the potential safety risks posed by hydrogen fuelling stations, specific requirements may be appropriate for matters like ensuring stations are maintained in a safe condition, staff are appropriately trained, stations are inspected periodically by a qualified person and records are kept of work. Similar requirements have been applied to CNG stations.

Q5	Do you agree with the proposal to develop a package of specific requirements for hydrogen fuelling stations on matters like safety and accurate measurement? Why/why not?
Q6	Do you consider the topics we have identified above should be covered in any specific requirements for hydrogen fuelling stations? Are there any additional topics you think should be added or topics listed which should be excluded?
Q7	In the list above we provide examples for specific requirements that could apply to hydrogen refuelling stations in each of these topic areas. Do you consider these example requirements are appropriate? Are there alternative requirements you consider should apply in these areas (for example, particular international Standards that should be followed)?

Proposal 4: Providing for Gas Safety Instruments to future-proof regulations

There are a range of other provisions in the GSM Regulations that we think could be supported by allowing Gas Safety Instruments to be made, allowing requirements to be modified or added to where appropriate. Providing for Safety Instruments will allow the regulations to respond more quickly and easily in response to emerging hydrogen practices and Standards, and provide mechanisms to more easily keep the GSM Regulations up to date.

The below table sets out the particular requirements we think could be supported by providing for Gas Safety Instruments to be made.

Regulations	Why a Safety Instrument may be appropriate
5A	Regulation 5A provides definitions for low-risk, general and high-risk gasfitting. These categories determine whether certification requirements or notification to WorkSafe applies (for example, see regulations 46 and 52H). We propose allowing Gas Safety Instruments to be made to add to the list of work that is defined as “low-risk” and “high-risk” gasfitting. This change will allow any emerging practices relating to hydrogen installations and

Regulations	Why a Safety Instrument may be appropriate
	<p>appliances to be more easily assigned into the low or high-risk categories where appropriate.</p>
11 -14	<p>Regulations 11 to 14 set general rules for when gas distribution systems, installations, fittings and appliances are considered unsafe. We propose allowing Gas Safety Instruments to be made that add to the list of where a system, installation, fitting or appliance is deemed unsafe.</p> <p>This change will help future-proof regulations by allowing any high-risk practices that emerge in the hydrogen industry to be restricted or prohibited more quickly and easily.</p>
21-22	<p>Regulations 21 and 22 provide requirements for all gas sold to be accurately measured according to prescribed measurement methods (in most cases, according to NZS 5259:2004).</p> <p>We understand there are challenges in applying these measurement techniques to hydrogen with the required accuracy, and alternative methods may be more appropriate. We propose allowing a Gas Safety Instrument to be made so that alternative requirements or Standards can be provided as they emerge for gases like hydrogen.</p>
25-27	<p>Regulations 25 to 27 set requirements for operators of distribution systems to keep records and plans, ensure continuity of supply and ensure workers are competent. These regulations refer to NZS 5258:2003 and AS/NZS 4645:2008 as options for businesses to follow to be considered to meet requirements.</p> <p>Neither of these Standards include hydrogen or most hydrogen blends. This means businesses using hydrogen systems do not have a specific Standard that they can follow to meet these requirements.</p> <p>Providing Gas Safety Instruments to be made will allow any appropriate Standards that emerge for hydrogen and similar gases to also be referred to. This will provide businesses more detail and certainty about how they can meet these requirements.</p>
32	<p>Regulation 32 provides that safety management systems, where required for a gas supply system must comply with either NZS 7901:2008 or the requirements listed in regulations 33 and 34.</p> <p>These requirements may not be fully appropriate for hydrogen supply or distribution systems. For example, many hydrogen systems may not meet the supply thresholds to be within scope of NZS 7901.</p> <p>Providing Gas Safety Instruments to be created that can provide alternative requirements or Standards to meet these regulations will allow any emerging requirements better targeted to hydrogen systems to be recognised and used by businesses.</p>

Regulations	Why a Safety Instrument may be appropriate
41	<p>Regulation 41 sets requirements for gas supplied for use in installations and appliances, or as an automotive fuel, to be of a specification that is suitable and safe for its intended use. Specific Standards are provided that reticulated natural gas and LPG must comply with to be considered an appropriate quality.</p> <p>We propose allowing a Gas Safety Instrument to be made that can add further specific Standards about quality levels for other gases, such as hydrogen. This will allow more certainty and detail to be provided about the specifications required for these gases.</p>
44	<p>Regulation 44 places duties on persons designing, installing, testing, commissioning or connecting a gas installation to ensure it is safe. This includes conducting work in accordance with AS/NZS 5601 – 2013 and/or the certified design for the installation.</p> <p>AS/NZS 5601 does not cover hydrogen or hydrogen blends above a relatively low blend ratio. This leaves it unclear whether any requirements beyond complying with the certified design for the installation are applied to hydrogen installations under this regulation. (Note, however, other regulations, such as regulation 9 also apply to require work on installations to be performed to a safe standard.)</p> <p>Providing for a Gas Safety Instrument to be made will allow any new Standards that do provide requirements appropriate for hydrogen installations to be incorporated into this regulation, making requirements clearer for businesses and workers. Providing such requirements through a Safety Instrument will also allow any such Standards to be kept up to date more easily.</p>
74, 75 and 75A	<p>Regulations 74, 75 and 75A set requirements for persons repairing, modifying, hiring and leasing gas appliances, fittings and installations to ensure they are safe. These include referencing particular Standards that equipment must comply with, or have an option to comply with, to demonstrate safety.</p> <p>We do not consider there are currently issues in how these regulations will apply to hydrogen appliances and installations. However, providing for Gas Safety Instruments to be created will allow any emerging safety Standards specifically relating to hydrogen to be more easily recognised.</p>

Q8	Do you consider there are risks in providing for Gas Safety Instruments in any of these regulations? If so, which regulations are you concerned about?
Q9	Are there any other changes to the GSM Regulations you consider should be made to remove unnecessary barriers to the use of hydrogen?

Changes to the Electricity (Safety) Regulations 2010

The *Electricity (Safety) Regulations 2010* provide requirements for the safe supply and use of electricity. This includes defining high- and low-risk electrical work, setting out specific circumstances where electrical work and installations are deemed to be unsafe, and setting out standards for the design and use of installations, fittings and appliances. These Regulations require electrical appliances using hydrogen, or being used in areas hydrogen is present, to be installed and used appropriately.

We consider these regulations are largely suitable to supporting the growing use of hydrogen. However, there are a few places where allowing Electricity Safety Instruments to be created could help future-proof against any emerging risks associated with an increased uptake of hydrogen.

Proposal 5: Providing for Electricity Safety Instruments to future-proof regulations

The below table sets out the particular requirements we think could be supported by providing for Electricity Safety Instruments to be made.

Regulations	Why a Safety Instrument may be appropriate
20	<p>Regulation 20 lists a range of circumstances in which electrical works and installations are considered ‘electrically unsafe’. Such unsafe installations must not be used.</p> <p>We propose allowing Electricity Safety Instruments to be made to add to the list of situations work or an installation is deemed electrically unsafe. This will allow any high-risk practices emerging in the hydrogen sector, or similar sectors, to be prohibited or restricted more quickly and easily.</p> <p>A previous example for deeming certain high-risk practices occurring in a sector unsafe can be seen in regulations 20(2)(fa) and (fb). These provisions were added in 2014 following several serious incidents in the refrigeration sector involving flammable refrigerants being used in inappropriately retrofitted systems.</p>
59-60	<p>Regulations 59 and 60 require certain installations to comply with the standard AS/NZS 3000: 2007, as well as additional standards for certain types of installations (for example, installations in hazardous areas must also comply with AS/NZS 60079.14).</p> <p>Allowing Electricity Safety Instruments to modify these requirements will enable any new Standards for hydrogen equipment to be recognised and given legal effect more quickly. This will help keep legal requirements aligned with emerging international good practices.</p>
80, 81, 83, and 85	<p>These regulations provide requirements that electrical fittings and appliances must meet to be considered safe. In most cases, fittings and appliances are deemed to be safe if they comply with either AS/NZS 3820.2009 or a relevant standard in Schedule 4. Medium and high-risk</p>

Regulations	Why a Safety Instrument may be appropriate
	<p>articles must also go through declaration of conformity or approval process as set out in regulations 83 and 85.</p> <p>We propose allowing Electricity Safety Instruments to be made that modify these requirements — for example, to add additional Standards that fittings and appliances can comply with to be deemed safe or modify the prescribed approvals processes where items have been tested to an appropriate Standard.</p> <p>This change would recognise that new Standards relevant to appliances and fittings using hydrogen are continuing to emerge, and allow such Standards to be recognised and given legal effect more quickly where appropriate.</p>

Q10	Do you consider there are risks in providing for Electricity Safety Instruments in any of these regulations? If so, which regulations are you concerned about?
Q11	Are there any other changes to the Electricity Safety Regulations you consider should be made to remove unnecessary barriers to the use of hydrogen?

Changes to the Health and Safety at Work (Hazardous Substances) Regulations 2017

The *Health and Safety at Work (Hazardous Substances) Regulations 2017* (the Hazardous Substances Regulations) set requirements for how businesses must manage the use, storage, handling and manufacture of hazardous substances in workplaces to minimise risks to workers and others. Hydrogen is subject to these regulations as a flammable gas and gas stored under pressure.⁴

The Hazardous Substances Regulations are technical, detailed and often prescriptive about how businesses must manage risks. Because of this, there are a number of requirements that may not reflect current technologies or best practices regarding hydrogen. To date, most exemptions from regulatory requirements issued by WorkSafe for hydrogen businesses have related to these regulations.

We think there are a number of technical amendments that can be made to these regulations to enable the use of technologies that are commonly used internationally for hydrogen, and generally to better reflect the particular needs and risks associated with hydrogen manufacture, use, transport and storage.

Proposal 6: Enabling the use of multiple-element gas containers

Multiple-element gas containers (MEGCs) are a series of gas cylinders or containers which are linked to each other by a manifold and mounted on a frame. MEGCs are commonly used internationally for the transport and storage of hydrogen and other industrial gases.

There are several barriers in the Hazardous Substances Regulations that effectively prevent MEGCs being used to store hydrogen in New Zealand (unless businesses receive exemptions to do so). In particular, a number of requirements relating to the separation of cylinders and tanks from one another are not practicable for MEGCs.

While requirements for tanks and cylinders to be kept separate are an important control to manage the risks of leaks or containment breaches, in the case of MEGCs we consider these risks can be managed through alternative means - such as through system design requirements and through increasing requirements for MEGCs to be separated from protected and public places.

We propose amending the Hazardous Substances Regulations to allow for MEGCs and similar hydrogen storage containers to be treated as a single system for separation requirements.

This will mean that while MEGCs and other systems must be separated from each other and other hazardous substances containers by the Regulations' specified minimum distances, the cylinders within a system will not be required to be separated from one another.

The specific changes we propose are set out below:

⁴ Hydrogen in gas form is regulated under these regulations as a class 2.1.1A high hazard flammable gas. Different requirements may apply for cryogenic liquified hydrogen, but hydrogen in this form is not currently approved by the Environmental Protection Authority for manufacture or import in New Zealand.

Regulations	Proposed change to enable MEGCs
3	<p>Regulation 3 provides definitions used in the Hazardous Substances Regulations. The definition provided for ‘stationary tank’ excludes MEGCs (see (c)(ii) of this definition).</p> <p>We propose to remove this exclusion, so that MEGCs are considered stationary tanks. This will mean MEGCs can be used as permanent storage for hydrogen, provided the requirements of Part 17 of the Regulations relating to stationary container systems are met.</p>
17.17	<p>Regulation 17.17 sets requirements for tanks containing flammable gases to be separated from one another. We propose excluding MEGCs and similar hydrogen containers from the requirements to:</p> <ul style="list-style-type: none"> • separate permanent gas tanks by at least 1m (17.17(1)(a)) • separate ends of tanks on a horizontal plane (17.17(3)) • not stack tanks above one another (17.17(4)). <p>As noted above, these requirements are impracticable for MEGC designs and effectively bar these systems being used for hydrogen storage.</p>
11.5 and 11.19	<p>These regulations provide requirements for cylinders and tanks containing flammable gases to be separated from public and protected places. The minimum distances gas containers are required to be separated from these places is determined by the quantity of gas a container holds.</p> <p>Under current provisions, the capacity of each component cylinder or tank that makes up an MEGC system is considered to be a separate container for the purposes of calculating requirements, rather than separation distances being based on the capacity of the MEGC system as a whole.</p> <p>If MEGCs are to be enabled for the storage of hydrogen and other gases, we consider this issue should be addressed.</p> <p>Specifically, we propose that, where multiple containers containing flammable gases are located within 1m of one another, the total quantity of gas stored across these containers must be aggregated for the purpose of calculating the distance the system must be separated from public and protected places.</p>

Q12	Do you support amending the Hazardous Substances Regulations to allow MEGCs and similar hydrogen storage containers to be considered a single tank system? Why/why not?
Q13	Do you agree with the suggested amendments to regulations 3, 17.17, 11.5 and 11.19 outlined above? Are there any additional amendments you consider would be needed to support this change?

Proposal 7: Recognising MEGCs meeting ADR standards

The European Agreement concerning the International Carriage of Dangerous Goods by Road (2023) (the ADR) provides requirements for the packaging, load securing, classification and labelling of dangerous goods being transported by road. The ADR is currently one of the leading international sets of requirements that multi-element gas containers (MEGCs) used to transport hydrogen are certified to. However, the ADR is not currently recognised by the Hazardous Substances Regulations as an acceptable compliance standard for portable tanks and MEGCs in New Zealand.

We propose amending regulation 16.30 to provide that a MEGC that complies with the ADR (and meets all other relevant requirements) may be used as a transportable container for hydrogen and other hazardous substances.

In practice, the requirements of the ADR are substantially the same as the UN Model Regulations, which MEGCs used as transportable containers are currently required to comply with (regulation 16.30(2)). However, because the Hazardous Substances Regulations do not refer to the ADR, MEGCs certified only to this standard are not recognised as compliant. We consider this represents an unnecessary barrier to their use, as containers complying with the ADR adequately manage risks to safety.

Q14	Do you agree with permitting MEGCs that comply with the European Agreement concerning the International Carriage of Dangerous Goods by Road (2023) to be used as transportable containers? Why/why not?
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Proposal 8: Setting requirements for cryogenic liquid hydrogen⁵

Liquid hydrogen is not currently approved New Zealand. An approval under the Hazardous Substances and New Organisms Act 1996 is required before it is authorised to be imported into, or manufactured in, New Zealand.⁶

However, we are aware that several projects and businesses are currently considering the manufacture and use of liquid hydrogen in New Zealand and so are likely to seek an approval soon. We therefore want to use this consultation to consider if changes may be needed to requirements under the Hazardous Substances Regulations to manage the risks of liquid hydrogen.

We propose setting requirements for cryogenic liquid hydrogen in the Hazardous Substances Regulations to prepare for its likely future use.

Part of this hazardous substance approvals process involves a New Zealand hazardous substances classification being applied to the substance. This classification, among other

⁵ The terms cryogenic hydrogen and liquid hydrogen are interchangeably used to refer to liquefying hydrogen at around 20 K (-253.1°C) and storing it at that temperature.

⁶ This is subject to some limited exceptions, like approval generally not being required to use liquid hydrogen for small-scale research and development in laboratories. Information regarding approval requirements and the approvals process is available at www.epa.govt.nz/hazardous-substances/

effects, determines which requirements under the Hazardous Substances Regulations will apply to its use, handling, storage and manufacture.

While it will not be confirmed which requirements will apply until an approval is received, based on international classifications it is likely liquid hydrogen will be regulated as a highly hazardous flammable gas⁷ and refrigerated liquified gas. This is similar to hydrogen in gas form – which is regulated as a highly hazardous flammable gas and compressed gas.

However, we consider liquid hydrogen poses additional safety risks that may warrant additional controls being applied to it under the regulations. In particular, due to the high storage pressures involved and energy potential of hydrogen in this form, we think some additional controls (in comparison to other flammable gases) should apply to liquid hydrogen.

The below table sets out some of the areas we consider it may be appropriate for specialised requirements to be provided for liquid hydrogen, and some suggestions for what specific requirements could be.

Requirements to be modified	Possible changes
Lower thresholds for fire and emergency management requirements	<ul style="list-style-type: none"> • Requiring warning signage at any workplace with 7kg or more of liquid hydrogen (reg 2.5). • Requiring fire extinguishers at any workplace with 2kg or more of liquid hydrogen (reg 5.3). • Requiring an emergency response plan at any workplace with 14 kg or more of liquid hydrogen (reg 5.6). • Requiring equipment in places where 2kg or more of liquid hydrogen is present to be electrically bonded and earthed (regs 10.13, 10.17 and 10.19).
Requirements to keep substances secure	<ul style="list-style-type: none"> • Requiring any quantity of 7 kg or more of liquid hydrogen to be secured from unauthorised access, if left unattended (reg 10.4).
Lower threshold before requiring a hazardous substance location	<ul style="list-style-type: none"> • Requiring businesses to establish a hazardous substance location at any place storing 7kg or more of liquid hydrogen (reg 10.26). This will, for instance, require the site to be regularly inspected and hold a compliance certificate.
Adjust requirements to keep substance	<ul style="list-style-type: none"> • Require cylinders and tanks containing liquid hydrogen to be separated from public places by at least 5m.

⁷ ie, a class 2.1.1A substance under the Hazardous Substances Regulations.

Requirements to be modified	Possible changes
separate from protected and public places	<ul style="list-style-type: none"> Require cylinders and tanks containing hydrogen to be separated from protected places (such as public buildings, offices and shops) by at least: <ul style="list-style-type: none"> 15m, where 40kg or more is stored 10m, where 7 to 40kg is stored, and 5m, where smaller amounts are stored (regs 11.5 and 11.19).
Incorporate relevant Standards for the design and construction of tanks containing liquid hydrogen	<ul style="list-style-type: none"> Requiring tanks, valves and fittings to be designed, constructed and maintained in accordance with AS 19880.1 (or an equivalent NZ Standard). Applying Standards for earthing and bonding of tanks, such as IEC 60204-1 and/or the National Fire Protection Association 2 Hydrogen Technologies Code.

Q15	Do you agree with amending the Hazardous Substances Regulations to introduce requirements for cryogenic liquid hydrogen? Why/why not?
Q16	If you are considering using liquid hydrogen, what types of systems do you intend to use it in? Have you identified particular tanks or storage approaches you are likely to use?
Q17	Do you consider the requirements for liquid hydrogen suggested in the table above are appropriate? Are there any changes you suggest or requirements that should be added or removed?

Proposal 9: Providing for Safe Work Instruments to future proof requirements

‘Safe Work Instruments’ is the term used for Safety Instruments that can add to or modify regulations under the Health and Safety at Work Act 2015.

We have identified three areas we consider Safe Work Instruments should be made available in the Hazardous Substances Regulations. These changes will provide a mechanism for requirements under these Regulations to be altered, if appropriate, in response to developing hydrogen practices and Standards.

Regulations	Why a Safe Work Instrument may be appropriate
Part 10, Subpart 1	Subpart 1 of Part 10 of the Hazardous Substances Regulations sets requirements to manage the risks of flammable gasses and liquids being unintentionally ignited. Regulation 10.8 provides businesses with options to manage these risks under one five prescribed control methods, set out in regulations 10.11-10.20.

Regulations	Why a Safe Work Instrument may be appropriate
	<p>A number of these regulations (such as 10.12, 10.14, 10.16, 10.18 and 10.20) include references to New Zealand and international Standards as an acceptable method of compliance with requirements.</p> <p>We propose allowing Safe Work Instruments to be made that can alter or add to the Standards considered a method of compliance with requirements in Subpart 1 of Part 10. This will enable any new Standards for hydrogen to be recognised and given legal effect more quickly, and generally support requirements to stay aligned with good industry practices.</p>
Part 17	<p>Part 17 of the Hazardous Substances Regulations sets requirements relating to stationary container systems used to contain hazardous substances. These include requirements relating to tank and fittings design, separation of tanks from each other and from transfer points, dispensers used to provide substances for retail sale, markings on tanks, and inspection and certification of certain tanks. Many of these requirements will apply to tank systems used in hydrogen fuelling stations.</p> <p>A range of Standards are in development relating to hydrogen fuelling stations (such as the ISO 19880 series), which will provide detailed, specific expectations regarding practices and equipment design. These Standards may provide requirements better tailored to the risks and operational needs of hydrogen fuelling stations than the general requirements of Part 17.</p> <p>We propose allowing a Safe Work Instrument to be made that can modify or add to the requirements in Part 17 for hydrogen fuelling stations. This will provide a mechanism for the requirements in Part 17 to be adapted to reflect such developing Standards, if appropriate.</p> <p>A Safe Work Instrument would also provide a mechanism to support the Hazardous Substances Regulations to align with any specific requirements introduced for hydrogen fuelling stations under the GSM Regulations, as suggested in Proposal 3.</p>
17.48	<p>Regulation 17.48 allows WorkSafe to approve a dispenser for use for the retail sale of a flammable gas or liquid if it complies with AS/NZS 2229:2004 or meets an equivalent level of safety.</p> <p>We propose allowing Safe Work Instruments to be made that provides additional Standards or requirements a dispenser may comply with to be approved.</p> <p>Safety Standards relating to hydrogen fuelling stations and associated equipment are currently in development (for example, New Zealand Standards based on the ISO 19880 series). This change will provide a mechanism for such Standards to be recognised by the Regulations in the future, where appropriate.</p>

Q18	Do you consider there are any risks in providing for a Safe Work Instrument to be made that can add to or modify these requirements? If so, which regulations are you concerned about?
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Proposal 10: Updating references to Standards

Two Standards referenced in the Hazardous Substances Regulations with relevance to hydrogen have now had new versions issued. We propose updating these references.

Change	Discussion
Updating the version of the United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (UN Model Regulations) referenced from the 19 th edition to the current 23 rd revised edition	<p>The UN Model Regulations are referred to in a number of places throughout the Hazardous Substances Regulations:</p> <ul style="list-style-type: none"> • Paragraph 4.1.7 of the UN Model Regulations, relating to packaging standards, is referred to in regulations 10.24 and 12.33 • Chapter 6.2, relating to testing and marking of gas cylinders, is referred to in Part 15 and Schedule 19 • Chapters 6.5 and 6.7, relating to requirements for the design, construction and testing of bulk containers, portable tanks and MEGCs are referred to in Parts 11 and 16. <p>This update will not result in any material changes in requirements for businesses. However, it will avoid any uncertainty that equipment certified to this most recent version of the UN Model Regulations will meet New Zealand requirements. It is also general good practice for the regulations to reference the most up to date version of Standards.</p>
Updating the version of AS/NZS 60079.01 referenced from the 2009 version to the 2022 version (including Supplement 1 (2022))	<p>AS/NZS 60079.01 is referenced in Part 10 of the Hazardous Substances Regulations in relation to requirements to establish hazardous areas where work using flammable gases or liquids is being conducted.</p> <p>This update will also not significantly change current requirements. However, the 2022 version of this Standard includes an informative Annex specifically on hydrogen which businesses may find useful to refer to when considering requirements.</p>

For both these updates, we propose that businesses complying with the version of the Standards currently referred to in the Regulations immediately before this change will be

considered to continue to meet requirements. This will ensure these updates do not unintentionally result in any currently compliant businesses becoming non-compliant.

Q19	Do you consider there are risks in updating references to the UN Model Regulations and AS/NZS 60079.01 to current versions?
Q20	Are there any other changes to the Hazardous Substances Regulations you consider should be made to remove unnecessary barriers to the use of hydrogen?

Other work health and safety regulations

In previous consultation and engagement with industry, two other sets of work health and safety regulations have been raised as potential barriers to the uptake of hydrogen. These are:

- **the Health and Safety at Work (Major Hazard Facilities) Regulations 2016** - these regulations provide additional requirements for sites that store large quantities of hazardous substances, such as emergency planning and notification obligations. Upper tier facilities (that store very large quantities of hazardous substances) must also have safety cases approved by WorkSafe.
Sites storing a combined 10 tonnes or more of hydrogen and other flammable gases may be subject to these regulations.
- **the Health and Safety in Employment (Pressure Equipment, Cranes and Passenger Ropeways) Regulations 1999** - these regulations set requirements for persons operating, designing and manufacturing specified high risk equipment. The principal requirements under these regulations are that high risk equipment is design verified and has a current certificate of inspection.
Pressure equipment used in conjunction with hydrogen, and which is not regulated under the Gas Act 1992, may be subject to these regulations.

We have not identified any specific issues in how these regulations apply to hydrogen, or clear reasons why hydrogen should be treated differently than other flammable gases for these requirements. However, we invite any feedback on issues you have encountered or consider may arise with particular requirements under these regulations and any changes you think should be made.

We also invite you to provide any feedback on other energy safety or work health and safety regulations you consider require changes to support the uptake of hydrogen.

Q21	Are there any requirements under other energy safety or work health and safety regulations you consider should be changed to remove unnecessary barriers to the use of hydrogen?
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Next steps

The feedback we receive in this consultation will help us develop policy advice about what changes should be made to safety regulations to enable hydrogen. We expect decisions on changes will be made in late 2025, with any changes likely to take effect in early 2026.

MBIE will continue to monitor how safety regulatory systems are functioning for the hydrogen sector following these amendments. As the sector increases in scale and/or new methods of production and uses of hydrogen emerge we will consider what other changes to regulations may be appropriate.