

WaterMark point of sale feasibility study

Feasibility assessment of point of sale regulation for the WaterMark Certification Scheme

A Summary Report for publication prepared for the Australian Building Codes Board

Tuesday 30 October 2018

A I T H E R

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Abbreviations

| | |
|-------------|---|
| ABCB | Australian Building Codes Board |
| DIY | do-it-yourself |
| NCC | <i>National Construction Code</i> |
| PCA | <i>Plumbing Code of Australia</i> |
| POI | point of installation |
| POS | point of sale |
| RTOs | registered training organisations |
| WELS scheme | Water Efficiency Labelling and Standards scheme |
| WMCS | WaterMark Certification Scheme |
| WMSP | WaterMark Certification Scheme Schedule of Products |

Glossary

| | |
|-----------------------------------|---|
| Point of installation | Unless otherwise specified, the point at which a product is installed in a plumbing and drainage installation under the Plumbing Code of Australia (and associated state- or territory-based legislation) |
| Point of sale | Refers to any point of sale between parties across the supply chain (including all forms of wholesale, retail, online sales etc.) unless otherwise specified, until the point of installation. |
| Point of installation (POI) | Refers to a system of regulation at the point of installation, |
| Point of sale regulation (POS) | Refers to a system of regulation at the point of sale |
| Point of installation enforcement | Refers specifically to the act of enforcing the regulation at the point of installation. |
| Point of sale enforcement | Refers specifically to the act of enforcing the regulation at the point of sale |

Executive summary

Aither Pty Ltd (Aither) was engaged by the Australian Building Codes Board to investigate the feasibility of, and possible options for point of sale (POS) regulation under the WaterMark Certification Scheme (WMCS). The primary focus of the study is on the feasibility of POS regulation for the WMCS as a means of improving compliance with the *Plumbing Code of Australia* (PCA).

The feasibility study was commissioned to consider the nature and extent of the ‘problem’ and to assess the feasibility of and provide recommendations on possible POS options. To provide a baseline for comparison, current point of installation (POI) regulation, and enhanced POI regulation were also considered as options.

The feasibility study was informed by desktop review, stakeholder submissions and extensive consultation with different stakeholder groups. Consultations were undertaken across Australia with industry representative bodies for plumbing and building practitioners, manufacturers and suppliers, as well as different areas of state and territory, and Commonwealth government (including building authorities, consumer affairs, and border force). The Water Efficiency Labelling and Standards (WELS) scheme administrator was also consulted.

The primary intent of the study was to inform the Australian Building Codes Board (ABCB) and government stakeholders. This public report summarises the feasibility study process, and includes the findings and recommendations as made to the ABCB.

Background and context

The WMCS is a mandatory certification scheme for plumbing and drainage products to ensure they are fit for purpose and appropriately authorised for use in plumbing and drainage installations.

Regulation of the WMCS is undertaken at the POI by the state or territory Plumbing Administration having jurisdiction. This places the responsibility for compliance on plumbing practitioners and ongoing enforcement on the state and territory Plumbing Administrations (or through delegation to local government in some jurisdictions).

In recent years, industry members (including plumbing product manufacturers and installers) and some state and territory Plumbing Administrations have sought an enhanced approach to the regulation of plumbing products that they consider would be more effective. Some of these stakeholders have expressed support for enforcement of the WMCS at the POS.

Defining the problem

Based on Aither’s assessment of the available materials and the consultation undertaken, the **problem** with (or for) the WMCS is that *non-WaterMark products are being (or at heightened risk of being) installed and used in situations where a WaterMark certified product is required.*

While this study found it difficult to identify robust, quantifiable data to verify the extent of the problem (either in terms of frequency or specific impacts), consultations revealed a widely shared view that the problem is nevertheless real and that it compromises the ability of the WMCS to deliver effectively against its objectives.

There were several examples provided where non-WaterMark products were installed unlawfully or were intended for installation where WaterMark products were required. There are also several clear trends and changes that provide context to – and help explain why – there is likely to be increased risk of non-WaterMark products being installed. These include changes in the supply chain that have fundamentally changed the way products are manufactured, sourced or supplied and purchased.

The consequences of the problem can be significant, resulting in:

- costs in replacing non-compliant materials (including to building owners, building practitioners, plumbing practitioners etc.), and penalties where applied
- public health and safety impacts (e.g. from contaminated water)
- product failure resulting in consequential building damage and loss.

Underlying causes of the problem

The following were identified as core underlying causes of non-WaterMark products being installed:

- cost incentives to use cheaper non-WaterMark products
- lack of awareness and education on WaterMark requirements (across the supply chain) leading to specification, supply, or purchase of non-WaterMark products
- limited enforcement at POI in many jurisdictions (meaning there is reduced incentive to install WaterMark products)
- pressure on plumbers at the end of the supply chain to install non-WaterMark products that have been sourced by developers, builders or individual consumers.

The extent to which each of these different causes might be driving installation of non-WaterMark products was unclear (some may be more significant than others), however examples of each were provided through stakeholder submissions and during consultations.

Conclusions on the nature and extent of the problem

In Aither's view, it is both illogical and naïve to assume that the problem does not exist, or that it is so insignificant as to justify no action in response. This study has led Aither to conclude that the following elements are present:

- changes in the supply chain that have disrupted the ways in which products are sold and who is purchasing them
- wilful non-compliance driven by cost incentives where non-WaterMark products are cheaper than WaterMark equivalents
- lack of awareness and education on the WaterMark scheme amongst key actors or entities involved in specifying, supplying, or installing plumbing and drainage products
- growth in and prevalence of home renovations and building projects, including do-it-yourself activity, and informal plumbing activity
- limitations in the current structure and implementation of compliance arrangements associated with the WaterMark scheme, including that:

- sole responsibility for compliance is at the 'end of the line' and rests only with installers – no other parties bear any responsibility for ensuring the required products are specified and installed
- audit and checking rates are limited in many jurisdictions and provide insufficient incentives for compliance.

Aither acknowledges that there is currently a lack of quantifiable (or verifiable) evidence to establish how widespread the problem is. However, given the above points and evidence from consultations, we are of the view that intervention or action within the current general framework is warranted in response. It is also important that any action in response must be considered, measured and proportionate.

Finding 1: Current trends and drivers surrounding the WMCS and elements of its implementation support the existence of a problem with installation of non-WaterMark products, and this is supported by evidence. Measured and proportionate action is justified in response.

Options for responding to the problem

The study was required to focus on the feasibility of POS regulation (as opposed to investigating other options or matters). The *WaterMark Point of Sale discussion paper* (2018) provided guidance on potential options for, as well as issues or other matters associated with, POS regulation including potential legislative approaches, and the option to leverage linkages with the Water Efficiency Labelling and Standards (WELS) scheme.

While the legislative basis and potential to align with the WELS scheme are important considerations for implementing a given option, at the outset of the study there was no commonly accepted articulation of what POS regulation might consist of in practice – including what it might authorise or proscribe, what other conditions or requirements it might impose, and to whom it would apply.

To assess the feasibility of POS regulation it was therefore necessary to form more specific options that addressed this issue, based on input from stakeholder submissions and consultations. The POS regulation options considered were:

- **POS regulation through prohibition of the sale of non-WaterMark products:** All products on the WaterMark Schedule of Products (WMSP) would require WaterMark certification in order to be sold. This option would mean that even if a product was able to be used outside of a plumbing and drainage installation (e.g. in an agricultural setting), it would still require WaterMark certification.
- **POS regulation through prohibition of the sale of selected non-WaterMark products:** Under this option only products listed on the WMSP that do not (or are unlikely to) have alternative uses outside of a plumbing and drainage installation (e.g. a toilet pan or shower head) would require WaterMark certification to be sold.
- **POS regulation through alternative use labelling for non-WaterMark products:** All products on the WMSP would require either WaterMark certification and associated marking or, if they did not carry certification, would require labelling specifying that the product is not suitable for use in a plumbing and drainage installation.

To compare with the POS options above, the study also considered two POI options: POI regulation as it is currently implemented; and POI with increased enforcement.

Finally, other complementary approaches or interventions that have the capacity to help address the problem were considered. These address items raised in the discussion paper, and by stakeholders, but are not strictly regulatory options for POS or POI.

Assessment of options

Option a) POI regulation as it is currently implemented (maintain the status quo)

There was a clear view amongst stakeholders that maintaining the status quo will not address the problem, nor will it remain adequate into the future given the current and ongoing rate of change across the plumbing and plumbing product sector. The primary weakness with this option is the limited levels of audit or inspection at the POI and lack of education and awareness of the WMCS.

However, as a regulatory regime the current approach is appropriately targeted and, in principle, should support the WMCS objectives, provided it is adequately enforced. Having POI regulation is widely supported by industry and government and is seen as a critical control point in maintaining the integrity of the WMCS.

Finding 2: Maintaining the status quo would not have any impact on the problem and in the event the problem gets worse, this approach would become even less attractive. There appears to be many good reasons to pursue alternative options.

Finding 3: POI should be retained as a key control point, whether or not POS regulation is adopted.

Option b) POI regulation with increased enforcement

The use of POI regulation is a fundamental component of the WMCS. It aligns directly with the scheme objectives and it is a direct way of ensuring compliance. At present, it appears that enforcement levels in some jurisdictions are limited and this is likely to contribute to the problem of installation of non-WaterMark products. In jurisdictions where enforcement levels are high there are less issues with non-compliance. Increasing enforcement of POI regulation is likely to be an effective means of addressing the problem.

It is relatively cost-effective (given it relies on existing arrangements) and has low barriers to adoption and implementation (including no new legislation). Increased focus at the POI may also drive awareness through the supply chain (as plumbers insist on WaterMark products from their suppliers, be they plumbing supply merchants, builders or consumers). Moreover, many stakeholders supported enhanced audit and inspection at POI. The most likely barrier to this option is the requirement for individual jurisdictions to resource an increase in compliance activity at the POI. Despite this, this option may potentially be the least costly of the interventions assessed.

Finding 4: POI regulation with increased enforcement is a feasible option for addressing the problem.

Option c) POS regulation through prohibition of the sale of non-WaterMark products

Prohibition of all non-WaterMark products listed on the WMSP would undoubtedly increase the rate of compliance at the POI, however this is outweighed by a range of undesirable impacts. These include: increased cost or decreased availability of products with otherwise legitimate uses outside plumbing and drainage installations; and the cost and ease of implementation.

Finding 5: POS through prohibition is not considered feasible.

Option d) POS regulation through prohibition of the sale of selected non-WaterMark products

A slightly moderated intervention could be to prohibit the supply or sale of non-WaterMark certified products that do not have an alternative use outside of plumbing and drainage installations. This would allow the ongoing sale of non-WaterMark products that have alternative uses, however, would be difficult and complex to implement and it is unclear how effective it would be in addressing the problem.

Identifying which products do not have an alternative use is likely to be difficult in practice as many products have a wide range of potential uses (such as various different types of pipe, and a range of fixtures and fittings), and the scope of a plumbing and drainage varies based on state and territory legislation. Additionally, many of the products that were identified as only having a use in a plumbing and drainage installation (such as toilets, taps and showerheads) are products that are also subject to POS regulation through the Water Efficiency Labelling and Standards (WELS) scheme requirements, which supports the WMCS at the POS.

Finding 6: POS through prohibition of selected products is not considered feasible.

Option e) POS regulation through alternative use labelling for non-WaterMark products

Requiring alternative use labelling could present a workable form of POS regulation, however it would require considerable resources and effort to implement. This includes new legislation and resourcing to support enforcement at the POS. Additionally, it is questionable whether this will be particularly effective. For informed purchasers, such as plumbers, who are aware of the WaterMark scheme, the presence or absence of a WaterMark provides a clear delineation of suitable or unsuitable products. Alternative labelling for consumers who are unaware of WaterMark may have some benefit, however it is possible that in the absence of an understanding and appreciation of the WMCS, warning labels and prescribed uses may be easily overlooked.

It seems likely that increasing awareness of the WMCS and the WaterMark itself might have the same effects without requiring regulation and enforcement at the POS.

Finding 7: POS through alternative labelling of non-WaterMark products may be feasible, however it would likely be costlier and arguably no more effective in addressing the problem than other alternatives considered.

Alternative or complementary measures

It was clear from consultations that there is lack of awareness and education around WaterMark. This can increase the likelihood of non-WaterMark products being installed.

While regulatory options could be used to address the problem and associated issues, significant progress could be made through improving education and awareness (including among installers, and anyone involved in specifying, sourcing, supplying or purchasing) of the role and rationale of the WMCS, compliance requirements, as well as penalties for non-compliance. Such initiatives could be implemented at relatively low cost and would likely complement any regulatory approach (whether POS or POI).

Finding 8: There is a lack of understanding and awareness of the WMCS and its purpose.

Finding 9: Improving education and awareness may help address the problem.

Additionally, a key theme from consultation was the desire for shared responsibility across the supply chain. While this could be achieved through POS regulation, it could also be approached through non-regulatory interventions such as education and awareness (as above) and adoption of voluntary codes and standards (including at the POS).

There are also legislative options to enhance supply chain responsibility (and accountability). One option could be to introduce an offence for knowingly or recklessly supplying or specifying non-WaterMark products for a plumbing and drainage installation. This could create an obligation on builders, developers and plumbing merchants to take steps to ensure only compliant product was supplied but would avoid the need for a more prescriptive POS scheme.

Finding 10: Shared responsibility is a key principle that many stakeholders seek for the WMCS. It would likely improve the equity and effectiveness of the scheme and address some stakeholder concerns, but its feasibility is heavily dependent on how it is implemented.

Recommendations

Recommendation 1: ABCB initiate an education and awareness program, in partnership with state and territory Plumbing Administrations and industry, to raise the profile of the WMCS with the public and industry and to increase compliance with the scheme and the NCC.

It is recommended that a concerted effort be made to increase education on and awareness of the WMCS. This should extend to the general public and consumers, as well as industry. It should be undertaken in conjunction with jurisdictional regulators and industry to maximise reach and to ensure relevance, reach and consistency. Possible actions or focus points include:

- ensuring consumers and the general public understand the health and safety benefits of, and the legal obligation for using WaterMark products; the basis for the WMCS; and how certified products can be identified so that they can request, check and verify that WaterMark products are being installed
- improve awareness across sector wide practitioners or professionals, including builders, consultants, designers and architects, and developers, to increase awareness so that compliant products are specified and sourced
- provide information and materials for use by registered training organisations' (RTOs) for training packages to enhance practitioner knowledge and compliance
- running joint marketing campaigns between industry and suppliers that raise visibility of the WMCS and promote and support the choice of qualified/licensed plumbers to undertake plumbing and drainage installations with certified products
- developing and providing guidance such as guidelines or voluntary code material for suppliers regarding advertising and selling of WaterMark products.

Recommendation 2: Increase enforcement at the point of installation.

An increased focus on and documentation of audits for WaterMark products at the POI should be pursued. To be an effective scheme, there must be sufficient enforcement so that licenced plumbers undertaking illegal plumbing and drainage installations will be detected and required to rectify the work. In jurisdictions with higher levels of audit very few instances of non-WaterMark products being installed were recorded and it is reasonable to conclude that the same could be achieved in other jurisdictions.

Achieving this would require additional resourcing but could also be improved through better targeting enforcement. The extent to which enforcement is increased is dependent on each jurisdiction and is ultimately a decision for state and territory governments. However, there could be scope for collaboration between the states and territories and the ABCB as to what might be an effective minimum level of audit. There may also be scope for changes to certification fees to help fund additional compliance (or other) activities.

Additionally, non-compliance could be better documented and reported to establish a baseline of performance. A major challenge is the ability to quantify the extent of the problem and without evidence it is difficult to target further action to effectively improve and enhance the WMCS.

Recommendation 3: POS regulation should not be pursued until further efforts have been made to enhance the existing approach through greater enforcement at POI and through education and awareness.

It is recommended that recommendations 1 and 2 are pursued before any further consideration is given to POS regulation. It is considered that the problem can be meaningfully addressed through improving enforcement of existing POI arrangements and improved awareness and understanding of the WMCS.

Due to the nature of the WMCS, including the products covered, the dual use of many products, and the way in which products are purchased, specified and installed, there are some major challenges in developing a workable and effective form of POS regulation without undue burden on industry and regulators/government. Beyond this, there are also questions surrounding the effectiveness of POS regulation in addressing the problem itself.

Additional opportunities and considerations

In addition to the core feasibility assessment of POS regulation, several opportunities and insights emerged from the study for consideration. Suggested actions and recommendations have been included below.

Shared responsibility

Recommendation 4: Options to create shared responsibility (outside of POS regulation) should be considered and explored further.

In general, many of those who support POS regulation did so on the premise of creating 'shared responsibility' along the supply chain. Shared responsibility could help reduce pressure (from others) on plumbers to install non-WaterMark products and might reduce the number of non-WaterMark products being sold.

Softer non-regulatory interventions such as education and awareness (as under Recommendation 1) and adoption by industry of voluntary codes and standards (including at the POS) could make a real difference and be adopted relatively easily.

Creating supply chain responsibility (and accountability) through making it an offence to knowingly or recklessly supply or specify non-WaterMark products for a plumbing and drainage installation could also be a reasonable and lower cost solution (compared to POS regulation). This warrants further consideration.

Monitor and observe the QBCC Act amendments

Recommendation 5: Monitor and learn from the implementation of the QBCC Act in Queensland, including the response by industry and any information or data on changes in compliance.

In late 2017, the Queensland Government amended the *Queensland Building and Construction Commission Act (QBCC Act)* through the *Building and Construction Legislation (Non-Conforming Building Products – Chain of Responsibility and other matters) Amendment Act 2017*.

A key change was to establish a chain of responsibility across the supply chain for the supply of building products (including plumbing products). While it is too early to tell exactly how this will be implemented and what the response will be, there may be lessons or approaches from the experience which could be adopted and applied nationally. This could include providing insights on possible models for creating shared responsibility across the supply chain.

1. Introduction

1.1. Overview

The Australian Building Codes Board (ABCB) undertook a review of the WaterMark Certification Scheme (WMCS) in 2014. From that review process, it was found that there was interest from stakeholders around improving the efficacy of the scheme. This included the potential enforcement of the WMCS at the point of sale (POS), as opposed to the current system that occurs at the point of installation (POI).

As a result, Aither was engaged by ABCB to investigate the feasibility of, and possible options for POS regulation under the WMCS. The primary focus of the study was on the feasibility of POS regulation of the WMCS as a means of improving compliance with the *Plumbing Code of Australia* (PCA). In testing feasibility, possible options to maintain the current approach (with some improvements) and options for implementing POS were compared and analysed.

The primary intent of the study was to inform the ABCB and government stakeholders. This public report summarises the feasibility study process, and includes the findings and recommendations as made to the ABCB.

1.2. Purpose and scope

The core purpose of the study was to investigate the feasibility of POS regulation for the WMCS. The project scope was to:

- consider the nature and extent of ‘the problem’
- assess the feasibility of options for POS, including with regard to the likely effectiveness, complexity, resources, timing, and costs and benefits of different models or options for POS.

Options for retaining and enhancing current POI were also assessed. To this end the potential ‘desirability’ of different options was considered to some extent (by virtue of the criteria used to analyse different options).

In covering this scope, the following specific set of feasibility issues (as well as other issues) were also to be considered:

- enforcement by state and territory regulators
- potential regulatory duplication
- mechanism for the continued sale of non-WaterMark products
- different approaches for medium and high-risk products
- potential for online sales to bypass POS controls
- strategies for engaging with suppliers
- possible role for ABCB.

It was not within the scope (nor was it the purpose of this study) to review the WMCS as a whole, and scheme elements such as certification standards and processes were not considered. The focus is on the feasibility and desirability of POS regulation under the wider WMCS framework.

1.3. Method and stakeholder engagement

Aither's assessment was informed by an overarching framework to guide the overall feasibility study. Assessment criteria were also developed to assess the feasibility and merits of specific options, and the analysis of different options and characterisation of the problem was heavily informed by extensive stakeholder engagement.

Each of these elements is discussed below.

1.3.1. Framework for assessment

The framework for assessment is based on two main elements:

- Defining the problem, and possible POS options for addressing it, including:
 - Identifying and articulating the problem, and separating it from, trends and drivers, and underlying root causes, or other issues
 - Determining the potential options for POS and how it might address the problem or its underlying causes, versus other issues
 - Identifying potential alternative solutions to address the problem or its causes
- Considering the feasibility of POS and determining the relative merits of different options, including:
 - Addressing the various feasibility considerations outlined in the ABCB discussion paper
 - Assessing the relative merits of each of the possible options against criteria (see below)
 - Identifying alternative approaches that could be considered

1.3.2. Assessment criteria for specific options

Each option has been explicitly assessed against several assessment criteria in order to consider the feasibility and merits of each option. The assessment criteria applied were:

1. Ability to address the problem:
 - The specific problem with, or for, the WMCS is explored in Section 3. Assessment against this criterion considers whether (or to what extent) the option is likely to address the problem.
2. Simplicity and practicability to operate:
 - This criterion considers whether the option would be relatively straightforward or otherwise feasible to operate in an ongoing sense, including ongoing resourcing, and potential complexity of governance arrangements.
3. National consistency and coverage:
 - This criterion considers if the option is able and likely to be applied in a nationally consistent manner, including whether it would have the necessary support of different levels of

government, and whether it would require new legislation the practicalities of different legislative models (e.g. through Commonwealth legislation, adoption of model legislation or other means, e.g. merging with the Water Efficiency Labelling and Standards (WELS) scheme).

4. Competition:

- This criterion considers what impact the option would have on competition, including whether it would unduly or unfairly impact different types of entities in the supply chain, or would uniformly and consistently apply to all.

5. Implementation considerations:

- This criterion considers matters such as the upfront costs and resources likely required to design and implement the option (whether for those administering it, or required to comply with it), as well as potential or likely timeframes.

6. Equity concerns:

- This criterion considers what implications the option would have for equity – for example, would it place the burden of responsibility for WMCS compliance relatively more, or less on different actors or entities involved in the plumbing and plumbing product sectors.

Assessment limitations

Aither's report has relied on publicly available information, submissions to the discussion paper and extensive stakeholder consultation. The report is not a regulatory impact statement and has not included detailed economic analysis of options or solutions. This would need to be undertaken and considered if further actions are to be undertaken to pursue POS regulation.

1.3.3. Stakeholder consultation

The study included a significant public engagement process to characterise the problem, and to identify and analyse options. This consisted of a call for submissions, and face to face consultations with a broad set of sector stakeholders.

Public submissions were invited in response to ABCB's *Feasibility of point of sale regulation for the WaterMark certification scheme* discussion paper. Through this process over 40 submissions were received from across the country from industry and government.

Stakeholder consultations were conducted in Melbourne, Canberra, Sydney, Perth and Brisbane and included conversations with industry representative bodies for plumbing and building practitioners, manufacturers and suppliers, as well as state and territory government representatives from Victoria, Northern Territory, Australian Capital Territory, New South Wales, South Australia, Queensland and Western Australia, and the Commonwealth Government.¹

The WELS scheme administrator was also involved in the consultation process.

A full list of stakeholders consulted is included in Appendix A.

¹ Stakeholder consultation invites were extended to all state and territory governments.

2. Background and context

2.1. Background

This section outlines the development and current structure of the WMCS with a focus on regulation and enforcement (as it relates to this study).

2.1.1. WMCS overview

Launched in 2005 by the National Plumbing Regulators Forum, the WMCS is in place to ensure that plumbing and drainage products used in Australia do not pose a health and safety risk to communities and to the environment.

The ABCB became responsible for the WMCS in February 2013. Following a review of the WMCS in 2014, the ABCB began implementation of an improved WMCS in August 2017. As part of these improvements, the objectives and scope of the WMCS were adjusted to align more closely with the mission and objectives of the ABCB and the goals of the PCA.

The current objectives of the WMCS are:

- a) to provide a process to authorise materials and products to enable their use in plumbing and drainage installations in or around buildings; and*
- b) to ensure that plumbing and drainage materials and products are fit for the purpose for which they are intended and that their use in a plumbing and drainage installation throughout its serviceable life is suitable and does not create significant risks or any likely outcome of:
 - i) personal illness, loss, injury or death;*
 - ii) on-site environmental degradation;*
 - iii) contamination of the water resource;*
 - iv) adverse impact on infrastructure (private and public);*
 - v) contamination of water supplies from the point of connection to the points of discharge; and*
 - vi) wastage of resources (waste and energy).**

The WMCS is referenced in Section A2.1 of the 2016 PCA, which is part of the broader *National Construction Code* (NCC). The NCC is maintained by the ABCB and takes effect through state and territory legislation.

Most plumbing and drainage products that are intended for use in, or connected to, a building require certification under the WMCS. A list of products that require certification can be found in the WMCS Schedule of Products (WMSP), which is publicly available on ABCB's [website](#).

2.1.2. Regulation and enforcement

Plumbing practitioners, as a condition of their licencing, are required to use WaterMark products in plumbing and draining installations (as defined under respective state and territory legislation) when that product type is listed on the WMSP. Manufacturers and sellers of plumbing products have no specific obligations to only make or only sell WaterMark products, and non-WaterMark products can be legitimately made, sold and used outside of plumbing and drainage installations.²

Enforcement is undertaken at the POI by state and territory Plumbing Administrations by checking that plumbing and drainage installations are compliant (i.e. that WaterMark products are being used where they are required). The ABCB does not undertake enforcement and relies on states and territories to enforce the scheme – levels of audit vary by jurisdiction.

2.1.3. Roles and responsibilities

A brief summary of the roles and responsibilities of stakeholders as they relate to the WMCS is included below.

- **Development and administration:** The ABCB and its office is responsible for the development and administration of the NCC (and under it, the WMCS) at the national level.

The ABCB reports to the Building Ministers' Forum (BMF), which is a ministerial-level body made up of Commonwealth, state and territory ministers responsible for building and plumbing policy. Under the ABCB inter-governmental agreement, the BMF is responsible for overseeing the ABCB.

- **Certification:** WaterMark Certification Assessment Bodies (WMCABs), accredited by the joint Accreditation System of Australia and New Zealand (JAS-ANZ), evaluate and certify WaterMark products. WMCABs are responsible for both the certification of WaterMark products and ongoing auditing of WaterMark Licence holders.

While under no obligation to apply for WaterMark certification of their products, manufacturers are responsible for applying for certification if they wish to have their product WaterMark certified.

- **Enforcement:** State and territory Plumbing Administrations are responsible for enforcing the use of WaterMark certified products at POI.

2.1.4. Interaction between the WMCS and the WELS scheme

Some plumbing and drainage products that are covered under the WMCS are also covered by the WELS scheme. Despite this overlap, the WELS scheme and the WMCS have very different objectives and it is important to differentiate between the two and to understand the interactions between them.

The WELS scheme objectives are to conserve water supplies by reducing consumption, through providing information to consumers about the water efficiency of products and by promoting the adoption of water efficient products and technologies.

The WELS scheme is established under national legislation (*Commonwealth Water Efficiency Labelling and Standards Act 2005*) and is supported by uniform state and territory legislation. The WELS Regulator administers the WELS scheme and monitors and enforces compliance with the

² Where a manufacturer seeks WaterMark certification there are stringent processes for obtaining and maintaining certification – this process has not been explicitly considered in this study.

scheme. The WELS scheme is enforced at the POS where mandatory WELS labelling must be displayed in accordance with the WELS scheme requirements.

In 2014 a report on the linkages between and potential integration of the WELS scheme and the WMCS was undertaken. It found that the objectives of the WELS scheme and the WMCS are 'compatible, but...not interchangeable' and at best, the schemes can support each other to a limited extent (GWA 2014, p. 48).

Importantly, WaterMark certification is a *prerequisite* for certain plumbing products regulated under the WELS scheme. This means that where a product is specified under the WMCS and the WELS scheme, the product must first obtain WaterMark certification before WELS scheme certification can be granted. As the WELS scheme is mandatory and enforced at POS, plumbing products covered by both the WMCS and the WELS scheme are already subject to POS regulation (through the WELS scheme).³

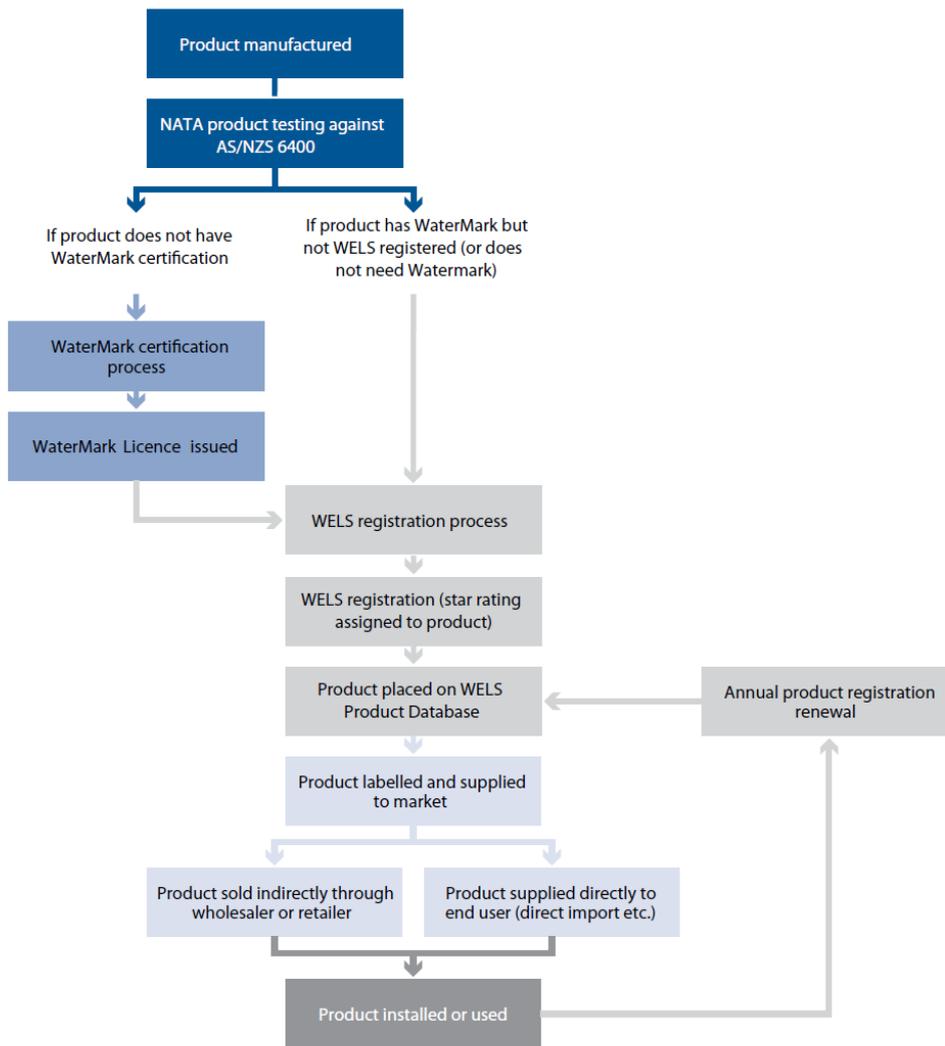
The WELS scheme covers only a limited group of products that are also covered by the WMCS. Products covered by both the WMCS and the WELS scheme include showers, toilet and urinal equipment, tap equipment and flow controller products. The products covered by both schemes account for a fairly small proportion (by number of products listed) of products listed on the WMSP (a full list of WMSP product types is publicly available on the ABCB website).

However, it is worth noting that products which are covered by both WELS scheme and the WMCS are typically 'front-of-wall'⁴ products that may be more prone to purchase by consumers or builders (and therefore supplied by a third party to plumbers, or potentially installed without a licenced plumber).

The following figure illustrates how the WELS scheme operates, and how it invokes a requirement for WaterMark certification, thereby providing *de facto* POS coverage for some WaterMark products (i.e. WaterMark products that also require WELS certification).

³ In this report, this impact is sometimes described as *de facto* POS regulation for WMCS. It should be noted however that, while a product will not be registered for WELS unless it has WaterMark certification, the WELS Scheme does not have legal responsibility or authority to enforce WMCS. Further, the WELS regulator makes compliance decisions and acts based on its legal framework and the objectives of its Act, not those of WMCS.

⁴ Front-of-wall products is a general description for the parts of plumbing and drainage installations that are visible within the home (i.e. on the front of the wall not behind). They include for example taps, showerheads, toilets etc. that are visible within the building.



Source: Aither

Figure 1 WELS scheme registration process

2.2. Context

This section provides context on the current and emerging trends within the plumbing and broader construction industry as they relate to the WMCS.

2.2.1. Emerging trends and drivers for change in for the WMCS

Major changes including offshore manufacturing, online sales, direct imports, and new and integrated products (e.g. ‘prefabricated modules [or pods] for showers, bathrooms, kitchens and laundries’) have altered the plumbing product supply chain. More products are more readily available to a range of potential purchasers, and the traditional model of plumbers purchasing plumbing products from a plumbing / trade outlet is not as prevalent. For example, consumers may be purchasing products from hardware outlets or online, or builders and plumbers may be using direct imports.

A potential implication of this is that more products are being purchased by consumers and other building practitioners who may not be aware of WMCS requirements. Likewise, different retailers (including online) may not be aware of the WMCS.

Additionally, an increase in do-it-yourself (DIY) household renovations and alterations has been cited as a potential breakdown in the WMCS (i.e. homeowners or unqualified providers installing plumbing products that may not be WaterMark certified). Also, service-for-hire websites such as 'Airtasker' were cited as a potential source of uninformed (and unqualified) providers installing non-WaterMark products.

It is difficult to quantify the magnitude of these changes and their impacts on the WMCS – however it is reasonable to conclude that the WMCS is operating in an evolving environment that challenges existing regulatory awareness and controls. Further information on this is included in Section 3.2.

Recent examples of plumbing / water related issues include lead in the water at Perth Children's hospital, and water contamination at the Royal Adelaide Hospital. While these are not necessarily examples of WaterMark failures, or issues that would have been avoided through POS regulation, each case study helps to highlight the public interest in these matters, and risks of substandard plumbing and drainage installations. Further information on these case studies has been included later in this report.

2.2.2. Broader building industry and conformity trends

The building and construction industry is a major economic driver in Australia. In 2015-16, it was the third largest industry in the country and produced around 8 percent of Australia's Gross Domestic Product (DIIS 2016). Similar to plumbing products (and other market sectors) globalisation and online sales have changed the way products are produced, bought and sold. Also similar to plumbing, there have been linkages drawn between an evolving supply chain and non-conforming building products.

Over recent years a number of high-profile incidents have shined a spotlight on potential issues with building product conformity – this includes the Lacrosse apartment building fire in Melbourne, and Grenfell Tower fire in London which were both exacerbated by cladding materials used on the buildings. Additionally, industry has been a proponent of improving building product conformity with the Australian Industry Group releasing the 2013 report *The quest for a level playing field – the non-conforming building products dilemma*. Stemming from this and other related efforts, in June 2015 the Senate referred the matter of non-conforming building products to the Economics Reference Committee for inquiry. The inquiry is ongoing with the final report date extended to November 2018. The first interim report Safety – 'not a matter of good luck' released May 2014 noted that:

Clearly there has been a serious breakdown in the regulation and oversight of both non-conforming and non-compliant building products, which requires determined action. (p. 18).

At the same time, the BMF appointed two independent experts, Professor Shergold AC and Ms Bronwyn Weir to undertake an external assessment of the compliance and enforcement systems for the building and construction industry across Australia. The work was commissioned in June 2017 and was presented to the BMF on 27 April 2018.

A summary of the key recommendations and findings relevant to this scope of work is included in the Box below. The key points have been considered and reflected in this report where relevant – noting *Building Confidence* (2018) was released following completion of consultation and initial drafting of this report.

Box 1: Key points from *Building Confidence* (2018)

With respect to the NCC (and within it the PCA and the WMCS), the report notes the following:

The NCC is one of the most important initiatives of the Council of Australian Governments (COAG). Many have described it as world-class. It sets minimum requirements for the design, construction and performance of buildings throughout Australia. It incorporates on-site construction standards in a systematic way. It is intended to enable all those involved in building and its regulation to understand the minimum requirements for health, safety and amenity in buildings. (Shergold and Weir 2018; p. 9).

The report cross references the scope of this study of POS feasibility, and states the following with respect to POS regulation for the WMCS:

The regulation of supply chains has merit. However, the resourcing required for regulatory oversight is significant and should not detract from core regulatory activities of building regulators. (Shergold and Weir 2018; p. 37).

The report also touches on the importance of education and awareness to support regulation, and that clear, visible and accountable compliance regimes are critical to an effective scheme:

'It is apparent to us that deriving the maximum benefit from a performance-based approach to building regulation depends on two fundamental requirements. First, there needs to be a high level of awareness and understanding across the building and construction industry of how compliance can be achieved by incorporating the performance requirements within the design process. Second, there needs to be strong public trust that the performance requirements are being met and, in particular, that health and safety is assured. At present, as this report elaborates, neither of these requirements are being fully met.

Without clear, visible and accountable compliance procedures, public confidence in the ability of governments to oversee a performance-based building and construction industry will be eroded. People need to be persuaded that the NCC is being administered to a high standard.' (Shergold and Weir 2018, p. 9).

The following recommendations are of relevance to this study:

- **Recommendations 1 to 4, and 13** focus on the role of registration and training of practitioners (including for example hydraulic engineers) and placing further responsibility on them in ensuring compliance.
- **Recommendations 5 to 7** relate to the roles and responsibilities of regulators with particular respect to commercial buildings and a need to increase and improve regulatory oversight.
- **Recommendations 18 to 19** relate to improved on-site inspection regimes for domestic and commercial buildings, however plumbing and drainage installations are not specifically mentioned in this context.

Evidently, the issue of non-conforming building products is in the public spotlight. The extent to which non-conforming building products are being used is difficult to quantify as evidence is often anecdotal, making it hard to scale the problem and potential net impacts. While high profile examples (such as the Lacrosse apartment fire) highlight the potential consequences of product misuse, there appears to be an ongoing challenge in robustly quantifying the extent of the issue and associated risks. This has also been observed in previous reviews of the WMCS.

3. Defining the problem

3.1. Overview

In order to evaluate the feasibility of POS regulation, it is necessary to understand the problem(s) which POS regulation is seeking to address. As has been noted in the ABCB discussion paper, there have been some stakeholders who have expressed support for POS regulation, but less clarity about the specific problem(s) it will address and how.

Our approach to better defining the problem has been to separate out different elements of the potential problem. For example, we seek to clarify a specific problem for the WMCS, as distinct from what could be potentially many and various underlying or 'root' cause(s) of the problem. Similarly, this approach seeks to identify and separate out other issues that may be valid but may not necessarily be explicitly tied to the problem, or the central question at hand for this study (which is whether or not to pursue POS regulation).

This has involved:

- identifying trends or changes in relation to supply or installation of plumbing products recently and over the longer term – these may not actually be 'problems' but provide context for the problem and potential solutions
- identifying the specific problem(s) that may exist with the WMCS in the context of these changes – this represents an attempt to clarify, and clearly articulate, the specific problem with or for the WMCS as it currently operates.
- identifying the outcomes (or consequences) that the problem is resulting in (or may result in), – which in part helps to confirm that the problem is or could be material
- identifying and describing the underlying or root causes of the problem(s) – which helps to separate out a potentially broad range of contributing factors from the problem itself, and assist in determining if and what changes (such as implementing POS) might be most effective in addressing the problem.

A key objective of considering the problem in this way is to make sense of the broad range of 'issues' that may have been identified as part of this study or other reviews or processes, and how POS may (or may not) be feasible.

As a brief note, in reviewing the submissions and throughout consultations, there was strong support for the WMCS amongst stakeholders. It is viewed as fundamental to maintaining public health and safety in the plumbing sector. It was implicit in consultations and submissions that addressing the problem and issues identified would be better achieved through retaining the WMCS (not removing or replacing it).

3.2. Trends and changes

There have been a range of trends and changes in the plumbing sector over recent decades. This includes the way plumbing and related products are supplied and installed, as well as how plumbing work is checked or verified. Some of the key changes or developments observed and discussed in consultations, include:

- more consumer direct/end user purchasing, including direct imports or orders straight from manufacturers
- increased online sales from a range of websites (including domestically or from overseas), by end users but also others in the supply chain or amongst developers and installers, which has changed the way in which products are sourced
- more large developments, and the changing nature of developments – including an increasing shift to high and medium density development
- evolution in products and technology has created a wider (and potentially more complex and confusing) range of products, with new and different plumbing products available
- increase in do-it-yourself mentality with respect to home improvements and growth in home renovations
- more overseas manufacturing and import of products
- more emphasis on installer responsibility (relative to what the case was several decades ago), and significantly less checking of installations by regulators or oversight bodies
- prevalence of ‘informal’ installations or ‘cash jobs’ which fall outside any potential checking regime (including services procured through online marketplaces).

There was a suggestion by several stakeholders that the operation of (or regulation associated with) the WMCS has not kept pace with or adapted to a rapidly evolving supply chain. The emergence of online sales, increased imports, and increased use of direct imports to work sites were all cited as examples. This amongst the other trends observed, suggests the environment in which the WMCS was established is different to what it is now.

The proportion of overseas manufacturers was estimated between 50 per cent and 75 per cent (based on estimates in the *Discussion Paper: Feasibility of Point of Sale Regulation for the WaterMark Certification Scheme*). Information on where different purchasers are buying products from is less clear however the general increase in home hardware stores, online sales and the ability to organise direct imports more readily are all signs of a changing marketplace.

3.3. The problem and its consequences

Based on our assessment of the Terms of Reference, discussion paper, submissions from stakeholders, and the consultation undertaken, our interpretation and characterisation of the **problem** for the WMCS, is that:

- non-WaterMark products are being (or are at heightened risk of being) installed and used in situations where a WaterMark certified product is required.

In other words, the core problem is that products that are not fit for purpose are being installed or used, or there is increased risk that this may occur. The extent to which this is actually happening is difficult to verify given the available data and limited checking of WMCS compliance in plumbing and drainage installations that is undertaken.

The **consequences** of this problem include that:

- there is increased public health and safety risks
- the objectives of the WMCS are compromised and the scheme is less effective than it could be

- the consequences of non-compliance will generally not manifest themselves until long after installation with the result that there is a high cost of remediation (e.g. product removal and replacement), particularly for products that are 'behind the wall'. Additionally, as time passes, it becomes more difficult to recover those costs from the party responsible.

3.4. Evidence of the extent of the problem

3.4.1. Evidence

Gathering evidence on the extent of the problem is challenging. While there are large numbers of installations, there is often limited verification and checking that occurs (and consequently very limited data or information about checks undertaken or their results). Some checking that does occur may not be targeting WMCS compliance specifically (because it is targeting other risks or issues with plumbing and drainage installations).

As part of this study, state and territory regulators were asked for data and information regarding audit rates and the extent of non-compliant installations due to WMCS related issues. Audit and compliance rates attributable to specific jurisdictions have not been included in this report, however the range and trends with respect to auditing and compliance have been discussed in general terms.

The information provided suggested that, with one exception, audit rates are very low, or in some cases, audits of WaterMark products are not undertaken at all. Several jurisdictions provided information that indicated plumbing and drainage installation audit rates of between 0 and 5 per cent. In addition to this, many jurisdictions did not specifically audit for WMCS compliance when plumbing and drainage installation audits or checks were undertaken.

Information provided on compliance rates (i.e. pass/fail rates of audits) suggested that jurisdictions with low audit levels had higher incidences of failure (i.e. non-compliance) than those with higher audit rates. However, it is difficult to draw definitive conclusions from this due to very limited data and a small sample size. Furthermore, non-compliances were often for reasons other than WMCS issues, although many jurisdictions did not specifically report on WMCS compliance (as distinct from other compliance requirements).

In the event of WMCS non-compliance, the state or territory Plumbing Administrator has the power to revoke practitioner licences, or issue penalties, however it appeared that these sanctions were rarely – if ever – invoked and the usual course of action is to require the practitioner to rectify the installation.

Box 2 below includes a summary of examples of non-WaterMark products being installed or intended for installation – noting that in most cases this information was provided through consultations and cannot be strictly verified.

Box 2: Examples of WaterMark non-compliance

Several examples were given where non-WaterMark products were either installed or specified for installation. Examples included:

- taps for installation in commercial developments as well as community housing projects and other developments that were not WaterMark certified
- toilets for installation in larger commercial developments
- purchases for domestic installation (e.g. a consumer purchases a tap and requests the services of a plumber to install it)

- larger scale projects (such as large commercial buildings and precinct developments) where non-WaterMark products have been procured or selected by the developer / head contractor for installation.
- directly imported integrated pods which had in-built plumbing products that were not WaterMark certified
- spas with integrated tapware (retailed in Australia) where the tapware was not WaterMark certified
- the Perth Children’s Hospital (see Box 3)

In addition to the examples above, there was strong agreement amongst many stakeholders that the most common examples of non-WaterMark products being installed were likely to be ‘front of wall’ products that were purchased or specified by someone other than the installer (e.g. a consumer, the designer, or the builder). Non-WaterMark tapware in particular was cited as most susceptible to being installed or specified for installation. Reasons for this included higher rates of consumer purchases and tendencies to purchase tapware online and from overseas (e.g. whether in pursuit of a cheaper alternative, or a ‘premium’ product not generally available domestically). It is worth noting that most of these ‘front of wall’ products (including tapware) require a WELS rating, and therefore must have a WaterMark to be sold (see discussion of interaction of the WELS scheme and WaterMark in Section 2.1.4).

Many of the submissions from stakeholders (and discussions during consultation) acknowledged the lack of data available in this context (i.e. specific data on the extent of wrongful use of non-WaterMark products) but presented other arguments that may be relevant to establishing whether the problem exists. These included:

- The ability for price to act as a strong incentive – consumers and those involved in building design and construction (including developers) will rationally seek lower priced (non-WaterMark) products. Comparisons of like products with and without WaterMark certification show a clear price difference (sometime more than double the price for the WaterMark product).
- The prevalence of both WaterMark and non-WaterMark versions of the same type of product being available for sale where the product is highly likely to only be used in a plumbing and drainage installation.
- Those who are willing to take risks will do so given the limited levels of enforcement, low penalties, and ability to push or direct responsibility onto others – there is a general lack of incentive for compliance.
- There is no barrier to supplying or selling non-WaterMark certified products that are within the scope of the PCA.
- The general argument that absence of evidence is not evidence of absence – given that rates of checking by state and territory regulators are limited, and that some checks do not cover WMCS issues, it was also suggested that there is no evidence that a problem does not exist.

The general theme of poor evidence to substantiate risks, acknowledgement of potentially major consequences from poor performing products, and consensus from stakeholders around maintaining some control and regulation of plumbing products to support community safety and health, have all been observed in preceding reviews of the WMCS (see Allens 2009, KPMG 2010 and the 2014 Review).

3.4.2. Consequences of the problem in plumbing or related sectors

The main examples of the consequences of non-compliance (i.e. non-WaterMark products being used where WaterMark products are required) highlighted through the course of this study include:

- costs in replacing non-compliant materials (including to building owners, building practitioners, plumbing practitioners etc.)
- public health and safety impacts (e.g. contaminated water)
- product failure resulting in consequential building damage and loss.

Stakeholder submissions indicated that these impacts could be significant. Costs of replacement can be in the millions of dollars, and the impacts of plumbing product failure can range from minor repairs and replacement, to adverse health and safety impacts (including death).

Examples where product failures or other issues associated with not fit for purpose products⁵ being installed have had major consequences (from the plumbing sector, as well as the construction sector more broadly) include:

- 65 deaths in Hong Kong from severe acute respiratory syndrome (SARS) which was traced to U-traps that were not fit for purpose in Amoy Gardens which allowed the virus to spread through the building's residences (Hung 2003).
- Water contaminated with lead in the Perth Children's Hospital, where it appears that plumbing fixtures are in-part to blame for unacceptable water quality and, in conjunction with other factors, led to significant delays in the opening of the facility (see Box below).
- Flammable cladding, both in the near-disaster at Lacrosse Tower in Melbourne where fire spread thirteen floors in thirteen minutes, and the disaster at Grenfell Tower in London where 71 deaths resulted from a fire that spread rapidly due to recently installed flammable cladding.
- In the electricity sector, 4000km of Infinity electrical cable was recalled in 2014 at an estimated cost of almost \$80 million to consumers and homeowners due to premature aging causing fire and electrocution risks.

Box 3: Perth Children's Hospital

It was reported that a thermostatic mixing valve assembly box was a contributing factor to high lead levels. The product suspected of contamination had been incorrectly labelled to imply that an integrated product was WaterMark certified, when only parts of the product were WaterMark certified, and others were not. In September 2017, the Building Commission issued a rectification notice ordering removal and replacement of the non-compliant product and the product has since been replaced (PAC 2018).

This created major delays in the project and incurred additional costs, had the issue not been identified it may have posed significant health risks.

⁵ Note – in these examples 'not fit for purpose' simply refers to the failure of a product to perform its intended function – irrespective of whether it was subject to any standards, certification or regulation.

3.5. Underlying causes of the problem

To better understand the *problem* as defined above, a range of principal causes for the problem were identified and considered. The root causes of the problem appear to be:

- **Cost:** the cost differential between certified (WaterMark) and non-certified (non-WaterMark) products is likely to be a powerful incentive for wilful non-compliance.
- **Ignorance:** In the absence of strong awareness and education on the WMCS it is likely that there are legitimate instances – particularly with respect to supply and specification of plumbing products – where non-WaterMark products are inadvertently supplied or purchased for installation in plumbing and drainage applications.
- **Likelihood of detection:** The scheme relies heavily on non-WaterMark products being detected at the POI. Enforcement of this is critical to providing a deterrent to non-compliance and it appears that in many cases enforcement levels are not creating this deterrent.
- **Penalties for non-compliance:** In addition to limited enforcement, a lack of consequence for installing non-WaterMark products will mean the deterrent to non-compliance is lower. If the penalty is rectification, and the chances of getting caught are low, the decision may be made to rectify on occasion when caught and to continue installing non-compliant product across other jobs.
- **Consumer preference:** Designers, architects and consumers etc. are increasingly purchasing and specifying products – this is a shift from the traditional role of the plumber and means that parties with little or no understanding of the WMCS are increasingly selecting or specifying products (this is further enabled through direct imports, online sales and other domestic outlets for plumbing products – particularly for products that are ‘front-of-wall’).

In combination, these underlying causes can also lead to pressure on the installer to install non-WaterMark products, which is in turn a cause of the problem:

- **Pressure on the installer:** Under current arrangements responsibility for compliance rests with the installer at the POI. Due to increased purchasing by parties other than the installer, the installer can be placed in the position where non-WaterMark products have already been purchased (e.g. by a consumer for domestic installation, or by a builder or developer for commercial development) and they are pressured to install the product.

Reasons for this include consumer preferences (and purchases), ignorance of the WMCS by purchasers, or cost incentives / savings from using non-WaterMark product. On the latter point, for builders/developers on larger projects – there may be substantial economic or other interests in supplying non-WaterMark products for plumbing or drainage applications. As the current system holds only the installer accountable, it is arguably both unfair and ineffective in holding those, who as major customers will often have unequal bargaining power, accountable for their actions.

3.6. Assessment of the problem and rationale for action

Current trends and drivers surrounding the WMCS, as well as aspects of its implementation, provide the necessary conditions and incentives for the wrongful installation of non-WaterMark products in plumbing and drainage installations.

In Aither’s view, it is both illogical and naïve to assume that the problem does not exist, or that it is so insignificant as to justify no action in response. Key elements in support of this argument include:

- changes in the supply chain that have disrupted the ways in which products are sold and who is purchasing them (including online purchases or direct imports where WaterMark certification may be unclear, or where uninformed purchasers, such as consumers, might be purchasing plumbing products where this has traditionally been done by the plumber / installer of the product)
- wilful non-compliance driven by cost incentives where non-WaterMark products (for alternative uses) are cheaper than WaterMark equivalents
- a general lack of awareness and education on the WMCS amongst key actors or entities involved in specifying, supplying, or installing plumbing and drainage products
- the growth in and prevalence of home renovations and building projects, including DIY activity, and informal plumbing activity
- in the context of the above points, the current structure and implementation of compliance arrangements associated with the WMCS, including that:
 - sole responsibility for compliance is at the 'end of the line' and rests only with installers – no other parties bear any responsibility for ensuring the required products are specified and installed
 - audit and checking rates are inadequate in many jurisdictions and provide insufficient incentives for compliance.

Aither acknowledges that there is currently a lack of quantifiable (or verifiable) evidence to establish how widespread the problem is. However, we also note that for the most part, state and territory Plumbing Administrations:

- in many jurisdictions check an extremely small proportion of all plumbing and drainage installations, or do not check at all
- often do not specifically check for WMCS compliance where audits or checks are undertaken
- cannot check informal installations (because certificates are not sought or issued) to identify instances of non-compliance with the WMCS.

Furthermore, consultations consistently delivered feedback suggesting the problem exists, with explicit acknowledgement from several regulators or administrators that they have identified or are aware of (in some cases significant) instances of non-compliance (for examples, see Box 2).

We also note that one of the key underlying objectives of the WMCS scheme relates to the protection of public health and safety. The consequences of using non-WaterMark products can be severe, both in terms of financial costs (like rectification and consequential damages from failure) and in terms of impacts to human health and safety.

Given the above, Aither is of the view that additional intervention or action, to complement the current scheme and its implementation is warranted. However, it is also important that any action in response must be considered, measured and proportionate.

Finding 1: Current trends and drivers surrounding the WMCS and elements of its implementation support the existence of a problem with installation of non-WaterMark products, and this is supported by evidence. Measured and proportionate action is justified in response.

4. Defining POS regulation

This section seeks to define what ‘point of sale regulation’ might mean in the context of the WMCS (as well as its scope of application) and is required in order to undertake an explicit assessment of options for this study.

4.1. Defining ‘point of sale regulation’

For this study, POS regulation has been defined as any form of mandatory requirements relating to the sale, or conditions of sale, of WaterMark and/or non-WaterMark products. The scope of POS regulation has been considered to be the sale of products at any point through the supply chain through to the POI.

It is also important to note that POS regulation is not synonymous with shared responsibility, although it would (if implemented in addition to POI) spread responsibility for WMCS compliance amongst a greater range of entities. It is also not necessarily synonymous with other ‘soft’ interventions or policies such as education and training, or voluntary codes or standards, which might involve actions and behaviours at the POS (although any implementation of POS would likely be accompanied by education and awareness raising).

In regards to the mechanics of POS regulation, there was not a common articulation from stakeholders regarding how POS regulation would work in practice (this was evidenced by differing views and thinking put forth in submissions and consultations).

In general, the arguments put forward for POS were built around:

- reducing installation of non-WaterMark products because non-WaterMark products would be unavailable or harder to purchase
- the opportunity to provide greater equity or distribution of responsibility across different actors or entities in the plumbing and plumbing product sectors which would help reduce pressures on plumbers to install non-WaterMark products.

Given this, Aither developed and defined different approaches, which informed specific options that were subsequently assessed (See Section 5). Options were distilled through testing specific ideas through consultations based on the general concept of POS, and the different needs and issues that stakeholders felt POS might help to address.

4.2. Challenges in designing POS regulation

There are a number of challenges associated with designing a workable POS regulatory regime, due to the nature and complexity of the WMCS itself. The key challenges identified in this study have been discussed in this section.

Protecting public health versus consumer awareness

Many stakeholders suggested through submissions and consultation that POS regulation for the WMCS could be based on the WELS scheme system (and potentially merged with WELS scheme). However, this is overly simplified and the differences between the two schemes make this impractical,

not least because the WMCS applies to many more product types than the WELS scheme (see information on interactions with the WELS scheme and the WMCS in Section 2.1.4).

Furthermore, the primary concern of the WMCS is protecting public health and safety through ensuring that products meet required standards and that these products are used at the POI (where required). The WMCS is therefore not strictly a consumer awareness program, unlike the WELS scheme, which is intended to inform consumers about the water efficiency of products (i.e. WELS displays the relative performance of different products so the consumer can make an informed purchase). This is a fundamental difference.

Products that have legitimate uses outside the scope of the PCA

Looking at the WMCS, many products listed on the WMSP have legitimate uses in addition to plumbing and drainage installations. Whether the product requires WaterMark or not is entirely contingent on its intended use and the associated risks (i.e. if its use is intended within the scope of the PCA with risks that can be mitigated through the application of the WMCS, it needs certification).

This poses a challenge as it becomes difficult to introduce POS regulation without impacting the sale of products which also have uses outside of plumbing and drainage installations. For example, if non-WaterMark certified products were banned, those who currently purchase non-WaterMark products (e.g. for agriculture) would be forced to purchase WaterMark certified products – which would likely be costlier (or even potentially not fit for purpose). Applications of plumbing products where WaterMark certification may not be required include irrigation, heating, manufacturing and ventilation, amongst several others (depending on how plumbing and drainage installations are defined in state legislation).

The nature of plumbing products

A further complication is that the WMCS covers a vast array of products including small products that are not individually labelled (the WaterMark label may be on a box of products and not on the product itself). This therefore generates further challenges when considering POS regulation and the practicalities of how it would be implemented. It is also worth noting that recent changes to the scheme following the 2014 Review included moving to a single level scheme.⁶ Differential treatment of products (e.g. some products are regulated at POS and others are not) would add complexity and essentially split the scheme again, which may be considered undesirable.

Online sales

Lastly, one of the underlying causes of the problem was identified as online sales. To maximise its effectiveness, POS regulation would also need to apply to online sales but ensuring full coverage of online sales may pose a challenge. However, this is not a unique challenge, and the WELS scheme regulator currently regulates online sales through a strategic and targeted approach. The overall feasibility or success of POS is not solely dependent on its ability to address online sales, however the efficacy of POS in the absence of capturing this channel is partly compromised.

Summary

POS regulation for the WMCS is complicated by numerous factors, however, through consultation with stakeholders, and in consideration of these factors, this study has identified three possible options or models for how POS regulation might work.

⁶ Previously the 'risk' of the product type was considered and products were allocated to one of two risk levels. Products were then audited and monitored differently depending on their risk level.

4.2.1. Potential models or approaches for POS regulation

Three possible models for POS regulation were identified through the process of this study. These approaches are reflected in the specific options that were assessed, as is described further in Section 5.

- POS regulation through prohibition of the sale of non-WaterMark products, where:
 - it would be prohibited to sell non-WaterMark versions of *any* products listed on the WMSP.
- POS regulation through prohibition of the sale of selected non-WaterMark products, where:
 - it would be prohibited to sell a selection of products from the WMSP without a WaterMark that have been identified as not having (or unlikely to have) an alternative use outside of a plumbing and drainage installation.
- POS regulation through alternative use labelling for non-WaterMark products, where:
 - in order to sell products listed on the WMSP that do not have WaterMark certification they must be marked or labelled (at the POS or supply) as not fit for use in a plumbing or drainage installation (i.e. under the PCA).

Note: It was clear through the course of this study that POI regulation was seen as complementary to POS regulation and that it should be retained even if POS regulation is pursued. As such it is assumed that if any of the POS options listed above were pursued, there would still be POI regulation. The analysis and rationale for this is included in the assessment of the maintaining status quo option in Section 1.1.

5. Options identification and assessment

5.1. Options for assessment

Options

For the purposes of assessment Aither defined five different options. These reflect Aither's definition of what POS regulation might actually do (see Section 4, including Section 4.3.1), but also stakeholder consultation and submissions, as well as options or considerations in the ABCB's discussion paper. The options assessed are:

- option a) POI regulation as it is currently implemented (maintain the status quo)
- option b) POI regulation with increased enforcement
- option c) POS regulation through prohibition of the sale of non-WaterMark products
- option d) POS regulation through prohibition of the sale of selected non-WaterMark products
- option e) POS regulation through alternative use labelling for non-WaterMark products.

Note: A number of options and approaches were presented in the *Discussion paper: Feasibility of Point of Sale Regulation for the WaterMark Certification Scheme*. These options have not all been explicitly assessed by Aither. This is due to those options having been reflected in Aither's options or in the assessment criteria, or because the options did not have a clear definition of what was being regulated. Appendix B contains a further explanation on how the options in the discussion paper have been addressed.

Explanation of assessment

Each option has been assessed against the assessment criteria outlined in Section 1.3.2. A qualitative assessment, and a rating has been provided for each option. The rating system facilitates a summary and comparison of different options at the conclusion of the assessment – however it is somewhat coarse in nature and should be considered in the context of the accompanying written assessment. The rating system is as follows:

- X = the option does not perform well against that criterion
- ✓ = the option performs reasonably well against that criterion
- ✓✓ = the option performs very well against that criterion
- n/a = the criterion is not relevant for the particular option.

5.2. Options assessment

5.2.1. Maintain the status quo (option a)

Overview

Under current arrangements WMCS conformance is undertaken at the POI by state or territory Plumbing Administrations ('plumbing regulators'), and in some cases these functions are delegated to

local councils – the ABCB is not responsible for enforcement. The plumber installing the products remains the party with ultimate responsibility for ensuring WaterMark products are installed where they are required, and is accountable to the relevant state regulator.

The level of enforcement varies greatly between jurisdictions. In some jurisdictions certain elements of all plumbing and drainage installations are checked, in others there is no, or very little, on-site checking, and some of these checks may not involve any specific checking of WMCS related issues. The discussion paper estimated that between 5 and 10 per cent of plumbing work is checked, however indications provided through stakeholder consultation suggest that even this estimate could be higher than reality. Therefore, maintaining the status quo means these limited levels of audit would be maintained.

Assessment against criteria

Table 1 Assessment of the status quo (option a)

| # | Criteria | Assessment summary | Rating |
|---|-----------------------------------|--|--------|
| 1 | Ability to address the problem | Maintaining the status quo will not have any incremental impact on the problem. Given increased accessibility through a range of channels (including online, direct imports and in stores) to cheap non-WaterMark products (where deterrents are weak), and an observed lack of full awareness of and education on WaterMark requirements there is a greater likelihood of non-WaterMark products being installed. Maintaining the status quo is likely to become increasingly ineffective over time. | X |
| 2 | Simple and practicable | Maintaining the current approach would require no change to ongoing arrangements, and there would be no change in operation of the WMCS. | ✓✓ |
| 3 | National consistency and coverage | Current POI regulations apply nationally through the PCA and the WMCS. | ✓✓ |
| 4 | Competition | The current arrangements are competitively neutral in the sense that all installers are treated the same, similarly, all sellers or suppliers are treated the same (i.e. no regulation to comply with). | ✓✓ |
| 5 | Implementation considerations | Not applicable (already adopted). | n/a |
| 6 | Equity concerns | Under current settings, all formal responsibility for compliance rests with the installer, which is arguably inequitable. | X |

Discussion and findings

Given evidence provided of non-WaterMark products being installed in plumbing and drainage installations there is a problem under current settings, and a number of identified issues and causes of this that relate to the current implementation of POI regulation (see section 3.4.1 for more information). The main drivers of this are that:

- there is generally poor understanding and awareness of the scheme across the supply chain and amongst consumers

- there are limited rates of audit at the POI, meaning incentives to comply are low (and incentives such as savings from cheaper non-WaterMark products or pressure to install non-WaterMark products from up the supply chain, might outweigh incentives to comply)
- changes in the supply chain are likely to increase accessibility to non-WaterMark products and/or purchasing by parties other than the installer who are not aware of WaterMark requirements.

There was limited support for maintaining the status quo – particularly with respect to current levels of audit which were generally (though not universally) perceived by stakeholders as too low. Broadly speaking, most stakeholders (industry and government alike) agreed that action could be taken to improve enforcement. There was also general consensus that under the current settings, awareness and understanding of the scheme is often low. However, there was no suggestion from stakeholders that POI regulation should be removed – on the contrary, all stakeholders support continued POI regulation whether POS regulation is pursued or not.

As a result, maintaining the status quo as it is currently implemented is undesirable – however, retaining POI regulation (with improvements) was widely supported.

Finding 2: Maintaining the status quo would not have any impact on the problem and in the event the problem gets worse, this approach would become even less attractive. There appears to be many good reasons to pursue alternative options.

A secondary finding from assessing this option was widespread support for retaining POI regulation irrespective of whether POS regulation is adopted or not. It is seen as integral to the WMCS.

Finding 3: POI should be retained as a key control point, whether or not POS regulation is adopted.

5.2.2. POI regulation with increased enforcement (option b)

Overview

This option would involve increasing enforcement under the current POI regulatory approach – i.e. more auditing for non-compliance. Limited levels of checking at the POI were reported in many jurisdictions. Enforcing the WMCS at the POI is critical to making the scheme effective – without adequate POI enforcement there are insufficient deterrents to prevent installation of non-WaterMark products and there is likely to be lower awareness of the WMCS itself.

Assessment against criteria

Table 2 Assessment of increasing enforcement POI regulation (option b)

| # | Criteria | Summary assessment | Rating |
|---|--------------------------------|--|--------|
| 1 | Ability to address the problem | It is likely that increasing POI enforcement would help address the problem. Stakeholder consultations and submissions highlighted examples where jurisdictions with higher enforcement levels appeared to have less issues with the installation of non-WaterMark products. | ✓✓ |

| # | Criteria | Summary assessment | Rating |
|---|-----------------------------------|---|--------|
| 2 | Simple and practicable | This option would only require increased enforcement of the current approach, so would be relatively straightforward in the sense that no new regulatory system would be required. It is anticipated that this would require adding additional ongoing resources (e.g. new inspectors) to enforce the regime. There would likely be incremental increases and the absolute level of audit would vary between states and territories given their size and current level of audit activity. | ✓✓ |
| 3 | National consistency and coverage | Current POI regulations already apply nationally through the PCA and the WMCS. However, there may be varying levels of support amongst states and territories which could create challenges in achieving nationally consistent implementation of improvements. | ✓✓ |
| 4 | Competition | No changes in competition would occur under this option. | ✓✓ |
| 5 | Implementation considerations | This option would likely not require upfront costs or resources to design or implement, unless states and territories designed alternative approaches to enforcement, or pursued awareness raising or education as part of a revised enforcement program. In the event major design changes do not occur, the option would not take long to implement. | ✓✓ |
| 6 | Equity concerns | Given all formal responsibility would remain with the installer, this option would not address this equity issue directly. However, it may be the case that increasing POI enforcement might increase the profile of the WMCS, which might alleviate some of the pressure on the installer. | ✓ |

Discussion and findings

The use of POI regulation is a fundamental aspect of the WMCS. It aligns directly with the scheme objectives⁷ and it is a direct way of ensuring compliance. Increasing POI enforcement could create greater incentives for practitioners to be aware of and respect their obligations to install WaterMark products and increase the visibility of the scheme (e.g. inspectors on site). This could ultimately drive pressure back up the supply chain to place pressure on suppliers or those making purchasing decisions (and potentially also manufacturers) to provide WaterMark products.

In jurisdictions where enforcement levels are high there appear to be fewer issues with non-compliance from the installation of non-WaterMark products. On the other hand, in jurisdictions with limited audit rates there is at least some evidence of non-compliance, though it is difficult to extrapolate exactly how frequently non-WaterMark products are being wrongly installed. While the above supports the view that higher rates of audit support greater rates of compliance, it is worth noting there is imperfect information and relatively limited data to draw on.

Support for increasing POI enforcement varied across stakeholder groups. There was general support for increasing POI enforcement amongst industry stakeholders, who perceived this as a way to increase the use of WaterMark products in installations. Across government there were mixed views on the benefits and cost-effectiveness of increasing POI enforcement. Generally speaking, most (not

⁷ See section 2.1.1 for WMCS objectives.

all) regulators saw benefit in higher audit levels (particularly where current levels are low), but were also concerned about funding and resourcing constraints.

On balance, increasing enforcement at the POI appears to be a potentially effective means of addressing the problem. It is likely to be relatively cost-effective given it relies on existing arrangements and has lower barriers to adoption and implementation. Perhaps the biggest challenge is whether there is the capacity to increase enforcement and associated resourcing (noting that these challenges exist for POS regulation options as well – see Section 5.3.). It will also not address the equity concern regarding compliance responsibility resting solely with the installer.

Finding 4: POI regulation with increased enforcement is a feasible option for addressing the problem.

5.2.3. POS regulation through prohibition of the sale of non-WaterMark products (option c)

Overview

Under this option POS regulation would be achieved through the prohibition of the sale of all products that are listed on the WMSP, unless they are WaterMark certified. This option would mean that products that may have alternative uses outside of a plumbing and drainage installation would require WaterMark certification regardless of their end use.

Assessment against criteria

Table 3 Assessment of prohibition (option c)

| # | Criteria | Summary Assessment | Rating |
|---|-----------------------------------|--|--------|
| 1 | Ability to address the problem | Prohibition of the sale of non-WaterMark products would help address the problem as fewer non-WaterMark products would be available for installation. | ✓✓ |
| 2 | Simple and practicable | This approach would be simple in principle, given it strictly and clearly outlaws a defined list of products. It would however require additional ongoing resourcing for compliance and enforcement throughout different parts of supply chains and, enforcing online sales and direct imports could be challenging (though not insurmountable, with the WELS scheme currently doing POS regulation for online sales). | ✓ |
| 3 | National consistency and coverage | This option would require new legislation to implement. Based on consultations, it appears unlikely that all of the states and territories would agree to legislation that prohibits the sale of products without a WaterMark, and therefore unlikely that this option could be implemented in a nationally consistent manner. Commonwealth support for this option is also not likely. | X |
| 4 | Competition | Regulating online sales and direct imports could be a particular challenge, and if so, this could potentially mean other forms of supply may be disadvantaged. However, this option could potentially be implemented in a way that is neutral (i.e. does not impact certain parts of the supply chain more than others), noting for example that WELS regulates online sales. | ✓ |

| # | Criteria | Summary Assessment | Rating |
|---|-------------------------------|---|--------|
| 5 | Implementation considerations | There would be upfront costs in designing and establishing a new regulatory regime (including development of legislation and establishing an effective compliance and enforcement approach). (see also Box 4). The option will require upfront costs for administrators and those affected by it (i.e. those having to comply), though this may be comparatively less than other POS options (if for example only some products on the WMSP were prohibited, this may be more complex to implement). | ✓ |
| 6 | Equity concerns | This option would help address the issue of pressure on plumbers to install non-WaterMark products (as non-WaterMark products could not be sold). However, it would potentially introduce other inequities for manufacturers, sellers and users of non-WaterMark products (where such products are being legitimately used outside the PCA). These stakeholders would be forced to make, sell and buy / use WaterMark products which are typically more expensive (reflecting the costs of certification as well as the design or materials used to meet the standard). | ✓ |

Box 4: Funding and legislative arrangements under POS

Introducing POS regulation would require resources and alterations to legislative arrangements, as well as potentially creating costs to industry. The three POS based options evaluated in this study (full prohibition, selected prohibition, and alternative labelling) would require upfront and ongoing resourcing as well as legislative changes. The following provides information on the possible impacts and implications of this, though precise estimation of costs was not included in the scope of the study.

Costs and funding arrangements

POS regulation would create new costs for government (for administration and enforcement), and for industry (for implementation and compliance) to effectively administer and enforce.

At present the ABCB primarily bears scheme administration costs, while state and territory governments provide enforcement resourcing. POS regulation could potentially create costs for government at both the Commonwealth and state or territory level, to both administer and enforce the POS requirements. As POI would likely be retained under any option (see Finding 3) designing, implementing and enforcing POS regulation would mean additional resourcing would be required – given POI levels of audit are generally quite low, there would also be little scope to allocate some resourcing presently used on POI regulation to POS regulation.

POS regulation of the WMCS would likely change the nature and extent of costs for industry, especially for product suppliers. Such costs, based on the WELS experience, could include:

- potential increases in wholesale product costs passed on by product registrants (the potential for which already exists for WaterMark certified products currently)
- time cost of checking product registration currency (an analogous cost under WMCS POS would be checking to ensure no prohibited items were in inventories, or checking that all products were labelled as WaterMark or with alternative use labelling)
- costs of additional in store labelling (potentially applying under any WMCS POS or POI option)
- cost of stock destruction due to expired registrations (an analogous cost may already exist under the WMCS if retailers actively monitor this, however it would likely be increased under POS options)
- costs of additional internal systems, procedures and staff training (likely to increase with any new WMCS POS measures, but potentially also as part of education and awareness raising campaigns)
- costs of meeting compliance and enforcement arrangements (under WELS these were characterised as rectifying breaches of requirements, such as disputing or addressing a negative audit finding or result).

Increases in costs at different points in the manufacturing or supply of products under POS regulation could be expected to be passed onto the end purchaser via increased prices.

Legislative arrangements

Any new legislation that may be required under a POS approach, regardless of whether state, or Commonwealth (or both) will have upfront costs to government to establish. This will include time and resources to design legislation and seek its passage through respective parliaments. Given this, it will also require political will and support. New or modified legislation would appear to be required under any POS based approach, in order to define what it is legal or illegal to do, and to whom this would apply.

Discussion and findings

There was limited stakeholder support for POS regulation through prohibition. While some industry stakeholders suggested that most products on the WMSP did not have alternative uses, and that such uses should not be a concern, other stakeholders indicated that there were many legitimate uses for non-WaterMark products outside of plumbing and drainage installations. Examples of applications outside the scope of the PCA included heating, ventilation and air-conditioning, agriculture / irrigation or mechanical services.⁸

Plumbing product suppliers were generally not supportive of this option and indicated that this option may be difficult to comply with, and would require additional systems to monitor and audit products for WaterMark certification, which would incur additional costs. Suppliers also expressed concerns around losing non-plumbing markets (e.g. agricultural customers), and whether it was fair to ask their non-plumbing customers to purchase WaterMark products (generally at a higher price).

On balance, POS regulation through prohibiting the sale of all non-WaterMark products is not considered feasible. This is due to the limited support from stakeholders and a number of clear issues with the option and its implementation outlined in the assessment above. Most notably, the prohibition of the sale of non-WaterMark products that have legitimate uses outside of plumbing and drainage installations, and the practicalities of implementing such a scheme make this option undesirable.

Finding 5: POS through prohibition is not considered feasible.

5.2.4. POS regulation through prohibition of the sale of selected non-WaterMark products (option d)

Overview

This option would only prohibit the sale of non-WaterMark products that do not (or are unlikely to) have an alternative use. This would mean that certain products on the WMSP would need to be declared as having no reasonable application outside of a plumbing and drainage installation and must therefore have a WaterMark in order to be sold. This option was proposed by a number of stakeholders that felt there were several products that did not (or were highly unlikely to) have a legitimate use outside of the PCA.

⁸ Note the definition of a *plumbing and drainage installation* is set at the state and territory level and differs between jurisdictions – therefore the scope of where WaterMark products are and are not required varies.

Assessment against criteria

Table 4 Assessment of selected prohibition option (option d)

| # | Criteria | Summary assessment | Rating |
|---|-----------------------------------|--|--------|
| 1 | Ability to address the problem | <p>This option may help address the problem, however it may only have limited effectiveness because many non-WaterMark products would still be available and could potentially be installed.</p> <p>There is also a potential issue of overlap with products already covered by POS through the WELS scheme. As discussed in Box 2, many of the examples of products that did not have a reasonable alternative use (and should therefore carry a WaterMark) were ‘front of wall’ such as taps and toilets and other visible features. As many of these products require a WELS rating, they are effectively covered by <i>de facto</i> POS regulation (see Section 2.1.4) – this therefore raises the question of whether having separate POS regulation that covers similar products would help address the problem.</p> | ✓ |
| 2 | Simple and practicable | <p>This approach would create a split approach to the WMCS by creating two different divisions and treatments of products. This would contradict recent amendments to the WMCS which combined two risk categories into one to simplify the scheme (as part of the changes made following the 2014 review). It would also be difficult to strictly determine which products have or do not have an alternative use. It would require additional ongoing resourcing for compliance and enforcement.</p> | X |
| 3 | National consistency and coverage | <p>This option would require new legislation to implement, and may be difficult given the definition of a plumbing and drainage installation currently varies based on state and territory legislation (meaning the definition of legitimate use outside of a plumbing and drainage installation would be different in different jurisdictions).</p> <p>Based on consultations it appears unlikely that all states and territories would agree to legislation that prohibits the sale of products without a WaterMark (even if limited to a subset of WaterMark products), however it could potentially be achieved if there was stronger political support.</p> | X |
| 4 | Competition | <p>As per option c), there would be challenges in enforcing this option for online sales and direct imports. This could be overcome but may be challenging to address.</p> | ✓ |
| 5 | Implementation considerations | <p>This option would require some considerable upfront costs and resources to design and implement, as it is creating a new and somewhat complex regulatory regime.</p> <p>The subset of products that would be prohibited would need to be defined and then communicated to stakeholders – this could be difficult and take time to reach agreement on the details of what is and is not included.</p> <p>This will create upfront costs to administrators and those affected by it (those having to comply) (see Box 4).</p> | ✓ |

| # | Criteria | Summary assessment | Rating |
|---|-----------------|---|--------|
| 6 | Equity concerns | This option would assist with the issue of pressure on plumbers to install non-WaterMark products as in some cases only WaterMark products would be available for installation (noting it would not apply to all products). | ✓✓ |

Discussion and findings

Prohibiting the sale of selected non-WaterMark products was broadly supported amongst stakeholders, with general support from industry and some support from government. This was particularly the case among stakeholders that felt it was unreasonable to sell non-WaterMark products that were most likely to be used in a plumbing and drainage installation.

However, while this option appears more reasonable than total prohibition of non-WaterMark products that are listed on the WMSP (the previous option) it is less clear whether it would effectively address the problem. This is because all products that have an alternative use would still be available for sale without a WaterMark and could potentially be installed in plumbing and drainage installations.

There would be challenges in deeming what products do not have an alternative use, and in reality, it may largely comprise products that are already covered through the WELS scheme POS regulation. At the same time, it would require new legislation, political support from and adoption by the states. Enforcement would also need to be adequately resourced.

This option would have some positive impacts regarding equity concerns – however, only for products where non-WaterMark versions are prohibited. For products that have alternative uses, non-WaterMark versions would still be available and could therefore be purchased or specified with pressure placed on installers to use incorrect products.

In summary, implementing this option would require overcoming considerable challenges, create complexity within the WMCS and potentially have minimal impact.

Finding 6: POS through prohibition of selected products is not considered feasible.

5.2.5. POS regulation through alternative use labelling (option e)

Overview

This option would require that products on the WMSP either have WaterMark certification or are clearly marked or labelled (at the POS or supply) as not suitable for use in a plumbing and drainage installation. This would allow for non-certified products to be sold but would make it illegal to sell them without a form of labelling or marking indicating they cannot be used in plumbing and drainage installations. This would be regulated through checking (at the POS) whether products have a WaterMark or alternative use labelling.

Assessment against criteria

Table 5 Assessment of alternative use labelling (option e)

| # | Criteria | Summary assessment | Rating |
|---|-----------------------------------|--|--------|
| 1 | Ability to address the problem | This option may help address the problem, however it may only have limited effectiveness because many non-WaterMark products would still be available and could potentially be installed in plumbing and drainage installations. | ✓ |
| 2 | Simple and practicable | This approach would not be relatively simple or practicable. It defines a new group of products with new requirements, which will add administrative and other costs and complexity for administrators and those complying (similar to those outlined in option (d)). The option will require additional ongoing resourcing efforts to monitor compliance (see Box 4). | X |
| 3 | National consistency and coverage | This option has some support amongst government stakeholders; however, it would require adoption of new legislation (and support from all the states to achieve national consistency and coverage) which may be a challenge (see also Box 4). | ✓ |
| 4 | Competition | This option could create issues around competition, depending on how it is designed and impacts on different entities in supply chains. It could be administratively and physically complex for sellers to administer, and this may disproportionately affect different sellers (e.g. online or in-store). | ✓ |
| 5 | Implementation considerations | This option would require some considerable upfront costs and resources to design and implement, as it is creating a new regulatory regime. It will have upfront costs to administrators and those affected by it (those having to comply). These costs could be greater than under other POS options given there is a second group of products being defined with a different label (see also Box 4). | ✓ |
| 6 | Equity concerns | This option could assist with the issue of pressure on plumbers to install non-WaterMark products, however non-WaterMark products would still be available to purchase. It would help to provide a degree of shared responsibility as it would place obligations on sellers to ensure labelling was provided on non-watermark products at the POS. | ✓ |

Discussion and findings

Stakeholders were generally supportive of this option, with particular support from government stakeholders who felt that it could be a reasonable form of POS regulation. This option could reasonably be implemented – and based on the level of government support for this form of POS regulation (in comparison to the others), this is the most feasible POS option.

There are however some questions around whether it would be effective in addressing the problem. The existence of WMCS means that those with a knowledge of the scheme effectively already have an alternative labelling scheme (as they should know that the absence of a WaterMark label means the product is not fit for plumbing use, which should dictate their purchasing decisions).

For those that are not aware of the WMCS, it is less clear whether purchasers would pay attention to and abide by the alternative use labelling, and there may still be challenges in ensuring widespread knowledge of WaterMark requirements and meaning of the alternative labelling.

Finding 7: POS through alternative labelling of non-WaterMark products may be feasible, however it would likely be costlier and potentially no more effective in addressing the problem than alternatives considered.

5.3. Summary and comparison of options

There are options which could feasibly address the problem of non-WaterMark products being used in plumbing and drainage installations, including both POS and POI based options. Prohibition of all non-WaterMark products listed on the WMSP would undoubtedly increase the rate of compliance at the POI, however there would also be a range of other undesirable impacts. This includes the banning of non-WaterMark products which might have legitimate applications outside of plumbing and drainage installations. This would force purchasers to pay for WaterMark products whether their characteristics were necessary or not, and could also lead to some products no longer being manufactured if they cannot meet the WaterMark standard.

A more moderate approach could be to only prohibit products that do not have an alternative use outside of plumbing and drainage installations. This would help protect against the issue of non-WaterMark products not being available for alternative uses, however it would be difficult and complex to implement and it is unclear how effective it would be in addressing the problem. Identifying which products do not have an alternative use is likely to be difficult in practice as many products have a wide range of potential uses, and the scope of a plumbing and drainage installation varies based on state and territory legislation. Additionally, many of the products that were identified as only having a use in a plumbing and drainage installation are products that already have *de facto* POS regulation through the WELS scheme requirements (see Section 2.1.4).

Requiring alternative use labelling could present a workable form of POS regulation, however it would require considerable resources and effort to implement. This includes new legislation and resourcing to support enforcement at the POS. Additionally, it is questionable whether this will be particularly effective. For informed purchasers, such as plumbers, who are aware of the WaterMark scheme, the presence or absence of a WaterMark provides a clear delineation of suitable or unsuitable products. Alternative labelling for consumers who are unaware of the WMCS may have some benefit, however it is possible that in the absence of an understanding and appreciation of the WMCS, warning labels and prescribed uses may be easily overlooked. It may be the case that increasing awareness of the WMCS and the WaterMark itself might have the same effects without requiring regulation and enforcement at the POS.

In terms of POI regulation, there was a clear view that in many jurisdictions maintaining the status quo will not address the problem, nor will it keep pace with the rate of change across the plumbing and plumbing product sector. However, as a regulatory regime it is appropriately targeted and in principle should serve the WMCS and its objectives well – provided it is adequately enforced. It is also widely supported by industry and is seen as an important part of maintaining the integrity of the WMCS more generally. This clearly aligns with the second POI option of increased enforcement.

Based on the assessment, *option b) to increase enforcement of POI regulation* appears to be the most direct way to address the problem and is likely to be the most straightforward to implement. It also appears to be the most cost-effective approach as it relies on existing arrangements (e.g. no new legislation, and can potentially leverage existing enforcement approaches).

The main shortcoming of pursuing option B is that it does not address concerns around pressure on plumbers to install non-WaterMark products. This is an issue that may be undermining the WMCS and one which is seen as inequitable. Given this, as well as to consider if there are other means of addressing the problem, complementary or alternative measures or approaches are considered in the

following section (Section 6). Such measures could potentially be implemented independent of, or in combination with, other regulatory approaches.

6. Complementary or alternative approaches

The section considers two prospective complementary or alternative approaches to addressing the problem; education and awareness, and approaches to address shared responsibility. These options have been presented and considered separately as neither are strictly about POI or POS regulation, and could both potentially be pursued in combination with, or separate from any of the options assessed in Section 5. They are based on ideas and thinking that emerged throughout consultations.

6.1. Education, awareness and training

Description and discussion

An alternative or complementary intervention could be to increase education and awareness of the WMCS. This would increase the profile of the scheme which could have a number of positive flow-on effects that could increase the proportion of WaterMark products installed, where they are required.

It is highly likely that any new POS arrangement would need to be accompanied by an education and awareness campaign upon introduction (and potentially ongoing), and ongoing or revised POI options could be enhanced by education awareness and training.

A resounding point from consultation was the perceived lack of general understanding and awareness of the WMCS. This was mentioned by industry and government stakeholders and was suggested to apply across many stakeholders (including architects, hydraulic designers, consumers, builders, plumbers, apprentices etc.).

It was suggested that consumers were generally unaware of the WMCS. While the WMCS is not strictly a consumer information scheme in the same sense as the WELS scheme, basic awareness amongst the general public could help with improving compliance – for example consumers may be more likely to select or specify WaterMark products. Additionally, if there is greater consumer demand for WaterMark products this might lead to retailers providing increased clarity on whether products are WaterMark certified.

Stakeholders also had mixed perspectives on the extent to which the WMCS and the PCA is covered in plumbing courses and it was suggested that in many cases WaterMark requirements were not well covered in plumbing courses. Outside of plumbing, knowledge of and training on the WMCS was considered to be minimal. Stakeholders felt that increasing understanding of the WMCS across the sector would be beneficial.

Summary and findings

It was widely accepted across stakeholders that there is lack of awareness around the WMCS, potentially driven by insufficient education, training and awareness raising activities. This has implications across the supply chain that are likely to be contributing to the probability of non-WaterMark products being installed in plumbing and drainage installations.

Finding 8: There is a lack of understanding and awareness of the WMCS and its purpose.

While POS regulation could potentially be used to address some of these issues, they could feasibly and possibly more effectively be addressed through improving education and awareness of the

WMCS. It could help drive knowledge and demand for WaterMark products up the supply chain and help prevent non-WaterMark products being inadvertently purchased, specified and installed.

Some possible ways to achieve this include:

- ensuring consumers / the general public understand the health and safety benefits of, and the legal obligation for using WaterMark products; the basis for the WMCS; and how certified products can be identified so that they can request, check and verify that WaterMark products are being installed
- improve awareness across sector wide practitioners or professionals, including builders, consultants, designers and architects, and developers, to increase awareness so that compliant products are specified and sourced
- provide information and materials for use by registered training organisations (RTOs) for training packages to enhance practitioner knowledge and compliance, this could also be extended to related disciplines such as builders, hydraulic designers, and building designers and architects.
- running joint marketing campaigns between industry and suppliers that raise visibility of the WMCS and promote and support the choice of qualified/licensed plumbers to undertake plumbing and drainage installations with certified products
- developing and providing guidance, such as guidelines, voluntary industry codes of practice, or similar materials for suppliers regarding advertising and selling of WaterMark products.

In addition to helping solve the problem, initiatives to improve education and awareness could be implemented at relatively low cost and would likely complement any regulation (POS or POI).

Finding 9: Improving education and awareness may help address the problem.

6.2. Shared responsibility

Description and discussion

Shared responsibility is the idea that other parties throughout the supply chain would play a greater (more equal than present) role in ensuring WaterMark products are installed where required, and it could help increase compliance by overcoming the issue of plumbers being pressured to install non-WaterMark products.

In general, stakeholders were supportive of shared responsibility as a principle, while not articulating specific options (outside of POS regulation) that could give effect to it. Many stakeholders that supported POS regulation did so on the basis that it would improve shared responsibility across the supply chain. This section looks at how shared responsibility might be established by other means.

Shared responsibility could be fostered to an extent through increased education and awareness. As discussed in the previous section, education and awareness could increase awareness across the supply chain and arguably increase the sense of responsibility across the supply chain (though without setting formal obligations). However, stricter forms of shared responsibility could also be adopted without requiring POS regulation.

It could also be possible to create shared responsibility across the supply chain by making it an offence to knowingly or recklessly specify or supply non-WaterMark products for use in a plumbing and drainage installation. For example, if a building designer or architect specifies, or a builder

sources or supplies products for installation that do not carry WaterMark, those parties (and the installer, if they install the products) could be held accountable.

This could be given effect by modifying existing, or potentially introducing new state or territory legislation. It would differ from POS regulation because it would not prohibit or place conditions on the sale of non-WaterMark products, it would not require any additional or different labelling or marking requirements at the POS, and could feasibly leverage existing POI enforcement efforts to detect issues of non-compliance. These differences would likely make it a simpler and lower cost method of creating shared responsibility than POS regulation.

Recent reviews and changes also suggest that shared responsibility (as a principle) is being considered and used to help increase compliance in the broader construction sector. As part of construction legislation reform, Queensland recently introduced legislation that is aimed at creating a chain of responsibility within the construction industry. Additionally, there are elements of shared responsibility within the recommendations from the Building Confidence report (Shergold and Weir 2018). Refer to Recommendations 1, 2, 3 and 13 from Shergold and Weir (2018) for further information.

Summary and findings

Creating greater shared responsibility across the supply chain could help address the problem of non-WaterMark products being installed and alleviate pressure on plumbers to install non-WaterMark products. However, the mechanism by which it is given effect and any associated monitoring and enforcement, may have a strong bearing on its effectiveness. For example, it would be relatively straightforward to define an offence in existing state legislation. But in the absence of any monitoring or enforcement, the offence may not have any practical effect – in such instances it would rely on ‘whistle-blowers’ or potentially competitors implicating others by reporting instances of non-compliance to authorities.

Given the above, further work could be undertaken to consider if and how non-POS legislative measures could be implemented so as to have a meaningful impact on the problem while addressing stakeholder concerns about equity and greater shared responsibility.

Finding 10: Shared responsibility is a key principle that many stakeholders seek for the WMCS. It would likely improve the equity and effectiveness of the scheme and address some stakeholder concerns, but this is heavily dependent on how it is implemented.

7. Conclusions and recommendations

7.1. Conclusions

Throughout the study there was strong support for the WMCS across all stakeholders, and solving the problem was viewed as a matter of improving the scheme rather than replacing it. Industry and government alike all supported retention of POI regulation regardless of whether POS regulation was pursued.

The problem, as defined by this study is that *non-WaterMark products are being (or are at heightened risk of being) installed and used in situations where a WaterMark certified product is required*. Behind this problem are a number of drivers and changes that may be contributing to this, including major changes in the plumbing product supply chain, and changes in the construction sector (see Section 3).

While the extent of the problem is unclear, Aither's view is that there is sufficient evidence of a problem, which is consistent with logical analysis, to warrant improving the WMCS in response. This is supported by several examples of non-compliant plumbing products being installed and other contextual factors and drivers. Given the drivers and changes in the sector, the problem is also likely to become worse over time unless action is taken.

Consultations did not reveal a common understanding or articulation of what POS regulation would actually comprise, and the shape of options were formulated and refined in the course of discussions. The options which are articulated and assessed in this report are the result of those rough formulations. For each of the POS options assessed, there are significant challenges in the feasibility of implementing and operating a functional model in a way that effectively addresses the problem. Critically, at present, it is not clear to Aither that there is a workable form of POS regulation that would be more effective and efficient in addressing the problem than the alternatives listed in this paper.

At the same time, Aither does not consider maintaining the status quo to be an appropriate approach for the future of the WMCS, largely because current enforcement practices are limited (in some cases) and education and awareness is low. However, POI regulation remains an important component of the regulatory framework for the WMCS and should be retained.

Increasing enforcement of POI regulation may help address the problem, and at a relatively lower cost (compared to POS options). However, it would not address issues around poor understanding and awareness of the WMCS and identified equity issues, both of which are also underlying causes of the problem.

Lack of education, awareness and training was identified as a key gap, and addressing this gap would be of value in conjunction with any of the POS and POI options in this report. However, Aither's view is that increasing enforcement at POI, in conjunction with improving education, awareness and training is likely to be the most cost-effective and reasonable means of addressing the problem. This is based on the view that greater enforcement of POI regulation is necessary (irrespective of whether POS regulation is pursued), and that education, awareness and training can help improve the effectiveness of POI regulation (for example education and training of building practitioners across the supply chain can help to alleviate equity issues regarding pressure on plumbers to install non-compliant products, and increasing awareness of WaterMark requirements amongst purchasers and suppliers can help reduce accidental or uninformed purchase of non-compliant products).

Many industry stakeholders were proponents of POS regulation based on its perceived ability to address the problem, as well as its ability to create shared responsibility across the supply chain (and therefore greater equity). While POI regulation will not directly address this equity issue, it may also be possible to achieve these outcomes through other complementary measures or options (that do not require POS regulation). This includes education, awareness and training (as discussed directly above), as well as creating shared responsibility through other legislative means that are not strictly POS regulation. Education, awareness and training improvements should be pursued now as lower cost 'no-regrets' improvements, while the latter option of supply chain responsibility through other legislative means could be considered further in the future once the proposed improvements from this study have been adopted.

Lastly, in considering the proposed changes for the regulation of the WMCS, it is necessary to consider broader alignment with regulation in the building and construction sector. The assessment and analysis presented in this report makes findings that are consistent with those of the recently released Shergold Weir report *Building Confidence* (2018) and Aither does not observe any contradictions with the recommendations made in this report. Indeed, similar to this report, *Building Confidence* notes the importance education, training and awareness, and clear, visible and accountable enforcement regimes.

Any further reform or enhancement of the WMCS should – and no doubt will – be considered in the context of the overall regulatory environment for the building and construction sector.

7.2. Recommendations

Recommendation 1: ABCB initiate an education and awareness program, in partnership with state and territory Plumbing Administrations and industry, to raise the profile of the WMCS with the public and industry and to increase compliance with the scheme and the NCC.

It is recommended that a concerted effort be made to increase education on and awareness of the WMCS. This should seek to cover all entities and actors directly obligated by or otherwise interacting with the WMCS. It should be undertaken in conjunction with jurisdictional regulators and industry to maximise reach and to ensure relevance, reach and consistency. Possible actions or focus points include:

- ensuring consumers / the general public understand the health and safety benefits of, and the legal obligation for using WaterMark products; the basis for the WMCS; and how certified products can be identified so that they can request, check and verify that WaterMark products are being installed
- improve awareness across sector wide practitioners or professionals, including builders, consultants, designers and architects, and developers, to increase awareness so that compliant products are specified and sourced
- provide information and materials for use by RTOs for training packages to enhance practitioner knowledge and compliance
- running joint marketing campaigns between industry and suppliers that raise visibility of the WMCS and promote and support the choice of qualified/licensed plumbers to undertake plumbing and drainage installations with certified products
- developing and providing guidance such as guidelines or voluntary code material for suppliers regarding advertising and selling of WaterMark products.

Recommendation 2: Increase enforcement at the point of installation.

An increased focus on and documentation of audits for WaterMark products at the POI should be pursued. To be an effective scheme, there must be sufficient enforcement so that licenced plumbers undertaking illegal plumbing and drainage installations will be detected and required to rectify the work. In jurisdictions with higher levels of audit very few instances of non-WaterMark products being installed were recorded and it is reasonable to conclude that the same could be achieved in other jurisdictions.

Achieving this would require additional resourcing, but efficiencies could be gained through better targeting enforcement. The extent to which enforcement is increased is largely dependent on current audit levels and other factors in each jurisdiction and is ultimately a decision for state and territory governments. However, there could be scope for collaboration between the states and territories and the ABCB around strategies as to what might be an effective minimum level of audit. There may also be scope for changes to certification fees to help fund additional compliance (or other) activities.

Additionally, non-compliance could be better documented and reported to establish a baseline of performance. A major challenge is the ability to quantify the extent of the problem and without evidence it is difficult to target further action to effectively improve and enhance the WMCS.

Recommendation 3: POS regulation should not be pursued until further efforts have been made to enhance the existing approach through greater enforcement at POI and through education and awareness.

It is recommended that recommendations 1 and 2 are pursued before any further consideration is given to POS regulation. It is considered that the problem can be meaningfully addressed through improving enforcement of existing POI arrangements and improved awareness and understanding of the WMCS.

Due to the nature of the WMCS, including the products covered, the dual use of many products, and the way in which products are purchased, specified and installed, there are some major challenges in developing a workable and effective form of POS regulation without undue burden on industry and regulators/government. Beyond this, there are also questions surrounding the effectiveness of POS regulation in addressing the problem itself, and it appears that the problem could potentially be overcome (or meaningfully reduced) through improving enforcement of existing POI arrangements and improved awareness and understanding of the WMCS.

7.2.1. Additional opportunities and considerations

In addition to the core feasibility assessment of POS regulation, several opportunities and insights emerged from the study for consideration, given the scope of the problem and in the context of continual improvement of the scheme. Suggested actions and recommendations have been included below.

Shared responsibility

Recommendation 4: Options to create shared responsibility (outside of POS regulation) should be considered and explored further.

In general, there was support for POS based on the premise of creating 'shared responsibility' along the supply chain. Shared responsibility could help reduce pressure on plumbers to install non-WaterMark products and might reduce the number of non-WaterMark products being sold.

Shared responsibility can be fostered through education, awareness and training as per Recommendation 1, however stricter forms of shared responsibility could also be adopted without necessarily requiring POS regulation.

Creating supply chain responsibility (and accountability) through making it an offence to knowingly or recklessly supply or specify non-WaterMark products for a plumbing and drainage installation could be one such option and may be a reasonable and lower cost solution (compared to POS regulation). Detailed design and consideration of this or similar responses was not within the scope of this study and would require further investigation and consultation before be considered more seriously. However, further exploration is warranted.

Monitor and observe the QBCC Act amendments

Recommendation 5: Monitor and learn from the implementation of the QBCC Act in Queensland, including the response by industry and any information or data on changes in compliance.

In late 2017, the Queensland Government amended the *Queensland Building and Construction Commission Act (QBCC Act)* through the *Building and Construction Legislation (Non-Conforming Building Products – Chain of Responsibility and other matters) Amendment Act 2017*.

A key objective is to establish a chain of responsibility across the supply chain for the supply of building products (including plumbing products). While it is too early to tell exactly how this will be actioned there may be lessons or approaches from the experience which could be adopted and applied nationally.

This could include providing a model for creating shared responsibility across the supply chain, but a proper assessment will require a clearer indication of the approach to implementation, resourcing and industry implications.

8. References

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Appendix A – Stakeholder Consultation

Table 6 Industry consultations

| Industry |
|--|
| Master Plumbers and Mechanical Services Association of Australia |
| Rinnai Australia |
| IAPMO R&T Oceana Pty Ltd |
| Plumbing Merchants Association |
| SAI Global Certification Services Pty Ltd |
| Plumbing Industry Climate Action Centre |
| The Australian Gas Association |
| Reece Group |
| Master Builders Australia |
| Plumbers' Supplies Cooperative |
| Harvey Norman Holdings Limited |
| Joint Accreditation System of Australia and New Zealand |
| Consumer Electronics Suppliers Association |
| Master Plumbers Association of NSW |
| Zetco Valves Pty Ltd |
| Australasian Fire and Emergency Service Authorities Council |
| Con-Serv Corporation Australia |
| Argent Australia |
| Australian Industry Group |
| Master Plumbers Association QLD |
| Tradelink |
| Backflow Prevention Association of Australia |
| Master Builders Queensland |
| Plumbing Products Industry Group |
| Master Plumbers and Gasfitters Association of WA |
| Bunnings Group Limited |

Table 7 Government consultations

| Jurisdiction | Body / department |
|---------------------|--|
| VIC | Victorian Building Authority |
| | Department of Environment, Land, Water & Planning |
| | Consumer Affairs Victoria |
| NT | Department of Infrastructure, Planning and Logistics |
| ACT | Plumbing & Gas Inspectorate |
| | Fair Trading |
| Commonwealth | Department of Industry, Innovation and Science |
| | Trade and Customs Branch, Commonwealth Department of Home Affairs |
| | Customs Compliance Branch, Commonwealth Department of Home Affairs |
| | WELS scheme administrator |
| NSW | NSW Fair Trading |
| SA | Department of State Development |
| QLD | Office of Fair Trading |
| | Department of Housing and Public Works |
| WA | Department of Mines, Industry Regulation and Safety |

Appendix B – Treatment of ABCB discussion paper options

A number of options were presented in the *Discussion paper: Feasibility of Point of Sale Regulation for the WaterMark Certification Scheme*. These options have not all been explicitly assessed by Aither in addition to those in this study. This is due to the following reasons:

- they are already reflected in Aither’s options (e.g. a status quo option)
- they did not yet have a clear definition of what was actually being regulated, or
- they are reflected in the assessment criteria (e.g. simplicity and practicability, or national coverage and consistency, cover many of the matters or options raised in the ABCB’s discussion paper).

Furthermore, some of the ABCB options primarily focus on certain elements of implementation (e.g. the legislative basis, or the role of the WELS scheme). While these are important considerations, there was a need to focus first and foremost on what the nature of POS regulation actually is (e.g. what it is legal or illegal to do), and to focus on options that fall out from this approach. To this end, the different elements of the options from the discussion paper have been touched on in Aither’s feasibility study (through the assessment criteria).

The table below summarises how this has been addressed in the study.

Table 8 Treatment of ABCB discussion paper options

| Discussion paper option | Comments |
|---|---|
| Maintain the status quo (5.1) | Maintaining the status quo has been considered as an option in the assessment. |
| Increase awareness of POI requirements (5.2) | This has not been explicitly assessed, as awareness is arguably an approach or strategy that would be applicable to or enhance any option (POI or POS). It has been addressed as part of ‘alternative or complementary approaches’ to addressing the problem and is an important consideration. Increased enforcement of POI regulation has been considered as an option. |
| Introduce POS regulation via model legislation (5.3) | The legislative basis for POS regulation is an important consideration, but ultimately secondary to the question of what substantive regulatory provisions would be desirable. |
| Introduce POS regulation via Commonwealth legislation (5.4) | POS regulation must be clearly defined and determined (and assessed as being an effective means of addressing the problem), before the most appropriate legislative mechanism is considered. |
| Introduce POS regulation enforced by | Though option 5.5 related to joint enforcement, many stakeholders perceived this option as being about merging the two schemes. |

the WELS regulator
(5.5)

Combining POS regulation with the WELS scheme was considered through the course of the study, and not considered to be a workable solution.

However, there are potential (though small) synergies between the WELS scheme and the WMCS if POS regulation were to be pursued for the WMCS.

While this was not considered as a discrete 'option' for POS it was factored in to the potential feasibility of POS options that were assessed.

Document history

Distribution:

| | |
|-------------|---------------------------------|
| Issue date | Tuesday 30 October 2018 |
| Issued to | Australian Building Codes Board |
| Description | Public report |

Citation:

Aither 2018, *WaterMark Certification Scheme point of sale feasibility study – Public summary report*, Aither Pty Ltd.

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