



AUSTRALIAN COMPETITION
& CONSUMER COMMISSION

Review of the mandatory safety standards for portable fire extinguishers

Consultation paper

September 2019



Disclaimer

The Australian Competition & Consumer Commission (ACCC) has developed this consultation paper to seek the views of stakeholders about the mandatory safety standards for portable fire extinguishers.

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1. Introduction

The Australian Competition and Consumer Commission (**ACCC**) is reviewing the mandatory safety standards for aerosol and non-aerosol portable fire extinguishers (the **mandatory standards**) to assess their ongoing efficacy since they commenced:

- Aerosol extinguishers: [Trade Practices Act 1974 – Consumer Protection Notice No. 9 of 2004 – Consumer Product Safety Standard: Portable Fire Extinguishers: Aerosol Type.](#)
- Non-aerosol extinguishers: [Trade Practices Act 1974 – Consumer Protection Notice No. 3 of 2004 – Consumer Product Safety Standard: Portable Fire Extinguishers.](#)

Three policy options are outlined in this paper and we invite feedback from interested parties. We encourage you to consider the questions at section 9 when making a submission. You do not need to answer all or any of the specific questions to make a valid submission.

This consultation may be the only opportunity for you to provide input into this review. We encourage you to make a submission.

2. Policy options

This consultation paper discusses three policy options:

- Option 1 Maintain the current mandatory standards (status quo)
- Option 2 Make a new mandatory standard for non-aerosol fire extinguishers and maintain the current mandatory standard for aerosol fire extinguishers
- Option 3 Revoke the mandatory standards.

3. Background

Portable fire extinguishers are hand operated devices designed to extinguish fires. The mandatory standards were introduced to ensure fire extinguishers work as intended. If an extinguisher malfunctions, is incorrectly labelled with the wrong operating instructions or contains an incorrect extinguishing agent, users and people in close proximity to the fire are at risk of serious injury or death.

Aerosol extinguishers are a single-use spray can weighing around 0.5 kg. They are designed to extinguish only the smallest of fires and to be discarded after use. They are easy to use and have an anti-discharge device to prevent inadvertent operation. In Australia, only aerosol extinguishers containing powder or liquid based extinguishing agents may be supplied.

Non-aerosol extinguishers are larger and more common than the aerosol type. They generally weigh between 0.5 kg and 9 kg, but can weigh up to 23 kg. They may be refillable and come with a support fitting, carry handle, squeeze lever, pressure indicating device and an anti-discharge device. They may contain one of seven extinguishing agents designed to be used on different types of fires such as petrol, chemical, wood, textile, kitchen or electrical fires.¹

¹ Extinguishing agents include water, wet chemical, foam, powder, powder (metal fires), carbon dioxide and vaporising liquid.

Portable fire extinguishers are available from a range of bricks and mortar retailers, and online. Depending on their size, non-aerosol extinguishers generally retail from \$20 to \$250. Aerosol extinguishers are less common in Australia and manufactured by only a small number of suppliers. They are cheaper and generally retail from \$15 to \$35.

There have been no deaths conclusively linked to defective or incorrectly labelled portable fire extinguishers in Australia, highlighting the effectiveness of the mandatory standards. We are aware of one death that occurred in the United States in 2014 due to a defective non-aerosol extinguisher. We note this extinguisher model cannot legally be supplied in Australia as it would not comply with the relevant Australian mandatory standard.

4. Mandatory safety standards

Regulation covering the supply of portable fire extinguishers commenced in Australia in 1978 to address concerns around ineffective and unsafe products. The current supply regulatory regime consists of two mandatory standards, one for aerosol extinguishers and another for non-aerosol extinguishers.

Both mandatory standards set minimum requirements to ensure safety and consistency across the market. Importantly both extinguisher types carry prescribed instructions and labelling to help consumers easily identify the device's intended use and safe operation in an emergency, and its correct storage. Users may be unaware that fire extinguishers are designed to fight particular types of fires and using the wrong type of extinguisher may exacerbate a fire, risking further injury to a person. For example, using a water based extinguisher on an oil fire.

The mandatory standards apply to the 'supply' of fire extinguishers. Under the Australian Consumer Law (the **ACL**), 'supply' as it applies to goods, includes re-supply by way of sale, exchange, lease, hire and hire-purchase. A person commits an offence, if that person engages in trade or commerce, and supplies goods where a mandatory safety standard is in force and those goods do not comply with the requirements of the mandatory safety standard.

Interaction between a voluntary standard and a mandatory standard

The mandatory standards as they apply to the supply of aerosol and non-aerosol extinguishers, call up and vary the scope of relevant voluntary Australian manufacturing standards.

The old and the new voluntary Australian manufacturing standards for aerosol and non-aerosol fire extinguishers (AS/NZS 1841:1997, AS/NZS 1841:2007 and AS/NZS 4353:1995) represent 'better practice' guidelines for manufacturers, but in the absence of a mandatory standard, do not impose a legal requirement on suppliers to meet the requirements of either voluntary standard. The voluntary Australian manufacturing standards specify requirements for materials, methods of manufacture and performance of an extinguisher and instructions and markings.

Aerosol extinguishers

The mandatory standard for aerosol extinguishers (the **mandatory aerosol standard**) calls up and varies the voluntary Australian standard AS/NZS 4353:1995 *Portable fire extinguishers – Aerosol type*. This voluntary Australian standard specifies manufacturing requirements for design, construction, performance, testing, instructions and labelling.

While the mandatory aerosol standard is based on the voluntary manufacturing standard AS/NZS 4353:1995, as the safety standard is concerned with supply it applies to all participants in the supply chain and is not limited to the point of manufacture.

AS/NZS 4353:1995 remains the latest voluntary Australian standard for aerosol extinguishers and we have assessed that this standard is suitable for continued adoption in commonwealth regulation without amendment to the mandatory aerosol standard.

Non-aerosol extinguishers

The mandatory standard for non-aerosol extinguishers (the **mandatory non-aerosol standard**) calls up and varies the voluntary Australian standard AS/NZS 1841:1997 *Portable fire extinguishers*, parts 1 to 8. This voluntary Australian standard sets manufacturing requirements for design, construction, performance, testing, instructions and labelling, which reflect non-aerosol extinguishers' different design features. It also specifies requirements by extinguishing agent.

While the mandatory non-aerosol standard is based on the voluntary manufacturing standard AS/NZS 1841:1997, as the safety standard is concerned with supply it applies to all participants in the supply chain and is not limited to the point of manufacture.

Unlike aerosol extinguishers, AS/NZS 1841:1997 has specific colouration requirements. Non-aerosol extinguishers must be either red or unpainted polished stainless steel and have a coloured band near the top of the cylinder indicating the extinguishing agent.² This helps users quickly identify the type of fire the extinguisher is designed for, especially in an emergency.

AS/NZS 1841:1997 was last updated by Standards Australia in 2007 and is now known as AS/NZS 1841:2007 *Portable fire extinguishers* (the **new voluntary Australian manufacturing standard**). While this voluntary Australian standard remains broadly consistent from the 1997 to the 2007 version, the 2007 version better accounts for industry practices. It updates requirements for labelling to provide greater clarity for industry participants and introduces new requirements on filling tolerances. We have assessed that the updated requirement for filling tolerances should be included in a new mandatory standard as recalls of portable fire extinguishers have occurred where an extinguisher was under-filled or over-filled (see section 5).

The 2007 edition of this voluntary Australian standard also provides suppliers with greater compliance choices through two alternative testing methods. These are for:

- determining the effective discharge time of an extinguisher
- the discharge testing of carbon dioxide extinguishers.

We seek stakeholder feedback on mandating the 2007 version of the voluntary Australian standard in place of the 1997 version including changes to compliance costs and administrative processes.

5. Compliance

The mandatory standards have been effective in limiting the supply of defective or incorrectly labelled fire extinguishers in Australia. The ACCC and state and territory ACL regulators have periodically surveyed the market for non-compliant products over a number of years.

² Water-type non-aerosol extinguishers are not required to have a coloured band if the cylinder is painted red. They are required to have a single red band if their cylinder is polished stainless steel.

Since the mandatory standards commenced in 2004 there have been eight recalls of non-compliant extinguishers (one aerosol and seven non-aerosol):

- Six were due to the products not functioning as intended. For example, they were under-filled or over-filled, or discharged their contents too fast.
- Two were due to non-compliant instructions and labelling.

The ACCC's most recent survey in 2017 found a high level of compliance with the mandatory standards.

The ACCC has analysed coronial data concerned with fire extinguishers and is not aware of any deaths that have occurred that are attributed to the failure of an extinguisher to operate as intended by the requirements of the mandatory standard. We have also assessed available injury data collated by the Queensland and Victorian Injury Surveillance Units and are not aware of injuries that have occurred that are attributed to the failure of an extinguisher to operate as intended by the requirements of the mandatory standard.

6. International standards

When making recommendations for new and amended regulations *The Australian Government Guide to Regulation 2014* requires policy makers to consider international standards as an option for regulation.

The ACCC has assessed the following standards from the British Standards Institution (**BSI**), International Organization for Standardization (**ISO**), European Committee for Standardization (**CEN**) and the United States National Fire Protection Association (**NFPA**) against the criteria for using international standards in consumer product safety standards and bans:³

- 1) Addressing safety concerns: Is there evidence that the international standard provides an acceptable level of consumer safety?
- 2) Comparable jurisdiction to Australia: Is the international standard published or developed by a legitimate standards body or government agency from an economy or nation with comparable economic and regulatory processes to Australia?
- 3) Applicability to the Australian context: Is the international standard applicable and sufficient in the Australian context?

Aerosol extinguishers

- BSI 6165:2002: *Specification for small disposable fire extinguishers of the aerosol type.*

The BSI standard sets out requirements for construction, design, performance and labelling. Unlike the Australian mandatory aerosol standard the BSI standard provides detailed information on testing apparatus in a single document. However, the BSI standard does not prescribe the same long-established labelling requirements found in Australia. Notably, it does not mandate pictographs to prominently display the extinguisher's safe conditions and prohibitions. The BSI standard also does not prescribe key cautionary statements, and differs in the wording and prominence of its safe use message.

The BSI standard further differs in that it only covers powder and water-type extinguishers, and does not prescribe the same rating system to Australia (see **Appendix A**). There are

³ ACCC, International standards for the safety of consumer products - criteria for acceptance, ACCC policy principles, 22 July 2015, www.productsafety.gov.au/content/index.phtml/itemId/1014180

also differences related to design and construction, for example the Australian mandatory aerosol standard requires exposed non-metallic elements to be UV stabilised.

Based on these differences we have assessed that the BSI standard is not suitable for use in Australia.

Non-aerosol extinguishers

- ISO 7165: 2017 *Fire fighting – Portable fire extinguishers – Performance and construction*
- CEN EN 3-7:2004+A1:2007 *Portable fire extinguishers – Characteristics, performance requirements and test methods*
- NFPA 10: 2018 *Standard for Portable Fire Extinguishers*.

The ISO, CEN and NFPA standards prescribe construction, design, performance and labelling requirements for non-aerosol extinguishers, with different requirements distinguishing each.

We have assessed these international standards applying to non-aerosol extinguishers as not suitable for use in Australia as they do not prescribe the same labelling (i.e. the coloured band on the extinguisher), fire classification and rating requirements as the Australian mandatory non-aerosol standard (see **Appendix A**). These requirements are assessed as an important feature to assist consumers to easily identify the appropriate extinguisher for use against particular types of fires. Using an incorrect type of extinguisher can place a consumer in a hazardous position. For example, using a water-type extinguisher on an electrical fire could result in the user being electrocuted.

7. Routine service of non-aerosol extinguishers

The objective of the voluntary Australian standard AS 1851-2012 *Routine service of fire protection systems and equipment* (the **routine service standard**) is to maintain the reliability of fire protection equipment and systems such that they continue to meet the requirements of their approved design and are likely to do so until the next scheduled service activity. The effect of this objective is that where a portable⁴ fire extinguisher is serviced in accordance with the requirements of the routine service standard, the portable fire extinguisher will operate to the requirements of the voluntary Australian manufacturing standard.

The routine service standard sets requirements for routine servicing that go to inspection, testing and preventative maintenance of fire protection systems and equipment that includes fire sprinkler systems, fire detection and alarm systems, fire hose reels, emergency evacuation systems and portable fire extinguishers.

For the purpose of this discussion when reference is made to the routine service standard the scope of the reference is limited only to portable fire extinguishers. The routine service standard sets out service requirements at fixed schedules that comprise a six monthly service schedule, a yearly service schedule and a five yearly service schedule. Advice provided to the ACCC is that servicing at six monthly and yearly intervals is conducted *in situ* and servicing at the five yearly schedule is conducted *off site*.

Compliance with the requirements of the routine service standard is mandated by commonwealth, state and territory legislation. By way of example, subclause 359(1)(c) of the Work Health and Safety Regulations 2011 (Cth) states that a person conducting a business

⁴ In this section reference to portable means non-aerosol fire extinguishers. Aerosol fire extinguishers are single use products that are not subject to routine service requirements.

or undertaking (PCBU) at a workplace must ensure that fire protection equipment is properly installed, tested and maintained. This subclause forms part of a uniform regulation by most states and territories. Victoria and Western Australia have not adopted the uniform regulation, but have instruments that assign regulatory responsibility for the maintenance of portable fire extinguishers to their respective work health and safety agencies. These regulatory regimes are administered by workplace health and safety authorities in each state and territory.

Similar legislation has been enacted in other domains that require the presence of a fire extinguisher. By way of examples these include regulation 196 of the Building Regulations 2018 (Vic), regulation 18 of the Plumbing Regulations 2018 (Vic), and subclause 18.3 of the National Standard for Commercial Vessels, Part C Design and Construction, section 4, Fire Safety (2018).

The ACCC is aware that in some circumstances where an extinguisher is subject to the requirements of the routine service standard an exchange/replacement fire extinguisher is supplied as part of the service activity. For the purpose of the ACL, supply is deemed to have occurred where an extinguisher is removed from the premise for servicing and is returned at a later date once the service is complete, for example where an extinguisher is subjected to pressure testing procedures. Another occasion where supply is deemed to have occurred is where one extinguisher is exchanged for another extinguisher that is removed from the premise. As the definition of 'supply' in the ACL includes supply or re-supply, exchange, lease, hire or hire-purchase, these service activities constitute supply and therefore an extinguisher supplied in these circumstances is subject to the requirements of the mandatory standard.

The ACCC has conducted an analysis of the routine service standard as it applies to non-aerosol extinguishers (see **Appendix B**). We have concluded from our comparative analysis that the requirements as detailed in the routine service schedules of the routine service standard and the requirements as detailed in the mandatory standard are comparable in terms of their performance objectives. This is because the objective of the routine service standard is that the affected fire extinguisher is serviced in a manner that the fire extinguisher will operate to the requirements of the manufacturing standard.

As the safety outcomes of both the supply regime and service regime are comparable, and as the service regime operates within a legislative framework that is administered by statutory authorities, the ACCC has formed the view that non-aerosol extinguishers are subject to regulatory duplication. This duplication imposes an additional and unnecessary regulatory cost on industry participants that does not appear to result in a net public benefit through reductions in deaths or injuries.

We note that there is a difference in terms of marking (see **Appendix B**) in that the routine service standard does not require the manufacturer or distributor's name, trade name or trademark to be displayed on the extinguisher by means of printing or durable labels or other permanent means. Instead, the routine service standard requires a hardcopy summary record to detail routine servicing and to support information on the service label or tag. The summary record must include, among other information, the name of the responsible entity, name and signature of the service person and the date, and the name of the service provider or company. This must be retained on site for a minimum of seven years and be cross-referenced with a permanent mark on the extinguisher, such as a barcode. We have assessed that the record keeping and documentation requirements in the routine service standard produce a comparable traceability outcome in the event of product defect and are satisfied that the difference between the mandatory standard and routine service standard would have no material effect on consumer safety.

In light of the operation of the routine service standard and to address regulatory duplication the ACCC proposes that a new mandatory standard for portable fire extinguishers apply only to new fire extinguishers. We seek stakeholder feedback on making a new mandatory standard for non-aerosol extinguishers that avoids the current regulatory duplication.

The ACCC is aware there is a market for refurbished fire extinguishers that are offered directly for supply. It appears that the market for refurbished fire extinguishers is restricted to one type of extinguisher, dry powder extinguishers. These extinguishers are manufactured to the requirements of the mandatory standard and appear to have been subject to the requirements of the routine service standard. Additionally these extinguishers would fall within the consumer protection requirements of the ACL that set specific legal protections for consumers who purchase, hire or lease goods. These are known as consumer guarantees, one of which is that products will be of acceptable quality. This means they must be safe, be of acceptable quality, and perform as a person would normally expect them to do.

We also note that under the ACL where a business makes representations about a good, for example about performance characteristics, it is an offence to make false or misleading representations about the good. Our assessment is that the application of the routine service standard and the application of the general provisions of the ACL, provide an appropriately robust framework to regulate the market for refurbished fire extinguishers.

We seek stakeholder views on our assessment of the market for refurbished extinguishers and the future application of the mandatory non-aerosol standard.

8. Detailed policy options

Option 1 – Maintain the current mandatory standards (status quo)

Description

The two mandatory standards would continue in their current form. Portable fire extinguishers supplied to the Australian market must continue to comply with the current requirements.

Benefits

The penalties associated with breaching the mandatory standards under the ACL would continue to apply and provide an incentive for suppliers to supply compliant products.

There would be no additional costs to suppliers as they would continue to produce and test products to the current requirements. Likewise, there would be no additional costs to government beyond those already incurred in administering and enforcing the mandatory standards.

Limitations

The mandatory standard for non-aerosol extinguishers does not recognise the updates to the latest voluntary Australian standard. Suppliers would be limited to complying with an outdated standard, and those that test to both the 2007 and 1997 versions of the voluntary Australian standards would face higher regulatory costs. Inefficient overlap with the voluntary Australian standard for routine servicing of non-aerosol extinguishers would remain.

Option 2 – Make a new mandatory standard for non-aerosol fire extinguishers and maintain the current mandatory standard for aerosol fire extinguishers

Description

This option would make a new mandatory standard for non-aerosol fire extinguishers. The new mandatory standard would require suppliers to comply with the latest voluntary Australian standard AS/NZS 1841:2007 and it would only apply to the supply of new non-aerosol fire extinguishers.

The mandatory standard for aerosol fire extinguishers would be maintained without change and it would continue to be based on the latest voluntary Australian standard AS/NZS 4353:1995. As there is no routine service regime applicable, it would not be limited to the supply of new aerosol extinguishers only.

Benefits

This option would reduce the regulatory burden for suppliers who currently test to both the 2007 and 1997 versions of the voluntary Australian standard for non-aerosol extinguishers. Suppliers would find it easier to comply with a mandatory standard that references the most recent version of the voluntary Australian standard (the 2007 version). Adopting the most current version of the voluntary Australian standard would align the mandatory standard with the most current technical assessment on the appropriate requirements for the design, manufacturing and marking requirements for fire extinguishers.

This option would also address the regulatory overlap with the voluntary Australian standard for routine servicing of non-aerosol extinguishers that has arisen from the introduction of the routine service standard following the commencement of the mandatory standard. This would reduce regulatory compliance costs which are not compensated for by savings from a reduction in deaths or injuries to consumers.

Limitations

This option would require suppliers to familiarise themselves with the new requirements in the 2007 voluntary Australian standard for non-aerosol extinguishers. This may impose some costs if they are not already familiar with this standard. However, suppliers would be afforded a transitional period to sell stock that complies with the superseded standard.

Limiting the mandatory standard to apply to the supply of new non-aerosol extinguishers may create a regulatory gap where they do not fall within either a supply or routine service regime. However our assessment is that the general provisions of the ACL are appropriate for the regulation of this market and do not pose a safety hazard for the reasons detailed above.

Option 3 – Revoke the mandatory standards

Description

The mandatory standards would no longer apply to aerosol and non-aerosol fire extinguishers supplied to Australian consumers.

Benefits

There would be no compliance costs for suppliers associated with the operation of the mandatory standards. Products manufactured to other standards could be supplied in Australia which may result in lower prices and a wider range of products becoming available to consumers.

Limitations

Our assessment is that the presence of the mandatory standards provides a positive benefit to members of the supply chain as they reduce potential search and transaction costs for industry participants who may otherwise have to assess the suitability of a product prior to offering the product for supply. Where a supplier or purchaser cannot confirm that a product has been manufactured to a mandatory standard search and transaction costs are likely to increase.

Products manufactured to overseas standards would have different labelling requirements which may cause confusion about which type of extinguisher to use for a particular fire. This could increase the hazard of injury or death where a person misused a fire extinguisher, which as discussed above, could exacerbate a fire.

Cheaper and less effective products that have not been manufactured to the requirements of a mandatory or voluntary technical standard may become more prevalent in the market potentially increasing the risk of the supply of products that are not fit for purpose which may pose a safety hazard.

9. Key questions

Please consider the following questions in your submission. Submissions do not need to answer all or any of these questions and may include any information that might be relevant for this review.

1. What is your preferred option and why?
2. Do you agree with our assessment of the international standards?
3. Would option 2 change your compliance costs for non-aerosol extinguishers?
4. Is there any reason the mandatory standard for non-aerosol extinguishers should not reference the latest voluntary Australian standard AS/NZS 1841:2007?
5. Is there any reason the mandatory standard should not be adjusted so that it only applies to the supply of new non-aerosol fire extinguishers and to avoid the current regulatory overlap for routine servicing?
6. Are there any other options the ACCC should consider?
7. Do you have any other comments or suggestions?

10. Have your say

The ACCC invites you to comment on this review. The consultation is open from 20 September 2019 to 18 October 2019.

The ACCC prefers that you submit your answers and other feedback online on our consultation hub at consultation.accc.gov.au.

Submissions can also be posted to:

Director
Standards and Policy
Consumer Product Safety Branch
Australian Competition and Consumer Commission
GPO Box 3131
CANBERRA ACT 2601

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Appendix A

Labelling

The following table outlines the coloured band regime for portable non-aerosol fire extinguishers across the Australian and international standards. All standards except the ISO standard prescribe colour bands. The Australian and CEN standards prescribe coloured bands according to the extinguishing agent, while the NFPA prescribes according to fire classification (see below for more information on classification).

Table 1: Coloured band colours by standard

	Australian AS/NZS 1841	International ISO 7165	European (CEN) EN 3-7*	USA NFPA 10
Water spray	Signal red (R13)	Fire extinguishers should be red (no specific colour band)	Signal red	Colour band by fire classification
Foam	Ultramarine blue (B21)		Cream	
Powder	White		French blue	A: Basic green
Wet chemical	Oatmeal (Y54)		Canary yellow	B: 192 Red
Powder (metal fires)	Lime green (G35)		French blue	C: Process blue
Vaporising liquid	Golden yellow (Y14)		Emerald green	D: Basic yellow
Carbon dioxide	Black		Black	K: Black
Water mist	Not allowed		White	

*The CEN standard allows coloured bands to follow national regulations. British Standard BS 7863 is used as an example above.

Classification

Extinguishers must also carry one or more letters to indicate the general class or classes of fire which they can effectively extinguish (classification). The following table outlines the letters prescribed for each class of fire by the Australian and international standards.

Table 2: Classification of fires

	AS/NZS 1850*	ISO 3941**	EN 3-7	NFPA 10
Wood, paper & plastic	A	A	A	A
Flammable & combustible liquids	B	B	B	B
Flammable gasses	C	C (not tested to)	C (not tested to)	B

Metal fires	D	D	D (not tested to)	D
Energised electrical equipment	E	Not assigned a letter	Not assigned a letter	C
Cooking oils & fats	F	F	F	K

*AS/NZS 1850 *Portable fire extinguishers – Classification, rating and performance testing* is referenced in AS/NZS 1841.

**ISO 3941 *Classification of fires* is referenced in ISO 7165.

Rating

Fire extinguishers carry a number to indicate their extinguishing potential under prescribed test conditions (rating). Ratings are intended to be used to compare the effectiveness of extinguishers in fighting a particular class of fire rather than indicating the size of fire it can fight. For example, an extinguisher rated 80B is more effective on Class B fires than a 40B extinguisher.

The Australian and international fire rating systems are not comparable due to different testing methods. For example, the CEN standard prescribes significantly different apparatuses, using different volumes of fuel and size/configuration of fire trays, to the Australian safety standard for Class A, B and E equivalent fire testing. Similarly, the Australian safety standard tests to a different type of wood (pinus radiata) for Class A fire testing compared to international standards. Pinus radiata is more difficult to extinguish, resulting in a different rating for the same size extinguisher. Allowing mixed rating regimes in Australia could lead to misuse, even by trained firefighting personnel, and increase the risk of death or serious injury.

Appendix B

Table 3: Routine service schedule requirements in AS 1851-2012 that are different to supply requirements for portable non-aerosol fire extinguishers

Routine service schedule requirements in AS 1851-2012	Difference with the mandatory safety standard and AS/NZS 1841:2007, parts 1 to 8	Does the difference present an obvious safety concern?
Six monthly service schedule		
Item No. 1.5: External damage	Voluntary Australian standard AS 2337.1 is not referenced in either.	No
Item No. 1.6: External corrosion	Voluntary Australian standard AS 2337.1 is not referenced in either.	No
Item No. 1.7: Outlet hose assembly	Clause 3.8.3 (Discharge hose and fitting) in AS/NZS 1841.1:1997 (referenced in the mandatory safety standard), and in AS/NZS 1841.1:2007, sets out that extinguishers having a size of 3.0 kg or 3.0 L or greater shall be fitted with a discharge hose.	No
Item No. 1.8: Pressure indicator	Clause 3.7 (Pressure-indicating device) of AS/NZS 1841.1:1997 (referenced in the mandatory safety standard), and clause 3.7.1 (Pressure-indicating device: General) of AS/NZS 1841.1:2007, exclude carbon dioxide type extinguishers from incorporating a pressure-indicating device.	No
Item No.1.12: Discharge nozzle	Fixed nozzle is not a requirement in either.	No
Item No. 1.16: Compressed gas container	Both only reference AS 2030.1, and not AS 2030.5.	No
Yearly service schedule		
Item No. 2.6: Internal condition – Portable extinguishers	AS 2337.1 is not referenced in either.	No
Item No. 2.8: Extinguishing agent replacement/Item No.	Separate test for leakage found at clause 6.2.2	No

2.10: Leak detection	(Standard test) of AS/NZS 1841.1:1997 (referenced in the mandatory safety standard), and clause 6.2.2 (Proof test) of AS/NZS 1841.1:2007.	
Five-yearly service schedule		
Item No. 3.5: Internal condition – Portable extinguishers	The voluntary Australian standards AS 2337.1 and AS 2030.5 are not referenced in either.	No
Item No. 3.8: Pressure test: Portable extinguishers	Different pressure testing requirement in both. Also, voluntary Australian standards AS 2030.5 and AS 2337.1 are not referenced in either.	No
Item No. 3.12: Leak detection	Separate test for leakage found at clause 6.2.2 (Standard test) of AS/NZS 1841.1:1997 (referenced in the mandatory safety standard), and clause 6.2.2 (Proof test) of AS/NZS 1841.1:2007.	No