



# REVIEW OF THE WATERMARK CERTIFICATION SCHEME

Consultation Draft



January 2014

## THE AUSTRALIAN BUILDING CODES BOARD

The Australian Building Codes Board (ABCB) is a joint initiative of all levels of government in Australia, together with the building industry. Its mission is to oversee issues relating to health, safety, amenity and sustainability in building. The ABCB promotes efficiency in the design, construction and performance of buildings through the National Construction Code (NCC), and the development of effective regulatory and non-regulatory approaches. The Board aims to establish effective and proportional codes, standards and regulatory systems that are consistent between States and Territories. For more information see [www.abcb.gov.au](http://www.abcb.gov.au)

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# LIST OF ABBREVIATIONS

ABCB	Australian Building Codes Board
ACCC	Australian Competition and Consumer Commission
Approved User	Manufacturer or supplier
ACA	Approved Certifier Agreement
AS 5200.000	AS 5200.000:2006 Technical specification for plumbing and drainage products
AUA	Approved User Agreement
ARMCANS	Agriculture and Resources Management Council Australia and New Zealand
BCA	Building Code of Australia – National Construction Code Volumes One and Two
BMF	Building Ministers’ Forum
CPPA	Committee for Plumbing Product Authorizations
COAG	Council of Australian Governments
IGA	Intergovernmental Agreement between the Commonwealth and the State and Territory Governments
ISO/IEC Guide 65	General requirements for bodies operating product certification systems
ISO/IEC Guide 67	Conformity assessment -- Fundamentals of product certification
ISO/IEC Guide 28	Conformity assessment -- Guidance on a third-party certification system for products
ISO/IEC 17020	Conformity assessment – Requirements for the operation of various types of bodies performing inspections
JAS-ANZ	Joint Accreditation System of Australia and New Zealand
WMLTL	WaterMark List of Terminated Licences
NATA	National Association of Testing Authorities, Australia
NCC	National Construction Code
NCPDP	National Certification Plumbing and Drainage Products
NoD 2013/1.0	WaterMark Certification Process
NoD 2013/2.0	Reference Documents
NoD 2013/3.0	WaterMark Product Database
NoD 2013/4.0	Update of WaterMark Technical Specifications
NoD 2013/5.0	Maintenance of Approved User List
NoD 2013/7.0	Financial Arrangements
NoD 2013/10.0	ATS 5200.033
NoD 2013/12.0	WaterMark Risk Assessment Process
NPRF	National Plumbing Regulators Forum
MP 52	MP52:2005 Manual of authorization procedures for plumbing and drainage products
MP 78	SAA MP78:1999 Manual for the assessment of risks of plumbing products
PCA	Plumbing Code of Australia – National Construction Code Volume Three
SA	Standards Australia
The Rules	Rules for the WaterMark Certification Trade Marks
WELS	Water Efficiency Labelling and Standards Scheme

WMAB	WaterMark Administrative Body
WMAcB	WaterMark Accreditation Body
WMCAB	WaterMark Conformity Assessment Body
WMCS	WaterMark Certification Scheme
WMLEP	WaterMark List of Exempt Products
WMMB	WaterMark Management Body
WMPD	WaterMark Product Database
WMSS	WaterMark Schedule of Specifications
WMTS	WaterMark Technical Specifications
WMTAC	WaterMark Technical Advisory Committee

# EXECUTIVE SUMMARY

Prior reviews of the WaterMark Certification Scheme (WMCS) consistently report the Scheme has suffered a lack of strategic direction, ineffective administration and poor enforcement – all due to insufficient resourcing.

Despite the inadequacies of the Scheme, Australians enjoy high quality drinking water and benefit from safe and effective sanitary and drainage systems. The extent to which the Scheme contributes to these outcomes is unknown as it sits within a well-established (predominantly state based) regulatory setting in which the relatively staid plumbing and drainage industry operates. The fact that practitioners and regulators favour traditional installation methods incorporating familiar products and systems, and lean to prescriptive rather than performance based approaches, must also contribute to these outcomes.

However, the conservatism of the industry as a whole is being challenged by:

- innovations in materials, products, systems and installations appearing at an ever increasing rate;
- a global economy where both unfamiliar international innovations and product suppliers are only a few clicks of a mouse away;
- the amalgamation of the Plumbing Code of Australia (PCA) with the Building Code of Australia (BCA), and the Australian Building Code Board's (ABCB) pursuit through the National Construction Code (NCC) of a nationally consistent performance based approach to the design and construction of buildings; and
- a deregulation agenda for all tiers of government.

Past management and administration of the Scheme has potentially stifled rather than encouraged innovation. New and innovative products have typically been treated with suspicion by practitioners and regulators alike and the development of appropriate technical specifications against which they can be evaluated subjected to unreasonably protracted timeframes and delays. Some products finally gain passage through the Scheme only to face resistance from local jurisdictions who may choose to deny approval of the certified product at installation. However, one outcome from the Plumbing Code Planning Day was a commitment to performance.

In its short history with the Scheme, the ABCB has discovered that the foundations for an effective product certification scheme exist. The development of the scheme rules and structure has been well informed, and most aspects of the Scheme are covered in the scheme documentation, albeit difficult in the navigation, with abounding duplication and contradictions.

Most participants in the Scheme appear genuinely committed to the Scheme and to meeting their obligations under the scheme rules and agreements. However failure to apply compliance and enforcement policies, including monitoring via surveillance and audit, and issuing breach notices or withdrawing licences, has meant that inappropriate practices (whether deliberate or not) permeate many aspects of the Scheme.

The majority of stakeholders have expressed confidence in, and high expectations for, the transfer of the Scheme to the ABCB delivering a more robust, transparent, accountable, effectively administered and technically rigorous scheme.

Independent risk assessment confirms that, should the ABCB pursue this new line of business, there needs to be a commitment to resourcing the Scheme appropriately so it is managed and administered effectively and enforced in a way that delivers its stated objectives.



Going forward, the Scheme requires clear objectives on which to align the scope, scheme rules and the governance and administrative arrangements. The Scheme needs to be supported by a strategic plan for implementing agreed enhancements, a sustainable fully cost recoverable revenue base, comprehensive IT and operational systems (including internal and external procedures) and a renewed 'value add' database. Effective engagement with all stakeholders during both the development and implementation of the enhancements is crucial to ensuring appropriate outcomes and ongoing awareness of, commitment to and compliance with the Scheme.

Whilst the ABCB owns CodeMark – a voluntary third party administered building product certification scheme – managing and administering the mandatory WaterMark plumbing product certification scheme represents a significant departure from the traditional core business of maintaining and developing the National Construction Code. With it, WaterMark brings to the nine governments challenging new responsibilities, liabilities and risks. These need to be managed appropriately to, at minimum, preserve of the good name and reputation of the very organisation sought for its capacity to bring integrity to the Scheme and, at worst, avoid potentially poor, costly and disruptive outcomes for stakeholders.

# CHAPTER 1.

## INTRODUCTION

### 1.1 Introduction

This chapter details the purpose and scope of the review as expressed in the Terms of Reference and provides the background to the Scheme, including the development of the Scheme and its documentation and past reports on the Scheme.

### 1.2 Terms of Reference

#### 1.2.1 Background

The Australian Building Codes Board (ABCB) is a joint initiative of all levels of government in Australia, together with the building industry. Its mission is to oversee issues relating to health, safety, amenity and sustainability of buildings. The ABCB promotes efficiency in design, construction and performance of buildings through the National Construction Code (NCC) and the development of effective regulatory and non-regulatory approaches. The ABCB aims to establish effective and proportional codes, standards and regulatory systems that are consistent between the States and Territories.

The WaterMark Certification Scheme (WMCS) is a mandatory certification scheme to ensure that plumbing and drainage materials and products are fit for purpose and appropriately authorised for use in plumbing installations.

The Plumbing Code of Australia (Volume Three of the National Construction Code Series) requires certain plumbing and drainage products to be certified through the Scheme and listed on the WaterMark Product Database (WMPD). The Scheme is based on a single trade mark, the WaterMark, which must be displayed on the material or product upon the granting of a Certificate of Conformity, with two levels of certification (Level 1 and Level 2).

Consistent with responsibility for the Plumbing Code of Australia (PCA) transferring to the ABCB, Commonwealth, State and Territory Ministers (the Building Ministers' Forum (BMF)) agreed to the ABCB assuming responsibility for the management and administration of the Scheme. The previous administrator, Standards Australia, has divested itself of the Scheme, which transferred to the ABCB on 25 February 2013.

##### 1.2.1.1 'Scheme Rules'

The Plumbing Code of Australia (PCA) requires an assessment of the need for certification by conducting a risk assessment in accordance with SAA MP78-1999. Procedures for WaterMark certification are contained in Part G1 of the PCA and Australian Standard AS5200.000-2006. The rules governing the WaterMark, as certified by the Australian Competition and Consumer Commission (ACCC), are set out in the Rules for the WaterMark Certification Trademarks. These four documents, individually and collectively, are commonly referred to as the 'Scheme Rules'.

##### 1.2.1.2 Key Roles in the Scheme

Administering Body: the ABCB manages and administers the Scheme, governed by a series of documents ("Scheme Rules").

Accreditation Body: the Joint Accreditation System of Australia and New Zealand (JAS-ANZ) accredits WaterMark Conformity Assessment Bodies (WMCABs), governed by a Deed of Agreement between the ABCB and JAS-ANZ.

Conformity Assessment Body: a WMCAB evaluates and certifies plumbing and drainage products, governed by an Approved Certifier Agreement between the ABCB and the WMCAB.

Approved User: the ABCB grants a WMCAB the right to issue an Approved User (manufacturer/supplier), whose product(s) have been certified as complying, a licence to use the WaterMark, via an Approved User Agreement.

The current scheme was launched in 2005, 11 WMCABs have been accredited under the Scheme and a total of 742 issued certificates are listed on the WMPD, covering an estimated 44,000 - 64,000 plumbing products certified under the Scheme.

## **1.2.2 Purpose of Review**

The purpose is to conduct a full review of the Scheme to:

- (i) consider the policy objectives of the Scheme and to determine whether the objectives remain valid and whether the Scheme Rules remain appropriate for securing those objectives;
- (ii) determine the costs and benefits of the Scheme;
- (iii) examine the effectiveness and efficiency of the operation of the Scheme and its interaction with other relevant schemes and laws; and to
- (iv) make recommendations where appropriate as to the future need for the Scheme and its operation and governance, including possible reform options.

### **1.2.2.1 Review Process**

The Review will commence through engagement with the States and Territories, industry and other key stakeholders. A cost benefit analysis of the Scheme will be undertaken to determine the net benefit to government, industry and the community. The purpose of the engagement and analysis is, within the context of the Terms of Reference, to examine the performance of the Scheme and its participants, the performance of similar schemes, including in other countries, and future options and their impacts.

The Review will be managed by the ABCB Office drawing on external expertise as necessary.

### **1.2.2.2 Review Output**

Following the initial stakeholder engagement, a Draft Report will be released for public comment. A Final Report will then be presented to the ABCB for its consideration, prior to being referred to the BMF for its consideration.

## **1.2.3 Scope of Review**

The Review will include, but not be limited to, the following:

- A review of the objectives and scope of the Scheme to determine the extent to which objectives have been met and their relevance today. Is the scope of the Scheme appropriate?
- A review of the core Scheme documents (ACCC Trademarks Rules; PCA; MP78; AS5200.000) with a focus on their appropriateness, function, currency, inconsistency, history and reference.
- A review of the governance arrangements, including the Scheme roles, responsibilities, liabilities, confidentiality issues, documentation and/or binding agreements. Are they appropriate and effective? How have roles within the Scheme (management, enforcement and compliance with the PCA, administration, accreditation, certification and application) been fulfilled? What should each role and function entail? What are the issues/challenges?
- A review of the key operational elements of the Scheme, including the product certification process, the development of technical specifications, the database, use of the WaterMark and enforcement, financial arrangements, and stakeholder engagement. Are they effective and efficient?
- A review of the relationship to consumer law - ACCC Trademarks and the PCA A1.1 definition of warranty.
- Identification of any linkages between WaterMark and the Water Efficiency Labelling and Standards (WELS) scheme, CodeMark and/or other schemes, such as State & Territory schemes.
- A review of the role and performance of similar schemes in other countries.
- Consideration of the level of ABCB involvement in a future WaterMark Scheme and exploring with the State & Territory Administrations certification scheme options.

- Undertaking a risk assessment of the Scheme to identify the nature and extent of risk to each stakeholder and recommend risk mitigation strategies.

### 1.3 Background to the Scheme

The approval or authorisation of plumbing and drainage products began at the turn of the 20th century when it was recognised that public health and safety was critically dependent on the design, manufacture and installation of plumbing and drainage products. In 1950 formal procedures and requirements for the inspection, testing and stamping of products were introduced. By the 1970s the State water authorities throughout Australia had hundreds of inspectors inspecting and stamping every product approved for use in the water and sewerage systems. There was limited reciprocal recognition of authorities' stamps

#### 1.3.1 National Certification Plumbing and Drainage Products Scheme

After a review in 1985, a voluntary arrangement was established in 1988 between Standards Australia and participating plumbing and drainage regulators in Australia known as the National Certification Plumbing and Drainage Products (NCPDP) Scheme.

MP52 Manual of authorization procedures for plumbing and drainage products (MP52) was published in 1988. While an informal system of risk analysis and assessment was adopted by the practitioners at that time, the procedures were incomplete and not documented.

The Committee for Plumbing Product Authorizations (CPPA) has revised MP52 four times. The major changes to MP52 include the following:

- Expanding the scope of the scheme to include appliances, equipment and apparatus.
- Adopting a new certification mark based on type testing for plumbing safety.
- Addressing the need for licensing of new and innovative products.

Restructuring of the water industry, in particular the regulatory framework within which the plumbing industry operated (separation of regulatory control for on-site installation), led to greater emphasis on performance-based standards and codes of practice based upon acceptable risk to the legitimate stakeholders. The CPPA, in consultation with industry, developed a risk management approach to the existing NCPDP Scheme.

#### 1.3.2 WaterMark Certification Scheme

As there was no national regulator for plumbing, the National Plumbing Regulators Forum (NPRF) formed in 2002. The NPRF is a cooperative arrangement of different groups with statutory responsibility for plumbing regulations in the various states and territories. It is not a statutory authority and has no executive power.

In 2004, the NPRF published the first version of the Plumbing Code of Australia (PCA). The Goal of the PCA is to enable the achievement of nationally consistent, minimum necessary standards of relevant safety, health, amenity and sustainability objectives efficiently. The PCA through Part A mandates required materials or products, which are used in plumbing or drainage installations to be certified and authorised through the national WaterMark Certification Scheme (WMCS).

This national code and scheme facilitated each State and Territory to divest from direct references to MP52 for the purposes of the WMCS. The NPRF entered into a Memorandum of Understanding with Standards Australia in the operation of the WMCS where the NPRF would manage the scheme and Standards Australia would administer the scheme.

In 2005, MP52 was revised and redesignated as AS 5200.000-2005 Technical specification for plumbing and drainage products by Standards Australia. At this time several reference texts were in circulation to govern the WMCS including the PCA and the Rules for the WaterMark Certification Trade Marks.

##### 1.3.2.1 Managing the Flow Report

An inquiry into the regulation of plumbing product quality in Australia led to the Parliament of the Commonwealth of Australia House of Representatives Standing Committee on Environment and Heritage releasing the report *Managing the Flow - Regulating plumbing product quality* in September 2007.

*Managing the Flow* made the following 5 key recommendations:

- to implement the Water Efficiency Labelling and Standards (WELS) Scheme;
- that WaterMark is a prerequisite for the WELS Scheme;
- to examine the enforcement practices for the WELS Scheme;
- the NPRF explore, in consultation with government and industry stakeholders, options to improve the audit and enforcement profile for ensuring plumbing product quality in Australia; and
- that COAG explore options for constituting a national coordinating body that can take responsibility for improving the coordination and cohesion of regulatory arrangements for controlling plumbing product quality in Australia, including the mandatory schemes, relevant standards and their application across jurisdictions.

### **1.3.2.2 Future Governance and Administration of the WMCS Report**

In October 2009 the Allen Consulting Group were engaged by the NPRF to review and report on the future governance and administration of the WMCS. The report reviewed the Role of the WMCS, the key elements of an effective plumbing product certification scheme and models for a future WMCS. The report highlights three key elements of the WMCS being:

- general administration,
- compliance and enforcement; and
- standards development and maintenance.

Further to the key elements of WMCS the report presented a number of models for a future WMCS. These models included:

- A corporate model; and
- A government model.

At this time SA announced its intention to divest itself of the administrative function of the WMCS. In addition, progress towards a National Construction Code (NCC) incorporating all on-site construction requirements into a single code was underway, commencing with the amalgamation of the Building Code of Australia (BCA) and the Plumbing Code of Australia (PCA). With responsibility for the PCA transferring to the ABCB, it was expected responsibility for the management of the WMCS would also be transferred from the NPRF to the ABCB.

### **1.3.2.3 Future Administration of the WMCS – Business Case Report**

On behalf of the ABCB, the (Victorian) Plumbing Industry Commission engaged KPMG to develop a business case for a government jurisdiction to administer the WMCS on a cost recovery basis. In December 2010 KPMG released the report and business case on the future administration of the WMCS. The report detailed recommendations to be undertaken once transfer of the WMCS occurred to a new administration. These recommendations included:

- Confirmation of a scheme manager;
- Identification of an appropriate scheme administrator;
- Agreement of funding arrangements;
- Revision of WMCS documentation;
- Transition of functions to new administrator;
- Recruitment of additional administrative staff and development of a new IT arrangement;
- Implement cost recovery model;
- Periodic and regular review of product certification.

Under the Intergovernmental Agreement between the Commonwealth and the State and Territory Governments (IGA 2012), the ABCB has the responsibility to 'manage or oversee the management of product certification schemes relating to building and plumbing'.

Consistent with responsibility for the PCA transferring to the ABCB, Commonwealth, State and Territory Ministers (the Building Ministers' Forum) agreed to the ABCB assuming responsibility for the management and administration of the WaterMark Certification Scheme. The WMCS transferred to the ABCB on 25 February 2013.

#### **1.3.2.4 Current Review of WMCS**

The Building Ministers' Forum requested a full review of the Scheme be undertaken on completion of the transfer to the ABCB to:

- (i) review the policy objectives;
- (ii) review the Scheme Rules;
- (iii) examine the appropriateness, effectiveness and efficiency of the operation of the Watermark Scheme; and
- (iv) make recommendations where appropriate as to the future of the Scheme.

Issues to be examined include the operation of the Scheme and associated reporting processes, the roles and liabilities of the participants, the overall costs and benefits to industry and government, options for future arrangements and possible linkages with other schemes, such as the WELS Scheme.

# CHAPTER 2.

## OBJECTIVES AND SCOPE OF THE SCHEME

### 2.1 Introduction

This chapter examines the policy objectives and scope of the Scheme to determine whether the objectives remain valid and whether the scope of the Scheme is appropriate for meeting those objectives. An international perspective on the practice of plumbing product certification in other countries with similar performance based regulatory systems is also provided.

The original objectives of plumbing product certification appear to be the concerns for the risk of contamination of the water and the risk of leaking of the pipe network. The latter was then rephrased as the concerns for the infrastructures, the environment and water conservation. Mandatory certification and labelling were practiced in Australia well over a century albeit at local levels. The establishment of a national scheme reflects the need for national consistency although the responsibility for plumbing still rests with the States and Territories.

### 2.2 Objectives of Certification

The prime objective of plumbing product authorisation/certification has always been the concerns for public health and safety.

The establishment of National Certification Plumbing and Drainage Products (NCPDP) Scheme reflected the wish to achieve national consistency in certification.

In 1998, the CPPA restated the objectives for the control of plumbing products, as follows:

The level of control for the design and manufacture of each product category or type, will be the minimum needed to ensure that the product is fit for purpose, in a cost-effective ecologically sustainable manner, through a process that assesses the risk associated with:

- Health and safety
- Infrastructure Impact (private and Public)
- Water conservation (Resource Conservation)
- Environmental Impact

Provision G1.3 in the PCA sets the objective of Part G1 Certification and Authorisation as:

'...to establish the requirements for materials and product certification and authorisation under Part A2 ...and to-

- (a) provide a process to authorise materials and products to enable their use in plumbing and drainage installations;
- (b) ensure that plumbing and drainage materials and products are fit for purpose and that their use in a plumbing and drainage installation is suitable and does not create significant risks or any likely outcome of:
  - (i) personal illness, loss, injury or death
  - (ii) environmental degradation;
  - (iii) contamination of the water resource
  - (iv) adverse impact on infrastructure (private and public);
  - (v) contamination of water supplies;
  - (vi) wastage of resources (water and energy)
  - (vii) premature failure of the material or product; and
  - (viii) the inability of a material or product to function as intended.'

It is difficult to determine the extent to which the Scheme has achieved all of its objectives. This is because of the other regulatory mechanisms in place which share the same objectives. Despite the inadequacies of the scheme, Australians enjoy high quality drinking water and benefit from safe and effective sanitary and drainage systems.

The current objectives of the Scheme however, need to be considered in the context of the objectives of the ABCB and the goals of the PCA.

### 2.3 Objectives of the ABCB and Goals of the PCA

The ABCB Intergovernmental Agreement (IGA) 2012 states the Board's mission and objectives. These are reflected in the Introduction to the PCA as follows:

'The ABCB's mission is to address issues relating to safety, health, amenity and sustainability in the design, construction and performance of buildings. This is achieved through the NCC and the development of effective regulatory systems and appropriate not-regulatory solutions.'

'The goal of the PCA is to enable the achievement of nationally consistent, minimum necessary standards of relevant safety, health, amenity and sustainability objectives efficiently.

The goal is applied so that-

- (a) there is a rigorously tested rationale for the regulation; and
- (b) the regulation is effective and proportional to the issues being addressed such that the regulation will generate benefits to society greater than the costs (that is, net benefits); and
- (c) there is no regulatory or non-regulatory alternative (whether under the responsibility of the Board or not) that would generate higher net benefits; and
- (d) the competitive effects of the regulation have been considered ; and the regulation is no more restrictive than necessary in the public interest.'

When considered against the goals of the PCA, many of the stated objectives of the Scheme are no longer valid.

Requirements that materials and products are fit for intended purpose [G1.3(b)], and be unlikely to prematurely fail [G1.3(b)(vii)] or be unable to function as intended [G1.3(b)(viii)] mirror A2.1 Suitability of material and products clause (a).

The objectives in G1.3(b) of avoiding risks of (i) personal illness, loss, injury or death aligns with the PCA core life safety goal.

However, the remaining objectives do not align as closely with the goals of the PCA:

- avoiding risks of (ii) environmental degradation and (iii) contamination of the water resource is not a building regulatory matter;
- avoiding risks of (iv) adverse impact on infrastructure relates to property protection (and thus is not a goal of the PCA);
- avoiding risks of (v) contamination of water supplies can be achieved through the specification of appropriate backflow provisions in the installation standards; and
- avoiding risks of (vi) wastage of resources is not presently a primary goal of the PCA, rather a matter being addressed in part by the Water Efficiency and Labelling Standards (WELS) ACT, which will be discussed later in this report.

ABCB consultation with industry and the State and Territory plumbing regulators confirm the findings of the *Future governance and administration of the WMCS* report in which stakeholder support for the Scheme was based on:

- *'the potential risk to public health and safety from poor quality or faulty plumbing products, for instance through the contamination of the water supply; and*
- *The difficulty in judging the size of these risks, in particular future risks, and the potential high cost of a single incident (essentially invoking the precautionary principle to these risks, where there is uncertainty about the likelihood or magnitude).'*



Further, as the mandatory scheme has been in place for some time, *'it was difficult to predict how the industry would behave without a mandatory scheme in place ... when properly administered and enforced, it covers all products where there is an identified risk, and all points of installation.'* As the avoided risks identified are deemed to represent a small number of incidents each carrying a high risk, a non-mandatory scheme is believed to be unable to adequately address these risks.

In the absence of quantifiable benefits, revising the objectives of the Scheme to align more closely with the goals of the PCA is an important first step to ensuring the Scheme serves to deliver on the mission of the Board under the IGA.

Finally, IGA 2012 Clause 5.1 states an Objective of the Board will be to:

'h. manage or oversee the management of product certification schemes relating to building and plumbing which assist the Board with achieving its other objectives.'

To the extent that the Scheme serves to address issues of life safety in plumbing and drainage matters, having responsibility for the WMCS does assist the Board with achieving its other objectives.

## 2.4 Scope of Certification

Not all plumbing and drainage materials and products require WaterMark certification.

The PCA provides Table A2.1 Materials and products which require certification and authorisation. The Schedule of Specifications for plumbing and drainage products lists the specifications and minimum level of certification required. A List of Exempt Products lists the products that have been assessed as being exempt from certification and authorisation. The latter two lists are available from [www.abcb.gov.au](http://www.abcb.gov.au)

Risk assessment process is used for materials and products for which there is no appropriate specification. These include new or innovative as well as imported materials and products. The risk assessment process is described in MP78. There are two levels of certification:

- Products for use in contact with drinking water or with a risk assessment score greater than 4 require Level 1 Certification (ISO/IEC Guide 67 System 5, i.e. involving testing of product samples for conformity and assessment of the quality system)
- Products that is assessed with a score in the range of 3-4 require Level 2 certification (ISO/IEC Guide 67 System 1b, i.e. testing of product samples for conformity only)

Any material or product with a score of less than 3 does not require certification and should be listed on the List of Exempt Products.

The Scheme has been established in line with ISO/IEC Guide 28. Guide 28 provides an example of a type 5 certification scheme with models for applications, assessment and licensing agreements for the use of a certification mark.

## 2.5 Certification System

The current certification system includes two levels of certification based on ISO/IEC Guide 67. These include a system 5 (Level 1) and system 1b (Level 2). In accordance with table 1 of ISO/IEC Guide 67, the key difference between all product certifications systems is the surveillance of the product undertaken after the initial granting of the licence and prior to extending, suspending or withdrawal of the licence. This is highlighted in table 1 of ISO/IEC Guide 67 below.

Figure 1

TABLE 1 ISO/IEC GUIDE 67

Table 1 — Building a product certification system

Elements <sup>a</sup> of product certification system	Product certification systems <sup>b, c, d</sup>						
	1a	1b	2	3	4	5	6
1) Selection <sup>f</sup> (sampling), as applicable	X	X	X	X	X	X	
2) Determination <sup>g</sup> of characteristics, as applicable, by:	X	X	X	X	X	X	X
a) testing (ISO/IEC 17025)		X				X	
b) inspection (ISO/IEC 17020)		X				X	
c) design appraisal							
d) assessment of services							
3) Review <sup>h</sup> (evaluation)	X	X	X	X	X	X	X
4) Decision on certification Granting, maintaining, extending, suspending, withdrawing certification	X	X	X	X	X	X	X
5) Licensing (attestation) <sup>i</sup> Granting, maintaining, extending, suspending, withdrawing the right to use certificates or marks		X	X	X	X	X	X
6) Surveillance, as applicable by:							
a) testing or inspection of samples from the open market			X		X	X	
b) testing or inspection of samples from the factory				X	X	X	
c) quality system audits combined with random tests or inspections						X	X
d) assessment of the production process or service				X	X	X	X

Source: ISO/IEC Guide 67

The approved user agreement details the term of the licence to be 12 months. The current scheme permits for the product type testing to have ongoing validity until an element of the product changes. The review of the product and certification by convention has a validity of 5 years for level 1 and 3 years for level 2. It appears the WMCABs have not actively applied the term of the licence.

The two levels within the scheme are intended to reflect the difference between high and moderate risk products. Low risk products are considered outside the WMCS. The low risk products are required to demonstrate evidence of suitability in accordance with Provision A2.2 which may include certification by a certification body under their own accredited certification scheme. These independent certification schemes are typically a system 5 certification scheme which is equivalent to Level 1 certification but do not attract requirements for the WaterMark certification trade marks nor payment of royalties to the ABCB.

## 2.6 Survey of International Practice in Plumbing Certification

To provide an international perspective on the practice of plumbing product certification in other countries with similar performance based regulatory systems, the ABCB conducted a survey of members of the Inter-Jurisdictional Regulatory Collaboration Committee (IRCC). Five member countries responded: New Zealand, Japan, Singapore, Canada and UK. The responses are summarized below.

All responding countries have some form of plumbing regulation and all countries except New Zealand have non-mandatory certification system specific to plumbing. New Zealand has a non-mandatory building product certification scheme which can be used for plumbing products. Singapore also has a mandatory water efficiency labelling system.

Following is a brief summary of the reported issues and or observations for each respondent.

### 2.6.1 New Zealand

There are no major issues with the regulation of plumbing products, however very few plumbing products have gained the voluntary certification. Nearly 10 years ago, the NZ government was close to banning a plastic pipe system because of non-compliance with the building code, but the issue was resolved when the product was voluntarily withdrawn from the market by the importer. There are a few cases of plastic pipes that are claiming pressure rating that they do not appear to meet, and product that appear not to meet the tests of the standards they have marked on them.

## **2.6.2 Japan**

Plumbing and drainage within the building site are subjected to both Waterworks Law (for water supply equipment) and Building Standard Law (for drinking water plumbing and drainage). Certification is only to Waterworks Laws. While certification is not mandatory, it is rare to find uncertified products in the market although the situation may be changing with influx of imported products.

## **2.6.3 Singapore**

No mandatory certification of plumbing product but there is mandatory labelling for water efficiency for some plumbing items. Mandatory compliance of products with standards is considered proven if successfully tested by accredited test laboratories. Active enforcement and compliance mechanisms are in place.

## **2.6.4 Canada**

No national mandatory certification of plumbing product but there are a number of accredited certification bodies and responsibility for assessing conformity rests with the individual provinces.

## **2.6.5 United Kingdom**

Although it is considered a criminal offence if the product does not conform to regulation, the 'approval' scheme appears to be voluntary.

## **2.6.6 Summary of International Practice**

Countries with similar performance based regulatory systems to Australia rely on non-mandatory certification systems for plumbing products – the extent of uptake of such systems ranges from few products (New Zealand) to most products (Japan). Countries actively enforcing compliance tend to have higher uptake of voluntary certification of plumbing products. None of the countries reported significant issues relating to or stemming from the regulation of plumbing products.

## **2.7 Issues**

The following issues regarding the objectives and scope of the Scheme require further consideration.

### **2.7.1 Alignment of Objectives**

Some of the present objectives of the Scheme do not align with the goals of the PCA, nor do they serve to ensure the Scheme assists the Board in delivering on its mission under the IGA.

Water conservation is a lower order objective of the PCA but it is not clear whether this is also an objective of the WaterMark Scheme. In any case, there is also the Water Efficiency and Labelling and Standards Scheme (WELS). The interaction of Watermark and WELS Schemes will be examined later in this report.

Internationally, countries with similar performance based regulatory systems to Australia rely on non-mandatory certification systems for plumbing products, if at all, that are variously applied to few up to most plumbing products.

### **2.7.2 Alignment of the Scope with the Objectives**

The scope of products and materials captured by the Scheme should be limited to those that can contribute to achieving the goals of the PCA.

The WMCS extends past the end of line protection, includes systems and is fragmented within the plumbing network.

### **2.7.3 Risk Assessment**

The risk assessment process is required to be carried out by the WMCABs and the outcome is to be confirmed by the Administrator. MP78 require the assembly of 'a small team of people' with 'varied experience'. The terms under quotation marks are not defined. As there are more than 10 WMCABs operating at present, it is necessary to ensure that the risk assessment process produces consistent outcomes.

The risk assessment parameters should be in line with the application of the goals of the PCA – best regulatory practice – such that matters of safety and health would be a higher priority to matters of amenity and sustainability.

#### **2.7.4 Scheme Type**

None of the WMCABs have been identified as being qualified in ISO/IEC 17020 – Conformity assessment – Requirements for the operation of various types of bodies performing inspections, yet Guide 67 requires the WMCABs to inspect sites and products. Means for demonstrating competency to undertake inspections need to be established.

Consideration for establishing a single system scheme (based on a type 2 or 3 system) whereby product surveillance is undertaken on products sourced direct from the factory or the open market. Inclusion of assessment of the production process is a key difference between the two.

The ABCB is also responsible for overseeing the management of the voluntary building product certification scheme CodeMark which has similar objectives (primarily health and safety) but operates on a completely different approach. For efficiency gains, consideration should be given to the possible operation of the two Schemes using the same approach or core set of rules.

#### **2.7.5 Structure of the PCA**

As for all volumes of the NCC, the PCA is intended to be a performance-based code consistent in scope and structure to the BCA. This is not the case at present. The performance requirements of the PCA need to be quantified with appropriate verification methods. The location of various plumbing requirements does not appear to be in accordance with the performance drafting principles. This may have implications for the certification of new and innovative products for which there is no technical specification to be evaluated against. Such products might rely on the Performance Requirements as the basis for certification.

State and Territory variations in the administration of the national PCA and the Scheme impact on meeting the goal of national consistency.

Industry enquiries indicate that confusion surrounds the application of the PCA, Provision A2.1 and the requirements of the WMCS. This is due to the fragmented documentation and the need to purchase critical documents that form part of the rules.

### **2.8 Recommendations**

The following recommendations are made to address the above issues:

- Revise the objectives of the Scheme to align more closely with the mission and objectives of the ABCB under the IGA and the goals of the PCA.
- Review and refine the scope of the WMCS to align with the revised objectives. Possible broad options include:
  1. Remove end of line appliances from the scheme (ensure backflow requirements are in installation provisions); and
  2. Remove requirements for fire protection from the Scheme (ensure backflow requirements are in installation provisions); and
  3. Retain existing scope but tighten the risk assessment process ('Existing 2 level scheme'); or
  4. Remove all Level 2 products from the scheme ('Level 1 scheme'); or
  5. Remove all but those products required to comply with AS 4020 ('4020 scheme').
- Revise the risk assessment process and risk profiles to align with the revised objectives to accurately determine what products are included or excluded from the Scheme. Incorporate Risk Assessment as a function within the WaterMark Administration or provide training to each WMCAB on risk evaluation.
- Consider establishing the WMCS as a single system with clear details of surveillance requirements.
- Review the requirements for WMCABs to be accredited to ISO/IEC 17020 and to be able to appropriately inspect and document materials and products.

- Remove the majority of the WMSC content from PCA Part G and consolidate it with all other elements of the WMCS rules (aside from that required by the ACCC for the Certification Trade Marks) into a single document that is freely available on the ABCB website. The WMCS Rules should remain a principle reference document of the PCA. Review and simplify Provision A2.1 of the PCA.

# CHAPTER 3.

## SCHEME STRUCTURE

### 3.1 Introduction

This chapter examines the structure of the Scheme. Possible linkages to other scheme such as CodeMark and WELS are identified and some examples of models for other certification schemes are provided.

The structure of the WMCS has been previously evaluated by the Allen Consulting Group in the *Future governance and administration of the WaterMark Certification Scheme* Report. The Allen Consulting Group presented two scheme structures - the corporate model and government model.

### 3.2 Corporate Model

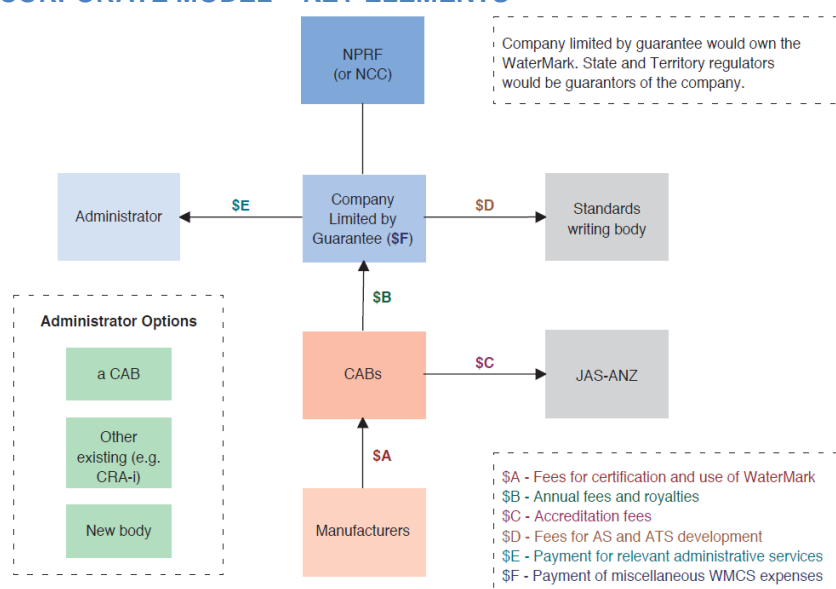
The Allen Consulting Group recommended the corporate model with a company limited by guarantee as detailed below.

*'The corporate model is so named as it seeks to address the issue of trademark ownership by creating a company limited by guarantee to take ownership of the WaterMark. Other key aspects of the corporate model include:*

- *A sub-contracted body responsible for general administration duties;*
- *A sub-contracted body responsible for various standards development and maintenance duties; and*
- *Similar roles and responsibilities for manufacturers, WMCABs and JAS-ANZ as currently is the case.'*

Figure 2

#### CORPORATE MODEL – KEY ELEMENTS



Source: The Allen Consulting Group – *Future governance and administration of the WaterMark Certification Scheme*

The Allen Consulting Group provided further recommendations on the structure and duties for the following elements:

- Company limited by guarantee
- Administrator
- Standards development and review

- Other entities
- Funding model

### 3.3 Government Model

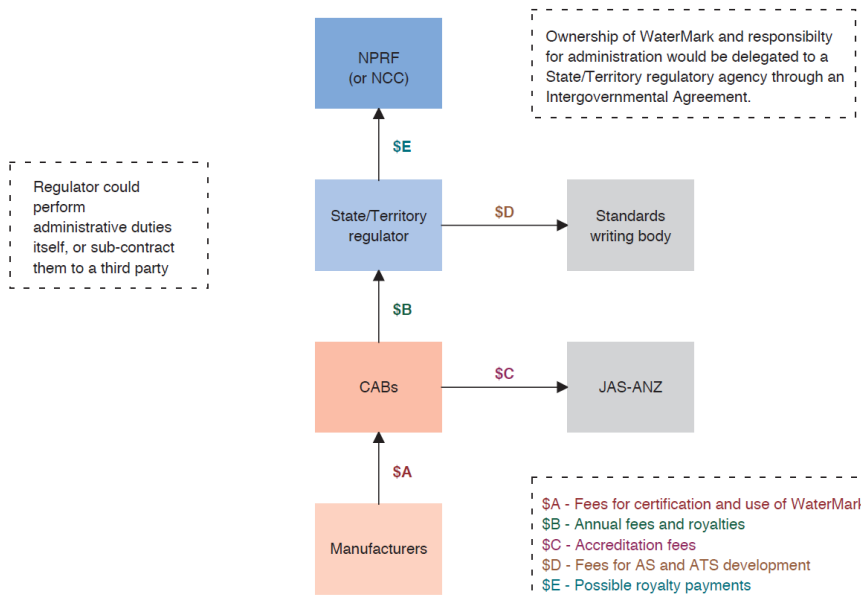
An alternative to the corporate model is the Government model.

*'In contrast with the corporate model, the government model seeks to address the issue of trademark ownership by delegating responsibility for ownership of the WaterMark to a State or Territory plumbing agency. This agency would be responsible for administering the WMCS. Other key aspects of the government model include:*

- *A sub-contracted body responsible for various standards development and maintenance duties; and*
- *Similar roles and responsibilities for manufacturers, CABs and JAS-ANZ as currently is the case.'*

Figure 3

#### GOVERNMENT MODEL – KEY ELEMENTS



Source: The Allen Consulting Group – Future governance and administration of the WaterMark Certification Scheme

The Allen Consulting Group provided further recommendations on the structure and duties for the following elements:

- Delegated agency
- Standards development and review
- Other entities
- Funding model

### 3.4 Possible Linkages with Other Schemes

In reviewing the WaterMark Certification Scheme it is important to identify any possible linkages with other schemes.

Firstly, the ABCB owns CodeMark – a voluntary third party building product certification scheme called up in the BCA initiated to support the use of new and innovative building products by enabling products with issued certificates of conformity to gain national mandatory acceptance.

Secondly, the Water Efficiency Labelling and Standards (WELS) Scheme – established under the Commonwealth Water Efficiency Labelling and Standards ACT 2005 and supported by uniform State and Territory legislation – aims 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. It is a ‘point of sale’ scheme targeting some of the plumbing products which are also covered by the WMCS and the 2010 review of WELS referred consideration of possible linkages between the two schemes to this review of WMCS.

#### **3.4.1 CodeMark Certification Scheme**

The CodeMark Certification Scheme was initiated by the ABCB in conjunction with the then New Zealand Building Industry Authority. In Australia, CodeMark was intended to enable the replacement of individual State and Territory based schemes. The Objective of CodeMark is to assist and benefit industry by providing confidence to regulatory authorities and the market about the conformity of certified Products to the requirements of the NCC Vol. 1 & 2 or the New Zealand Building Code (NZBC) as appropriate. CodeMark certified products are given mandatory acceptance throughout Australia and New Zealand.

A Certificate of Conformity is issued by a CodeMark certification body that certifies a building product conforms with the relevant Performance Requirements or Deemed-to-Satisfy provisions of the NCC Series Volume 1 & 2. Building materials, forms of construction, systems and designs can come under the scheme. The Joint Accreditation System – Australia – New Zealand (JAS-ANZ) is responsible for the accreditation of CodeMark certification bodies in accordance with the CodeMark Scheme Rules (available from [www.abcb.gov.au](http://www.abcb.gov.au)).

CodeMark was launched in Australia in September 2005. Three organisations have been accredited as CodeMark certification bodies: SAI Global (March 2006), GlobalMark (September 2006) and CertMark (June 2011). Since the launch of the Scheme, 73 Certificates of Conformity have been issued throughout Australia. Of these 24 are related to the Termite barrier industry.

ABCB is presently conducting a review of CodeMark to determine the future of the scheme, the outcomes of which will impact on any possible linkages. Whilst the WaterMark and CodeMark are fundamentally different schemes, the potential for linkages, synergies and efficiency gains within the ‘business of product certification schemes’ should be examined.

Additionally, depending on outcomes from the reviews of both schemes, it is possible that plumbing products not requiring mandatory certification under WaterMark may seek voluntary certification under CodeMark as evidence of suitability. This presently occurs in New Zealand where there is no plumbing product specific scheme. Implications for CodeMark are that rather than being perceived as the building product certification scheme, it could be viewed as the NCC’s voluntary construction product certification scheme, under which non-mandatory certification could be sought for any product, including future inclusions in the NCC suite, seeking compliance with the NCC. Whether CodeMark CABs (or only WMCABs) would be able to undertake the certification of plumbing products under the CodeMark scheme would also need to be determined, noting that all three CodeMark CABs presently are also accredited WMCABs.

#### **3.4.2 Water Efficiency Labelling and Standards Scheme**

The ABCB engaged George Wilkenfeld and Associates Pty Ltd to undertake the examination of possible linkages between the WELS and WaterMark schemes. The *Executive Summary* of this report is provided as an extract below.



### **3.4.2.1 WELS Linkages Report - Executive Summary - Background**

*The WaterMark Certification Scheme (WMCS) is a system of risk-assessment, testing and certification of plumbing products and materials, to verify that they meet the requirements of the Plumbing Code of Australia. The Scheme is currently operated by the Australian Building Codes Board (ABCB). The obligation to install only products, materials and systems that have been properly assessed (or exempted) under the WMCS falls on plumbers and installers, as a condition of their licensing under State and Territory law. The WMCS places no direct obligation on product suppliers.*

*The Water Efficiency Labelling and Standards (WELS) Scheme is established under the Commonwealth Water Efficiency Labelling and Standards Act 2005, supported by uniform state and territory legislation. Its 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 products currently covered by WELS fall into two groups -*

- *Plumbing products, which are also covered by the WaterMark scheme: toilets, urinals, taps, showers and flow controllers.*
- *Water-using electrical appliance: clothes washers, dishwashers and combined clothes washer-dryers. These are outside the scope of WaterMark.*

*The WELS Act places obligations on suppliers to test and register these products and to ensure that they are correctly labelled in advertisements and at the point of supply. Toilets and clothes washers are also subject to minimum water efficiency standards (WES).*

*The ABCB is currently reviewing the WaterMark scheme. One of the Terms of Reference for the review is Identification of any linkages between WaterMark and the WELS scheme. This report covers that aspect of the WMCS review, and addresses the following questions:*

- *the objectives and scope of each scheme, and their compatibility;*
- *their regulatory frameworks and impediments to greater linkage;*
- *the specific aspects, if any, that could be linked, and how;*
- *the benefits of such linkage, and to whom they would accrue;*
- *whether there is merit in transferring responsibility for WELS registration, enforcement and communication for plumbing products to the WM administrator;*
- *how could regulatory differences could be overcome to achieve linkages;*
- *how fees and charges could be distributed between the two schemes, given their differing expectations regarding cost recoverability;*
- *the recommendations in the 2010 review of the WELS scheme, and relevant lessons learned that could inform the future direction of WaterMark.*

*This project was undertaken over a relatively short period. It relied on documents supplied by the ABCB, additional documents identified by the author, meetings with officials of the ABCB, the Department of Industry and the WELS team in the Department of Environment and a limited number of interviews with stakeholders nominated by ABCB. The issues raised by stakeholders were similar to those identified by ABCB during its own extensive consultations on the WM scheme during 2013.*

### **3.4.2.2 WELS Linkages Report - Executive Summary - Conclusions**

*The objectives the WaterMark Certification Scheme and the Water Efficiency Labelling and Standards scheme are compatible, but they are not interchangeable. The WMCS scheme cannot meet the objectives of the WELS scheme, nor vice versa. At best, the schemes can support each other to a limited extent, as WELS has done by making WM certification a condition of registration for those plumbing products covered by both schemes.*

*The relationship between the two schemes is analogous to that between electrical product safety regulations and the appliance energy efficiency program. All electrical products must meet electrical safety standards, because every item represents a potential safety hazard. However, only a relatively small group of products is subject to energy labelling and minimum energy performance standards (MEPS), because they account for a high share of energy use, and their technology and market structures mean that product efficiency is likely to be influenced by these measures.*

*The most obvious overlap between the WMCS and WELS is that a particular group of plumbing products is covered by both schemes, and therefore the suppliers of those products come into contact with both schemes. In almost every other respect, the schemes are significantly different with regard to regulatory structure, mode of operation and target groups.*

*The WELS scheme was established following a rigorous impact assessment and cost-benefit analysis of alternative policy options. By contrast the WMCS addresses a problem which, though real, has not been quantified, and for which alternative strategies have not been proposed or assessed. If the objective of the WMCS is to ensure that only products that are risk-assessed should be connected to the mains water supply, then alternative strategies may be more effective.*

*The objectives and structures of the two schemes are so different there is little merit in transferring responsibility for WELS registration, enforcement and communication for plumbing products to the WaterMark Administrator.*

*Nor is it feasible to address water-efficiency solely through the WMCS. There is a continuing need for a scheme that can achieve both minimum WES and communicate comparative water-efficiency in an integrated way. Only WELS is capable of doing this.*

*In the absence of a clear, unified regulatory structure for the WM scheme – possibly on a similar basis to WELS – it is difficult to envisage formal linkages. However, that should not preclude administrative or functional linkages where mutually beneficial:*

- *Linkage Level 1 – development of a joint registration/database portal;*
- *Linkage Level 2 – greater integration of test standards and laboratory requirements, and co-operation on monitoring and compliance issues – for example, WELS inspections of plumbing product suppliers could note which products are marked with or lacking the WM symbol;*
- *Linkage Level 3 – in the longer term, if WMCS were established under uniform national legislation, product suppliers could be made responsible for the WM status of products in the same way as they are responsible for the WELS status of products. If this were achieved, then registration, testing, monitoring and compliance functions could be formally linked. Alternatively, if the WELS Act were amended to cover the public health and safety aspects of plumbing products as well as their water-efficiency, it may be possible in the long term to unify the two schemes under the WELS Regulator. A change of this magnitude would require the agreement of many stakeholders in government and industry, as well as a Regulation Impact Assessment which would subject the WM scheme to formal cost-benefit analysis.*

*At present the two schemes have different, and incompatible ways of raising revenue. The ABCB receives annual payments and royalties from CABs, whereas WELS receives revenue directly from registration fees. The linkages between revenues and cost-recovery for the ABCB are indirect and unpredictable, whereas for WELS they are more direct and predictable. These differences constitute a more significant impediment to the linkage of fees and charges than any differences in cost-recovery targets (currently 100% for WMCS and 80% for WELS).*

*While it may be possible to reduce combined operating costs and increase effectiveness through greater linkage, for the time being ABCB and WELS should continue to collect revenues and manage their separate costs and charges. Indeed, given that each scheme covers a wider range of products than the ones they have in common, it would be difficult to establish an equitable basis for the distribution of fixed costs, variable costs and income.*

*With regard to the 2010 review of the WELS scheme, there is little of direct relevance to WaterMark. The recommendations of greatest potential relevance - to merge the administrative functions of WELS with the WaterMark scheme (for plumbing products) and the Equipment Energy Efficiency (E3) Program (for appliances) - were rejected by government, and have not been acted on. The recommendations that were accepted have been implemented largely through amendment to the Commonwealth WELS Act 2005 and its related Fees Act and Determinations. As the WMCS has a different regulatory basis, changes of this kind would be more difficult to achieve.*

### **3.5 Other Certification Scheme Models**

A report providing information about a select number of industry certification schemes that operate in Australia is provided at Appendix E.

### **3.6 Issues**

- Consistent with responsibility for the PCA transferring to the ABCB, Commonwealth, State and Territory Ministers (the Building Ministers' Forum) have agreed to the ABCB assuming responsibility for the management and administration of the WaterMark Certification Scheme.
- The Scheme transferred to the ABCB on 25 February 2013 with the understanding that the Scheme would continue to operate essentially 'as is' until a full review was undertaken to inform decisions as to the future of the Scheme.
- As the Scheme has transferred to the ABCB, the Government model has been adopted. Notwithstanding, whilst the ABCB owns CodeMark – a voluntary third party administered building product certification scheme – managing and administering the mandatory WaterMark plumbing product certification scheme represents a significant departure from the traditional core business of maintaining and developing the National Construction Code. With it, WaterMark brings to the nine governments challenging new responsibilities, liabilities and risks. These need to be managed appropriately to, at minimum, preserve of the good name and reputation of the very organisation sought for its capacity to bring integrity to the Scheme and, at worst, avoid potentially poor, costly and disruptive outcomes for stakeholders.
- The ABCB has engaged PricewaterhouseCoopers to undertake a risk assessment of the present Scheme and provide a risk mitigation strategy to address the identified issues. To that end, further consideration of alternative Scheme structures may be warranted.

### **3.7 Recommendations**

- Consider the following options for a future Scheme structure together with the findings of the Risk Assessment:
  1. Maintain the WMCS structure as is; or
  2. Provide additional corporate protection by transferring the ownership of the scheme to a company limited by guarantee; or
  3. Transfer the WMCS to an alternative Government agency; or
  4. Transfer the WMCS to an independent corporate model.

# CHAPTER 4.

## GENERAL ADMINISTRATION

### 4.1 Introduction

This chapter examines the general administrative functions relating to the Scheme including administering the Approved certifier Agreements, stakeholder engagement, maintaining a WaterMark website and database, Scheme promotion and financial arrangements.

Under the current arrangements, the ABCB office role as administrator of the WMCS involves a number of general administrative duties, including: approving certifiers and managing Approved Certifier Agreements; managing enquiries from scheme stakeholders (manufacturers, WMCABs, State and Territory administrations and members of the general public); maintaining a WaterMark website and database for licenced products; and financial administration of royalties.

In addition, the ABCB has been establishing the Scheme within the ABCB including the development of operational procedures; clarification /interpretation of roles, responsibilities and rules; and communication with stakeholders. Where possible the ABCB has been looking to simplify, streamline and automate administrative functions.

This review considered the three previous studies being the Parliament of the Commonwealth of Australia *Managing the flow – regulating plumbing product quality* dated September 2007; the Allen Consulting Group *Future governance and administration of the Watermark Certification Scheme* dated October 2009 and KPMG *Business case for the future administration of the WMCS* dated December 2010.

These reports detailed the same general administrative duties for the Scheme, in particular promotion of the Scheme was to focus on improving the recognition of the mark itself.

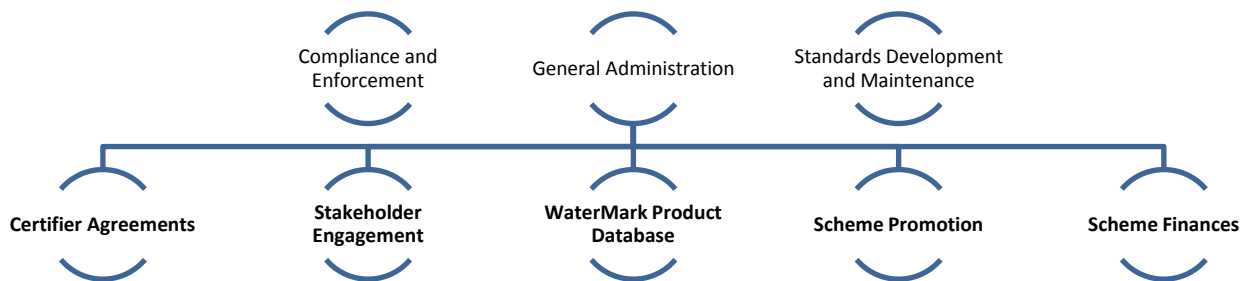
In consulting for this review, the ABCB office held forums with State and Territory administrations, the accreditation body (JAS-ANZ), the WMCABs, the Department of Environment WELS team, industry practitioners and representative industry associations.

Stakeholder feedback, primarily from the WMCABs, suggested that there was dissatisfaction with the previous scheme administration due to restrictions in continuity of service. The administrator was only available part time and there were subsequent delays or lack of update on administrative duties including enquiries, complaints and specification development. More recent feedback suggests an increase in satisfaction of administrative duties following the transfer to the ABCB with an improvement in communication, direction and enforcement of submissions to the administration.

The following diagram details the current structure of the WMCS General Administration.

**Figure 4**

#### ELEMENTS OF GENERAL ADMINISTRATION



**Source: ABCB office**

The WaterMark Administrative Body (WMAB) responsible for administering the WMCS including:

- a. Approving WMCABs and administering the Approved Certifier Agreements

- b. Reviewing and enforcing the competence and compliance of the WMCABs
- c. Advising WMCABs of any changes to the operations of the WMCS through appropriate directions including changes to:
  - i. The PCA;
  - ii. The Scheme Rules
  - iii. Policies
  - iv. Procedures;
  - v. New or changes WMCS specifications; and
  - vi. Required actions
- d. Managing enquiries from stakeholders and complaints in relation to the WMCS ( e.g. misuse of the WaterMark) and reporting actions resulting from those complaints to the management body and or the accreditation body in a timely manner.
- e. Facilitating the development, approval and publication of WMCS specifications and other WMCS documents
- f. Facilitating meetings of, and acting as secretary to , the WaterMark Technical Advisory Committee (WMTAC)
- g. The establishment and maintenance of the WaterMark Product Database and Website
- h. Promotion of the Scheme, in particular improving recognition of the certification trade marks
- i. Financial administration of royalties received
- j. Providing reports to the WaterMark management body as requested.

Very little in the way of established internal or external operational procedures and supporting documentation (such as processes, check lists, standard forms, form letters, etc) was supplied to the ABCB when the Scheme transferred.

For efficient, consistent, transparent and accountable administration, the ABCB has developed some rudimentary operational procedures and documentation on an as needs basis. The guiding principles have been to consider current practice, the Scheme Rules, requirements of the Board, Department of Industry and/or Building Minister’s Forum, existing ABCB operations and procedures and general principles of efficiency and consistency. The procedures and documentation created to date are by no means comprehensive or complete; however they have been an operational necessity and are a practical first step toward the development of a new Product Certification branch of the ABCB Quality Management System (QMS).

The ABCB QMS was established in 2007; Operational procedures are evaluated at least annually by the nominated responsible officers; an internal system audit is conducted annually; and an external system audit is conducted regularly.

The ABCB is looking to systematise operations relating to product certification so operations may be adapted to suit any future scheme that may move to ABCB as a result of broadening the NCC to other on-site construction matters.

## **4.2 Administration of the Approved Certifier Agreements**

Currently only WMCABs who enter an Approved Certifier Agreement with the ABCB are given the right to grant licences to Approved Users for the use of the WaterMark on materials and products under the WMCS. This is detailed within clause 3 of the Rules for the WaterMark Certification Trade Marks.

Figure 5

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### CLAUSE 3 RULES FOR THE WATERMARK CERTIFICATION TRADE MARKS

#### 3. APPROVED CERTIFIERS

- (a) ABCB will approve certifiers and grant Approved Certifiers the right to grant licences for the use of the WaterMark if it is satisfied that the certifier:
  - (i) is capable of granting licences for the use of the WaterMark and ensuring that the WaterMark is used by Approved Users in accordance with these Rules, the terms of the Approved User Agreement and any reasonable directions that may be given by ABCB in relation to the WaterMark from time to time;
  - (ii) is able to pay all fees and royalties to ABCB by the due dates;
  - (iii) has, and will maintain, accreditation for the certification of Plumbing Products with the Joint Accreditation System for Australia and New Zealand ("JAS-ANZ") or an accreditation body that has either a bilateral or multilateral recognition arrangement or agreement with JAS-ANZ; and
  - (iv) will enter into and comply with the terms of the Approved Certifier Agreement and these Rules.
- (b) All Approved Certifiers must enter into and comply with an Approved Certifier Agreement with ABCB.
- (c) ABCB will keep and maintain a list of all Approved Certifiers of the WaterMark. ABCB will provide details of Approved Certifiers of the WaterMark or make a list of all Approved Certifiers of the WaterMark available for public inspection during business hours at the head office of ABCB, on request.

*Source: ABCB Approved Certifier Agreement*

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There are a number of aspects involved in administering the certifier agreements. These include:

- Developing and maintaining the agreement – establishing the legal obligations of both parties under the agreement, as well as keeping the agreement up-to-date with any relevant legislative and organisational changes;
- Developing and maintaining a process of allowing new WMCABs to become a WMCAB; and
- Ensuring that the Approved Certifiers are fulfilling their obligations under the agreement.

Stakeholders did not identify any issues with the administration of the Agreements however previous studies have questioned the effectiveness of the WaterMark administration's policing of the agreement. Specifically in relation to:

- The payment of licence fees and royalties; and
- Auditing and surveillance of WMCABs.

Since the transfer of the WMCS to the ABCB, the ABCB office has issued a Notice of Direction 2013/7.0 *Financial Arrangements* to clarify and address the issue of payment of licence fees and royalties. Notice of Direction 2013/7.0 became effective on 14 July 2013. At the time of writing this review, two financial quarters have passed. Following minor prompting of WMCABs, all WMCABs have provided their licencing activity reports within 14 days of the end of quarter and payment within 30 days of the end of the financial quarter. Notice of Direction 2013/7.0 has improved the process for payment of licence fees and royalties. The notice of direction should be considered with any update to the Approved Certifier Agreement.

The auditing and surveillance of WMCABs is outlined in the Approved Certifier Agreement. The WaterMark Administration is currently negotiating a Deed of Agreement with the Accreditation Body (currently JAS-ANZ). The primary task under of the Accreditation Body under the agreement has been to undertake surveillance of the WMCABs to maintain their accreditation in accordance with ISO/IEC Guide 65 – General requirements for bodies operating product certification systems. This guide has been revised by ISO/IEC 17065:2012. The surveillance of the WMCABs by the Accreditation Body to ISO/IEC Guide 65 has been primarily focused on process rather than specific technical elements. The technical surveillance and identification of valid concerns appears to have been neglected by the WaterMark Administration. The function of a technical audit on the WMCABs by the WaterMark Administration or its representative is detailed further within Chapter 6 relating to compliance and enforcement.

Figure details clause 4.6 of the Approved Certifier Agreement for auditing and inspection of the WMCAB by the WaterMark Administration.

Figure 6

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## CLAUSE 4.6 OF THE APPROVED CERTIFIER AGREEMENT: AUDITS AND INSPECTIONS

### 4.6 Audits and inspections

- (a) No more than once a year (unless an audit or inspection is necessary to maintain the integrity, validity or ABCB's ownership of the WaterMarks), ABCB may audit the records of the Approved Certifier (including taking copies of the relevant parts of those records) and inspect the premises of the Approved Certifier to ensure that the Approved Certifier is complying and is able to continue complying with its obligations under this agreement, by giving at least 7 days notice to the Approved Certifier.
- (b) If requested by the Approved Certifier, ABCB will procure a written undertaking from each person who is conducting the audit or inspection on its behalf, that they will only use the information obtained in the course of the audit or inspection for the purposes of the audit or inspection and that they will maintain the confidentiality of such information, unless the information is public knowledge (otherwise than as a result of a breach of this clause by the person) or required to be disclosed by law. The Approved Certifier may not make such a request if JAS-ANZ is conducting the audit or inspection.
- (c) The Approved Certifier must:
  - (i) make all relevant information available for such an audit;
  - (ii) authorise ABCB (and its representatives) to inspect the Approved Certifier's premises; and
  - (iii) co-operate fully with ABCB.
- (d) The cost of the annual audit will be borne by ABCB. However, if the audit reveals:
  - (i) any area of concern for ABCB's auditor such that further investigations are deemed necessary in ABCB's reasonable opinion ("Valid Concern"), the costs of such further investigations will be borne by the Approved Certifier; or
  - (ii) that the Approved Certifier has underpaid the royalty for any period, the Approved Certifier must immediately pay to ABCB the amount of the underpayment plus interest in accordance with clause 6.3. **Error! Reference source not found.** and if the total amount of underpayment for the period of the audit is more than [\$1000], the costs of the audit will be borne by the Approved Certifier.
- (e) If any additional audits are required in a year, the costs of the additional audit will be borne by ABCB unless the results of the audit reveal any Valid Concern, in which case the costs of the additional audit and any further investigation of the Valid Concern will be borne by the Approved Certifier.
- (f) Where possible, such audits will be conducted during normal business hours and with minimal disruption to the business and operations of the Approved Certifier.

*Source: ABCB Approved Certifier Agreement*

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### 4.3 Stakeholder Engagement

The WMCS has a range of stakeholders – JAS-ANZ, WMCABs, manufacturers of materials and products, plumbing practitioners, testing laboratories, State and Territory administrators as well as the general public. These stakeholder groups seek information with the WaterMark administration about the following topics:

- Scheme coverage – stakeholders may seek the WaterMark administrator's advice about whether a particular product needs to be WaterMarked;
- WaterMark Technical Specifications (WMTS) and associated technical issues – stakeholders may seek the administrator's advice about whether a proposed product will be covered under an existing specification or if a new specification is needed;
- Reports about the compliance of products – rival manufacturers or WMCABs may question the validity of a WaterMark certification given to a specific material or product;
- Reports about the installation of non-WaterMarked products;
- Reports about product failure;
- Database user interface issues;
- Appropriate financial reporting; and

- General enquiries about the scheme (these may relate, for instance to the purpose of the scheme, the coverage of the scheme, and how the WMCS interacts with other schemes, such as the Water Efficiency Labelling and Standards [WELS] scheme).

The Allen Consulting Group study reported that

*‘Communication with stakeholders is a vital component of the WMCS. It helps ensure that the process of certifying new products works as efficiently as possible, provides a ready source of feedback about the effectiveness of the scheme, and builds confidence in the scheme.’*

The report noted past issues for stakeholders and the administration itself including under resourcing; the fielding of technical queries that the WMCABs should have been able to answer; complaints left unaddressed; time consuming processes of dealing with complaints via committees etc.

The report recommended that

*‘... in order to engage stakeholders effectively, the scheme needs an improved process for managing a range of types of enquiries.’*

This was reinforced by KPMG in their business case which recommended

*‘... clarification of stakeholder management arrangements, particularly in the management of technical enquiries, complaints and appeals processes.’*

The ABCB office has reviewed the enquiries, complaints, breach and termination process for licences and agreements and developed a flow chart of actions with a mirror record management system for the interim administration of the scheme. Figure outlines the enquiries, complaints, breach and termination process flow chart. In addition, where possible the WaterMark administration has drafted a number of generic replies to enquiries. These generic replies include:

- Scope of the WMCS – products included;
- Evaluation of products for inclusion within the WMCS; and
- Compliance enquiry – detail of WMPD.

As a proactive means to make improvements and appropriate re-alignment of scheme requirements, the ABCB office has published notices of direction, in accordance with clause 5(c) of the Rules for the WaterMark Certification Trade Marks. Figure 7 lists the notices that have been published on the ABCBs website, in most cases after a period of consultation with the WMCABs.

**Figure 7**

#### **WATERMARK NOTICES OF DIRECTION**

<b>Number</b>	<b>Notice of Direction</b>
<a href="#"><u>2013/D1.0</u></a>	WaterMark Certification Process
<a href="#"><u>2013/D2.0</u></a>	WaterMark Reference Documents
<a href="#"><u>2013/D3.0</u></a>	WaterMark Product Database and Licence Reference Numbering
<a href="#"><u>2013/D4.0</u></a>	Update of WaterMark Technical Specifications
<a href="#"><u>2013/D5.0</u></a>	Maintenance of Approved User List
<a href="#"><u>2013/D7.0</u></a>	Financial Arrangements
<a href="#"><u>2013/D10.0</u></a>	ATS 5200.033-2004 Spraying Apparatus/Dispensing Units with the Option of Chemical Additions - Hose Connected
<a href="#"><u>2013/D12.0</u></a>	WaterMark Risk Assessment Process

Source: ABCB website [www.abcb.gov.au](http://www.abcb.gov.au)

Present formal stakeholder engagement initiatives include:

- JAS-ANZ – meetings as required, with an ongoing commitment to regular meetings;
- WMCABs – an initial WMCAB Forum in July 2013, with a commitment to annual forums; and
- State & Territory Plumbing Administrations/industry representatives – 3 scheduled Plumbing Codes Committee meetings per annum.



Present informal stakeholder engagement initiatives include ad hoc discussion with:

- Plumbing practitioner and plumbing product industry associations regarding matters impacting their members;
- Testing laboratories and the testing laboratory accreditation body - National Association of Testing Authorities, Australia (NATA).

## 4.4 Website and Database Management

### 4.4.1 Website

The WaterMark pages on the ABCB website [www.abcb.gov.au](http://www.abcb.gov.au) provide information about the Scheme; how it works; the review; and contact details for the ABCB, JAS-ANZ and the WMCABs. It includes the List of Approved Users, the WaterMark Schedule of Specifications and List of Exempt Materials and Products. All scheme documents, such as the ACCC Scheme Rules, Agreements, a Scheme brochure, ABCB new and re-branded technical specifications, procedures, templates and notices can all be freely downloaded from the website. Links to Standards Australia branded documents have been maintained.

In readiness for the Scheme transfer, the ABCB developed new content for the webpages. All ABCB webpages are regularly reviewed as part of the QM system. The information contained in the List of Approved Users, Schedule of Specifications, List of Exempt Materials and Products, technical specifications and standards have not been fully revised post transfer and will require careful revision post review. All other documents contain new or updated material.

### 4.4.2 Database

The scope of the WMCS is extensive, covering thousands of plumbing and drainage materials and products within Australia. The State and Territory Regulators, WMCABs, manufacturers, plumbing practitioners, consumers and other stakeholders require access to an up-to-date list of all WaterMark Licenced materials and products to enable them to identify and/or verify if a particular product is certified under the scheme.

The ABCB currently maintains the WaterMark Product Database on its website [www.abcb.gov.au](http://www.abcb.gov.au)

The database allows users to search for certified products by the fields detailed in Figure .

In previous studies of the WMCS, the consensus from the consultations was that the previous administrations upkeep of the WMPD has been unsatisfactory – a conclusion that the previous administration agreed with. Stakeholders generally felt that the database was neither user-friendly nor kept up-to-date. The primary reasons for this were reported as:

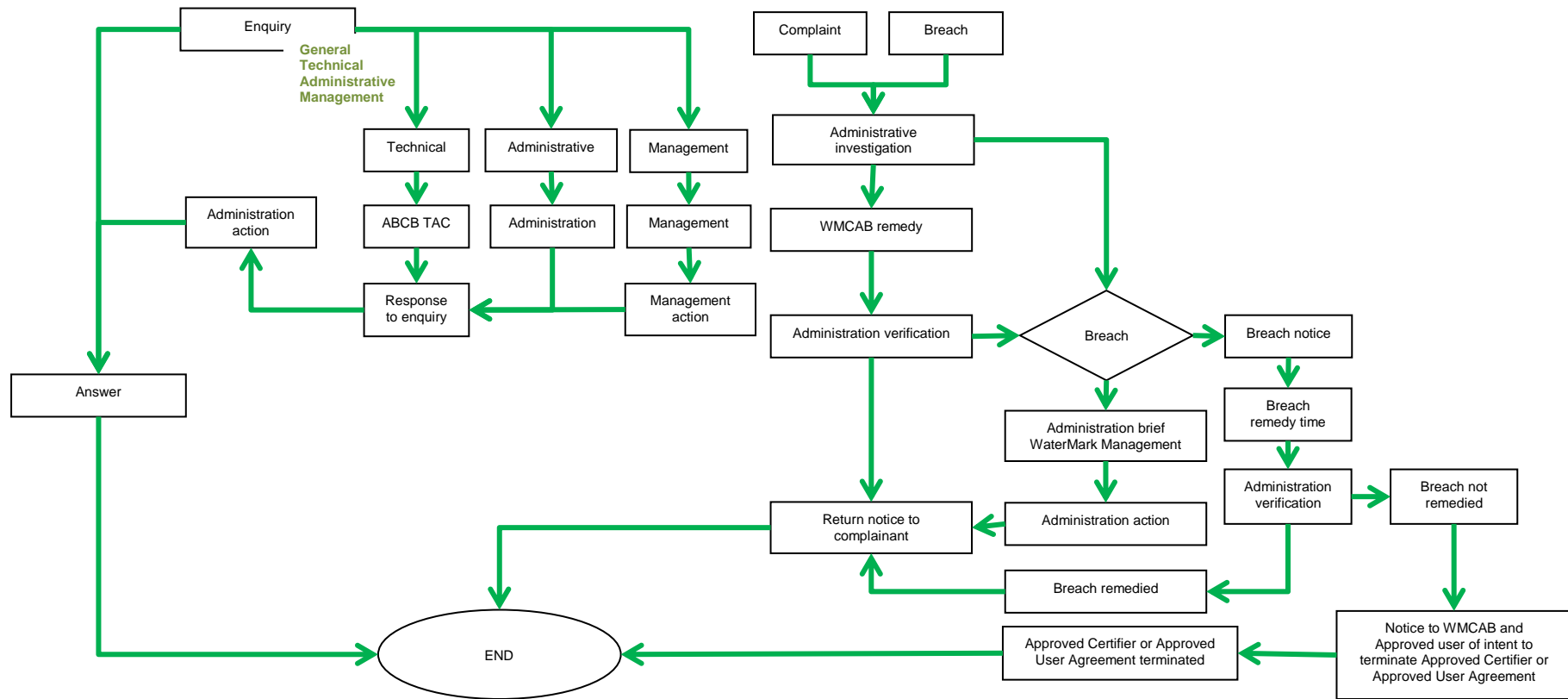
- A lack of focus and resourcing from the administration in wake of its decision to divest itself of the WMCS; and
- The inability of the previous administration and the Approved Certifiers to develop an effective process for transferring information to the WMPD in a timely and accurate manner.

At the time of Scheme transfer, the ABCB inspected the database and, despite its limitations, decided to retain, and support as best as possible, the existing database and defer its replacement. It was felt that after the Scheme review the ABCB would be better informed about what stakeholders and the administration required of the database. Whilst the database is sound, the information it contains is limited, and the search function and user interface are considered 'clunky' and outdated.

The ABCB has however made several interim changes to the WMPD which include limiting the file size of uploads (to better protect against uploaded viruses), removing the capacity for WMCABs to delete information and providing an interface to generate the xml upload file (data builder).

Figure 8

WATERMARK ENQUIRY, COMPLAINT, BREACH AND TERMINATION FLOW CHART



Source: ABCB

Figure 9

## WATERMARK PRODUCT DATABASE

### SEARCH WATERMARK DATABASE

#### IMPORTANT!

The database does not contain all certified products at this stage, due to the fact that we are still awaiting certified product information from the WaterMark Conformity Assessment Bodies.

#### Supplier or Model Details

Enter either details of the Model or the name of Supplier/Manufacturer. For a more accurate search result enter both.

Model Name or Model ID      Supplier Name or Manufacturer  
           

#### Standard

Dropdown contains the list of all Standards/Specifications under AS 5200.000 that apply under Watermark Level 1 & 2.

Australian Standards or Technical Specification  
Select a Standard     

#### Certificate of Conformity

You are required to enter at least 4 characters i.e. "WMKA0" will return WMKA00150 amongst others.

Watermark Certificate of Conformity Number  
     

#### Conformity Assessment Body

Display all certified products under a particular Conformity Assessment Body.

Conformity Assessment Body  
Select a Conformity Assessment Body     

#### Product Attribute

If you do not have any of the above product information try searching for a particular attribute of the product. You are required to enter at least 3 characters (i.e. "Boi" with the category "Water Heater" will return a number of boiling water heaters).

Product Attribute      Product Category  
      Select a Product Category     

Source: ABCB website [www.abcb.gov.au](http://www.abcb.gov.au)

The WaterMark administration team, rather than the IT team (who have limited understanding of the Scheme specifics), review the uploaded licence detail against the specific information requirements prior to authorising it for inclusion on the database. Experience in system coding is necessary to assist the WMCABs with uploads should errors occur. The reception from the WMCABs to date has been positive.

Within the first six months of the transfer, 60% of all WMCABs were updating their licence details on a regular basis resulting in an increased level of accuracy of the WMPD. After nine months, 70% of the WMCABs were updating their licence detail on a regular basis. It is important to note that 20% of the WMCABs do not have any licence detail to upload. Currently only one of WMCABs has not updated their licence detail on the WMPD.

The WaterMark Administering Body has issued a direction to all WMCABs on the requirements to upload licence detail for consistency and to improve the accuracy and detail contained on the WMPD.

The WMPD is currently being used as a repository for basic information regarding authorised WaterMark materials and products. The meta fields of information are considered sufficient to capture the required information. Criticism arises from previous studies as well as current forums in the capacity to search for materials and products. The ABCB has identified that the following search functions do not provide results:

- Supplier or model details, and
- Product Attribute.

Errors with the above search functions are attributed to the WMCAB failure to put sufficient or accurate information within the material and product fields; often basic spelling errors have limited the capacity for correct searching. The other search criteria of specifications, Licence numbers and WMCABs provide high level results which require further manual searching with no option for refining the search. In some cases the search is inhibited once again by the accuracy of information uploaded by the WMCAB.

When the same entry for the brand name, model name and model identification is repeated or generic information is entered in the database there is insufficient information for stakeholders to appropriately search for accurate or specific information regarding a particular material or product.

Further to the search function, the WMPD does not provide any additional value add to the administrative function or scheme as a whole. The WMPD could include several automatic functions such as:

- Automatic removal of expired licences within the search function
- Upload warnings of duplicated information
- Capturing and reporting of licence financial information
- Listing of Approved Users

In addition, rather than CABs issuing licence numbers, automatic generation and issue of licence number and inclusion of information on the database when the applicant has forwarded the correct information and paid for the licence would achieve administrative efficiencies. Likewise for WMCAB acceptance and re-accreditation in scheme, the payment of fees could trigger the system to issue an Approved Certifier number.

A 'mobile friendly' version of the database for tablets and smartphones would also improve the accessibility of information.

#### 4.5 Promotion of the Scheme

The Allen Consulting Group study reported that

*'The success of the WMCS is dependent on the extent to which manufacturers, plumbing practitioners as well as members of the general public are aware of and support the scheme, its objectives and requirements.'*

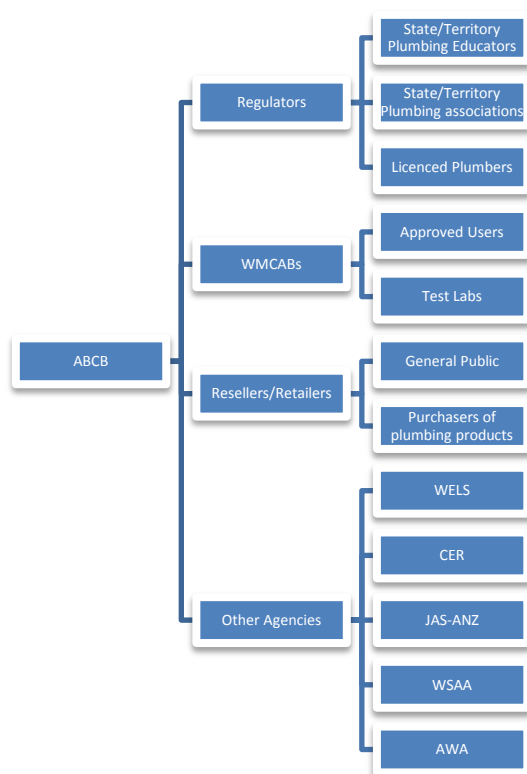
The study identified the WaterMark website and engagement with training providers as two means of promoting the scheme.

Promotion of the WMCS by the administrator has historically been limited. The State and Territory plumbing regulators however also have a responsibility to promote the WMCS and its role in the plumbing regulatory framework, as they license plumbing practitioners in their jurisdictions and require the installation of WaterMarked products as a condition of the plumbing license.

The current management and administration of the WMCS has generated limited promotion of the WMCS during the interim and review phase. The WaterMark administration has identified a number of key lines of communication for general promotion as well as dissemination of information to industry through the coordinated network as detailed in Figure 1. As noted previously, no formal protocol of communication has been established other than posting information on the WaterMark website.

Figure 1

## COMMUNICATION LINKS WITHIN THE WMCS



Source: ABCB office

The ABCB is responsible for the promotion of the NCC, including its annual amendments, and has a well-established strategy for promotion, awareness and education, including a suite of events and resources, to keep industry stakeholders informed. These include:

- Annual NCC information seminars – delivered to all capital cities;
- Biennial national conference, including plenary and workshop sessions;
- Awareness webcasts addressing topical matters;
- Education awareness resource kits to assist practitioners with training needs;
- Non-regulatory handbooks – typically addressing topics considered unsuitable for regulation in the NCC;
- ABCB standards and publications; and
- The Australian Building Regulation Bulletin – raising awareness of technical matters.

The ABCB is not a registered training organisation (RTO); its role is in the development of resources that can be utilised by RTOs, industry associations and regulators in their education and awareness activities.

Increased inclusion of PCA and WaterMark related content will provide plumbing industry stakeholders with opportunities to keep informed. It should be noted however, this strategy has evolved over time and been mainly targeted at stakeholders of the BCA (builders, building designers, and building certifiers), and to date engagement with plumbing industry practitioners has been limited. In the plumbing world there are designers and installers, and inspectors, but no equivalent for the building certifier, who is the primary target for dissemination of BCA related content.

The challenge for the ABCB is to work with the plumbing regulators, industry associations and education providers to determine the most effective means of providing education and awareness opportunities for stakeholders of the PCA and WMCS, which may vary the current ABCB strategy.

Initial discussions with the State and Territory regulators and industry members at the ABCB Plumbing Code Planning Day (in July 2013) suggest some jurisdictions have well established regular training and information events, often in conjunction with industry associations.

## 4.6 Financial Requirements

### 4.6.1 Introduction

In agreeing to transfer the Scheme to the ABCB, the nine governments expressed their expectation that the Scheme would be fully cost recoverable.

The WaterMark management and administration receives funding for the Scheme through:

- initial application and annual renewal fees paid by the WMCABs; and
- royalty payments associated with the WMCABs charges for services associated with the licencing of plumbing and drainage materials and products that have been WaterMarked.

The requirement of the Approved Certifiers to pay fees and royalties to the ABCB is detailed within the Rules for the WaterMark Certification Trade Marks (see Figure 11) and the Approved User Agreement (see Figure 12).

Figure 11

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#### CLAUSE 3 RULES FOR THE WATERMARK CERTIFICATION TRADE MARKS

**3. Approved Certifiers**

(a)(ii) is able to pay all fees and royalties to ABCB by the due dates;

Source: ABCB

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Figure 12

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#### CLAUSE 4.1 APPROVED CERTIFIER AGREEMENT

**4.1. Requirements of an Approved Certifier**

(b) is able to pay all fees and royalties by the time stipulated in clause 6;

**6.2 Royalty fee**

(b) The royalty payment referred to in clause 6.2(a) is payable within 30 days of the end of each quarter of the year for all money due or deemed to be due to the Approved Certifier (whether or not such money has been received from the Approved Users) in that quarter.

Source: ABCB

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Schedule 2 of the Approved Certifier Agreement details the licence and royalty fees associated with the WMCS (see Figure 13).

Figure 2

## SCHEDULE 2 APPROVED CERTIFIER AGREEMENT

<p><b>1. Fees</b></p> <p>The Approved Certifier must pay ABCB:</p> <p>(a) an initial application fee of [\$1,500] plus GST payable immediately on the Commencement Date; and</p> <p>(b) an annual fee of [\$2,000] plus GST, payable immediately on the Commencement Date and thereafter, payable yearly in advance on each anniversary of the Commencement Date.</p> <p><b>2 Royalty fee</b></p> <p>The Approved Certifier must pay to ABCB a royalty fee of [4%] of all monies due to deemed to be due to it in connection with the WaterMark (including from granting licences to Approved Users to use the Watermarks and services performed by it in relation to the granting of licences for the WaterMarks). If no fee is charged by the Approved Certifier for the licence of, or services performed for, the WaterMark(s) or if one fee is charged for the licence of, or services performed for, the WaterMark(s) and other marks or services provided by the Approved Certifier, the Approve Certifier, the Approved Certifier will be deemed to have monies due to it in connection with the WaterMark(s) that is equivalent to a reasonable proportion of the fee charged or if no fee is charged, a reasonable amount that the Approved Certifier could have charged for such licence or service.</p>
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Source: ABCB

The previous administration relied on the WMCABs to submit licence activity reports with calculation of the monies owed (4%) on the cost of the licence itself and to remit the royalties directly. Where a WMCAB did not submit licence details or details of monies owed to the administration, it appears no further action was taken. In addition, there was inconsistency between WMCABs as to whether the WMCABs would exclude travel or inspection costs from the calculation of monies owed citing that it is only royalties on the direct fees for the licence that are to be paid.

Royalties were received on an ad hoc basis – with some WMCABs choosing to remit monthly, quarterly, annually or from time to time (perhaps as income was received).

This method for the receipt of royalties to the WaterMark Administration is problematic as it is open to interpretation, is based on honesty and because there is no effective means of verification. In addition, it appears the previous administration did not make use of the audit process to aid consistency and compliance.

WMCABs have alluded to the fact that increase competition between CABs is driving down the costs for certification services, thus reducing the revenue stream with which the ABCB can operate the Scheme.

Regardless, the royalty model as presently administered provides neither a reliable nor sustainable source of income.

### 4.6.2 Interim Measures

To assist the WMCABs understanding of and compliance with the financial requirements of the WMCS, the ABCB office issued Notice of Direction 2013/7.0 in June 2013. The notice requires WMCABS to:

- Submit an activity statement in standard format within 14 days of the end of each quarter; and
- Pay all ABCB invoices within 30 days.

The ABCB will:

- Issue an invoice to renew Approved Certifier Agreements 4 weeks prior to the end of the term (annually/quarterly); and
- Issue an invoice for the royalties due within 7 days of receipt of the quarterly activity statement.

The notice of direction has improved the perceived previous reporting and payment of royalties of WaterMark licences. The ABCB combined financial quarter 3 and 4 of the 2012/13 year into a single submission. The royalty reporting was provided within 14 days and payments were made 30 days after the period. The monies received totalled \$73,439.40 for financial quarter 3 and 4 of the 2012/13 year and \$55,887.30 for financial quarter 1 of the 2013/14. Extrapolating from this predicts that annual monies received from royalties would be in the order of \$173,000. With 11 WMCABs the annual renewal fees will total \$22,000 – thus the total annual revenue will be \$195,000.

The WaterMark Product Database does not provide a means for verifying WMCAB activity and/or revenue attributable to the Scheme.

#### **4.6.3 WMCAB Audit**

The ABCB has engaged PricewaterhouseCoopers to undertake a financial and technical audit of the WMCABs to ascertain, amongst other things, the accuracy of, and consistency between, WMCAB royalty calculations. The outcomes from this audit will inform the discussion on royalties and revenue streams.

#### **4.6.4 Cost Recovery Options**

The KPMG business case detailed that an annual expenditure for the WMCS is in the order of \$590,000. KPMG estimated the annual revenue of the scheme to be approximately \$90,000 per annum. Despite actual annual revenue doubling the estimated revenue, with annual expenditure in line with the estimates, there remains a significant shortfall.

The Scheme is presently 33% cost recoverable, with a 300% increase in revenue required to make the Scheme 100% cost recoverable.

Possible options for achieving full cost recovery for the Scheme are as follows:

1. The KPMG business case offered a solution to improve the annual revenue of the scheme. It was proposed to increase the royalty from 4% to 12.5%, retain the annual fee for CAB registration of \$2000 and place a product registration fee of \$20 per product.

KPMG predicted that this would result in annual revenue of \$605,044, providing a simple adjustment to the existing arrangements while not imposing a prohibitive fixed cost.

2. An alternative option is to have a set registration fee similar to that of JAS-ANZ. With the eleven WMCABs and the required revenue being \$590,000 the annual registration fee would need to be in the order of \$55,000. It is currently understood that JAS-ANZ annual accreditation fees are in the order of \$30,000. Therefore the registration costs of the WMCABs would be in the order of \$85,000. It is considered that this option only favours the larger WMCABs and is inhibitive and not reflective of the scope of work amongst all WMCABs or the WaterMark Administration duties to each of the WMCABs.
3. Following the ABCB forums and discussion within the WaterMark management and administration, another option is to abandon the royalty payment and have a fixed rate per licence. Currently there are approximately 1,500 licences within the WMPD. In order to achieve the revenue of \$590,000 the fixed fee per licence would need to be in the order of \$400. This could be scaled between licences depending on the number of products contained within the licence as detailed below:
  - 0-50 products per licence - \$100
  - 51-200 products per licence \$200
  - 201-500 products per licence \$400
  - 500+ products per licence \$500

The above scaling may result in WMCABs limiting the number of products disclosed on a licence. Preliminary examination of the WMPD details that there are approximately 45,000 products within the WMCS. If a flat product fee of at least \$20 per product per annum was levied annual revenue of approximately \$600,000 could be maintained (noting: allowance has been made for the actual numbers of products to reduce in response to a levy being set on products).



The latter options above rely on 'product' being clearly defined, and on appropriate pro-rata rates being established for 'systems' of products. An improved database which facilitates validation of fees owing could ensure all fees due are identified. In addition, aligning issuance of licences to use the WaterMark (and annual renewal on the anniversary of the licence) with an initial fee (and annual fee upon licence renewal), would mean a simple automated system for fee calculation and invoice generation could be established.

Costs for undertaking the annual audit of WMCABs could be levied directly at the WMCABs and recovered through their annual Approved Certifier fees. This would mean increasing the annual fee from \$2000 to \$10,000-12,000, which might naturally limit the numbers of WMCABs operating at any one time to those for whom participation in the Scheme remains financially viable.

Costs for the development of WMTS could be shared by all applicants/Approved Users in the Scheme (via levying on the annual product licencing fee), rather than being wholly imposed on the original proponent. The current model whereby the first proponent to bring a new or innovative product to the market bears all the costs (and time delay) of developing a technical specification that, once finalised and published, can be freely utilised by all subsequent applicants bringing similar products to market is not only unfair, it has the potential to stifle innovation. Applicants bringing products to market that are already listed on the Schedule of Specifications likewise have the advantage of not incurring any costs for the development of the standards that stipulate the certification requirements for their product.

Note: the majority of manufacturer costs for testing, plus timeframes for testing are not direct impacts of the scheme as they would most likely be necessary to bring a product to market in Australia regardless of the need to gain certification. Compared with other countries – timeframes of up to 6 months were not considered unreasonable by some manufacturers. Stakeholders required to develop technical specifications however, felt the process, protracted times frames and costs incurred were unreasonable.

#### 4.7 Issues

- There is a lack of comprehensive established internal and external operational procedures and supporting documentation (such as processes, check lists, standard forms, form letters, etc) to ensure the efficient, consistent, transparent and accountable operation of the Scheme.
- The agreements detail certification provisions that do not align to the PCA
- The agreements are not understood by all WMCABs or Approved Users.
- Several agreements are engaged on a quarterly basis whilst others are yearly.
- Present stakeholder engagement initiatives are piecemeal with a focus on phone and email enquiries, communication with the WMCABs and formal updates to the State and Territory regulators, and the Board.
- The database contains basic details and functions which do not provide value add to the WaterMark management and administration. Nor does it provide a means for validating amounts due to the Scheme.
- Not all database search functions work or provide sufficient information to stakeholders.
- There is no formal strategy for the promotion of the Scheme – which is a joint responsibility with the States and Territories.
- The current funding arrangement through royalties (with/without effective means of validation) does not provide a sufficient, reliable nor sustainable revenue basis for the scheme.
- The number of WMCABs has increased the level of competition resulting in reduced fee costs to certify products. This can impact on the present revenue base of the Scheme and potentially on the quality of work undertaken in the certification of the products.
- A new fee structure with greater reliability and security for the management and administrative function needs to be established, subject to the findings of the financial audit of the WMCABs. As the Scheme appears to be 33% cost recoverable, a 300% increase in revenue needs to be effected.

- The new funding arrangement is considered a high priority and can be implemented as an independent work plan item as it is unlikely to significantly impact on other areas of scheme reform. However, the database has the potential to enable verification of amounts due, and automating the generation of invoices for fees and charges relating to the Scheme.

## 4.8 Recommendations

The following recommendations are made to address the above issues:

- It is recommended that a comprehensive suite of internal and external operational procedures and supporting documentation be developed for inclusion in a new Product Certification branch of the ABCB Quality Management System (QMS).
- It is recommended that the Approved Certifier Agreement be reviewed and simplified in line with the detail of ISO/IEC Guide 28 for licensing agreements. Functions and requirements of the WMCABs is recommended to be detailed within a single consolidated set of rules where the licensing agreement references the requirement for the WMCAB to comply with the details of the consolidated rules.
- It is recommended that stakeholder communication strategies be developed for engaging effectively with key stakeholders.
- It is recommended that the WaterMark Administration generate an internal protocol of stakeholder engagement including handling of enquiries and complaints where supporting information be publically available to provide self-guided assistance on common enquiries within the ABCB website which may include details of frequently asked questions or information brochures.
- It is recommended that a review of the WMPD function and capacity to value add to the WMCS where the WMPD may automate several administration functions.
- It is recommended that the WMPD search function be reflective of the needs of the WaterMark Administration, State and Territory administrations, practitioners and the general public.
- It is recommended that a dedicated marketing and education strategy be generated, in conjunction with the State and Territory Regulators, to promote the scheme; and that protocols be established for disseminating information to key stakeholders and the general public.
- It is recommended that a new cost recoverable revenue model be implemented promptly to improve on the current cost recovery status; and that the model be supported by value add features in database and IT systems to facilitate the validation of monies due and the automatic generation of invoices.

# CHAPTER 5.

## SPECIFICATION DEVELOPMENT

### 5.1 Introduction

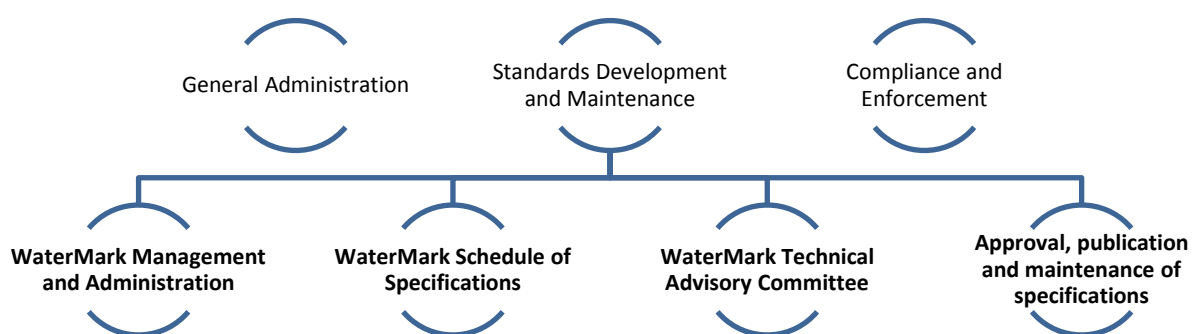
This chapter examines the process for listing specifications on the WaterMark Schedule of Specifications (WMSS) and the WaterMark Technical Specification (WMTS) development process.

Specifications are critical for a product certification scheme as they set the criteria for which the materials or products are tested to. The value of the certification is highly reliant on the credibility of the specifications that the materials or products are benchmarked to and set a point which addresses risk of material or product quality.

There are four key aspects to specification development and maintenance in the WMCS. They are WaterMark Management and Administration, the WMSS, the WaterMark Technical Advisory Committee (WMTAC) and the process for approval, publication and maintenance of specifications, as detailed in Figure .

Figure 14

#### ELEMENTS OF SPECIFICATION DEVELOPMENT AND MAINTENANCE



Source: ABCB

### 5.2 WaterMark Management and Administration

The WaterMark management is responsible for developing the rules and procedures for administrative control on the development, maintenance, approval and publication of specifications.

The following reference documents developed by the WaterMark management outline the rules and procedures for administrative control on the development, maintenance, approval and publication of specifications:

- Plumbing Code of Australia – National Construction Code – Volume Three
- SAA Miscellaneous publication MP78 – Manual for the assessment of risks of plumbing products
- Procedures for Developing Technical Specifications 2013.

The process of standards development is initially set out in the National Construction Code – Volume Three – Plumbing Code of Australia Provision A2.1 (c) and (e) which details product certification and authorisation as well as any new or innovative material or product must be assessed, certified and authorised with the procedures set out in Part G1 – Materials and Products Certification and Authorisation. This provision is detailed in Figure .

Materials and products that have previously been evaluated in accordance with Part G1 of the PCA are detailed on the WaterMark Schedule of Specifications or List of Exempt Materials and Products. Following the original risk assessment in accordance MP 78, where a consequence score greater than 3 is established, the material or product requires mandatory certification and the product is to be listed on the WMSS. Should the consequence score be less than 3, the material or product does not require WaterMark certification, where this occurs the material or product is to be listed on the List of Exempt Materials and Products.

Figure 15

NCC – VOLUME 3 - PLUMBING CODE OF AUSTRALIA PROVISION A2.1

**GENERAL PROVISIONS**

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PART A2
ACCEPTANCE OF DESIGN AND CONSTRUCTION

**A2.1 Suitability of materials and products**

- (a) Every part of a *plumbing* or *drainage* installation must be constructed in an appropriate manner to achieve the requirements of the PCA, using materials and *products* that are fit for the purpose for which they are intended.
- (b) Materials or *products* listed in [Table A2.1](#) which are used in *plumbing* or *drainage* installations must be certified and authorised.
- (c) *Product* certification and authorisation must comply with the procedures set out in [Part G1](#).
- (d) Materials and *products* intended for use in contact with *drinking water* must comply with AS/NZS 4020.
- (e) Any new or innovative material or *product* must be assessed, certified and authorised, if required, in accordance with [Part G1](#) prior to their use in a *plumbing* or *drainage* installation.
- (f) A material or *product* exempted from certification under the PCA is authorised for use in a *plumbing* and *drainage* installation if—
  - (i) it is certified as complying with the appropriate Australian Standard(s); or
  - (ii) if an appropriate Australian Standard does not exist, other evidence of suitability in accordance with [A2.2](#).

*NT A2.1(g)*

- (g) A material or *product* used in a fire-fighting water service is authorised for use if it is certified by a recognised body as complying with the relevant Australian Standard(s) for the specific application.

*NT A2.1(h)*

- (h) A material or *product* used in a stormwater installation is authorised for use if it is certified by a recognised body as complying with Section 2 of AS/NZS 3500.3 in accordance with [A2.2](#).

Source: ABCB

### 5.3 WaterMark Schedule of Specifications

The WaterMark Schedule of Specifications lists the pre-approved specifications and Standards to which material and products must be evaluated. Materials and products that do not have a referenced specification listed on the WaterMark Schedule of Specifications are required to be evaluated by a WMCAB and if needed, have a WaterMark Technical Specification or other approved standard reviewed by the ABCB Office, the WaterMark Technical Advisory Committee and the State and Territory Plumbing Control Administrations for inclusion on the Schedule of Specifications. The WMSS achieves recognition through two core references within the PCA. The first is note 1 of Table A2.1 which references a comprehensive list of product types and applications, specifications and exemptions in AS 5200.000. The second is within Part G1 of the PCA Provision G1.5.3 and G1.5.3.3 which refers to specifications listed in AS 5200.000. These references are detailed in Figure , Figure and Figure .

Figure 16

NCC – VOLUME 3 - PLUMBING CODE OF AUSTRALIA TABLE A2.1

NOTES:	
1.	For a comprehensive list of <i>product</i> types and applications, <i>specifications</i> and exemptions, see AS 5200.000.
2.	All materials in contact with <i>drinking water</i> must comply with AS/NZS 4020.
3.	Where a <i>product</i> category and the <i>product</i> type have different minimum certification levels, the certification level of the <i>product</i> type is also nominated.
4.	For <i>products</i> not listed in Table A2.1 or AS 5200.000, the minimum certification level shall be determined in accordance with MP 78 and Part G1.
5.	For <i>products</i> which have been authorised but which are not listed, refer to the authority having jurisdiction.

Source: ABCB

Figure 17

NCC – VOLUME 3 - PLUMBING CODE OF AUSTRALIA PROVISION G1.5.3

G1.5.3 The process
The certification process is outlined in Figure G1.5.3.
Certification of a <i>plumbing</i> or <i>drainage product</i> or material must be conducted by a <i>WaterMark Conformity Assessment Body (WMCAB)</i> .
If the material or <i>product</i> attributes coincide with those of a material or <i>product</i> listed in Table A2.1, certification must be carried out in accordance with G.1.5.4 and the relevant <i>specification</i> in AS 5200.000.

Source: ABCB

Figure 18

NCC – VOLUME 3 - PLUMBING CODE OF AUSTRALIA PROVISION G1.5.3.3

G1.5.3.3 Consequence score of 3-4 (Certification Level 2)
If the outcome of an assessment in accordance with MP 78 is a consequence score of 3 – 4 and there is no <i>specification</i> in place the <i>WMCAB</i> is to submit for approval:
(a) to the <i>administering body</i> , a <i>specification</i> that accurately describes the physical and functional attributes of the material or <i>product</i> and relevant tests related to materials and function; and
(b) to the <i>administering body</i> , proposed installation details related to the <i>product</i> .
The documentation required in (a) and (b) above is to be in a generic <i>product</i> Standard format, called an Australian Technical Specification (ATS).
Note: The <i>administering body</i> may request amendments to the <i>specification</i> and/or proposed installation details before accepting approval for the <i>specification</i> .
Certification of the material or <i>product</i> must be in accordance with G1.5.4.2 and is to be based on the approved <i>specification</i> received from the <i>administering body</i> .
Certification based on a <i>specification</i> listed in AS 5200.000 or an approved <i>specification</i> is valid for a period not exceeding 2 years. The <i>WMCAB</i> working with and on behalf of the applicant is to actively participate to convert the approved <i>specification</i> into an Australian Standard within that period. Failing to do so will result in the certification being withdrawn. In such an event, the <i>WMCAB</i> is to remove the material or <i>product</i> from the <i>WaterMark Product Database</i> . An extension to the certification period may only be granted under extenuating circumstances.

Source: ABCB

The WMSS was originally contained within Australian Standards 5200.000-2006 within section 5. The WMSS is a dynamic list that should be varied over time as new or superseded specifications are included or removed from time to time. Under the previous administration, the WMSS was revised in 2006 from the 2005 version when Australian Standard 5200.000 was updated. Since 2006, the WMSS has not been updated.

Following transfer of the WMCS to the ABCB, the ABCB office re-branded AS 5200.000 AS Procedures for Certification of Plumbing and Drainage Products and removed the WMSS and List of Exempt Products from the document. These two documents are now freely available on the ABCB website and following appropriate review and approval, the lists are updated on a needs basis to appropriately reflect the requirements of the WMCS.

#### **5.4 WaterMark Technical Advisory Committee**

In the past, SA technical committee WS-031 was established to support the ongoing development and maintenance of the Scheme standards and provide technical support as required to the Scheme. It comprised some members from the NPRF and representatives from industry and regulatory bodies. Whilst it provided sound advice, the committee was poorly run, and advice was sometimes dismissed by the NPRF who sought additional technical advice from within individual jurisdictions. As NPRF had the final say on the acceptance of the technical specification for listing and publication, the process was often unnecessarily protracted and inefficient, stalling over installation issues that could have been referred to the WS-014 committee who support the ongoing development of AS 3500 suite of plumbing design standards. WS-031 was disbanded on transfer of the Scheme to the ABCB.

The ABCB is in the process of establishing an equivalent committee, the WaterMark Technical Advisory Committee (WMTAC) to assess applications for the inclusion of specification on the WMSS; to assess new WMTS; and to provide other technical advice as required from time to time.

The ABCB office seeks to maintain the function of the technical committee and refine the communication and application process for a greater level of transparency and consistency, and to improve timeframes.

At the time of review, the WMTAC had not been established pending finalisation of contractual agreements. The Terms of Reference for the WMTAC, as approved by the Plumbing Codes Committee, may be found at Appendix F.

#### **5.5 Approval, Publication and Maintenance of Specifications**

The process and means of specification development within the WMCS was originally detailed within AS 5200.000-2006, which has not been a direct reference through legislation since 2011. The process of approval and publication of specifications was detailed within Appendix C of AS 5200.000-2006 and defined as 'informative'. This document has been rebranded by the ABCB as Procedures for Certification of Plumbing and Drainage Products.

A 'normative' appendix is an integral part of the Standard, whereas an 'informative' appendix is for information and guidance only. The previous administration did not enforce Appendix C of AS 5200.000-2006 as it is categorised as 'informative'. This resulted in piecemeal applications for new specifications being developed as well as existing specifications being considered for inclusion within the WMCS. (Refer Figure 21).

Two enforceable reference documents remain in place following the removal of AS 5200.000 in 2011. These are the PCA and the Approved Certifier Agreement. The PCA details the requirements for the development of specifications by the WMCAB where no specification is in place within Provision G1.5.3.3 which is for materials and products that achieve a consequence score of 3-4 (i.e. Level 2). There is no subsequent detail where no specification is in place within Provision G1.5.3.4 where a consequence score greater than 4 (i.e. Level 1) is achieved. Provision G1.5.3.3 of the PCA is detailed in Figure .

Figure 19

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### NCC – VOLUME 3 - PLUMBING CODE OF AUSTRALIA PROVISION G1.5.3.3

G1.5.3.3 Consequence score of 3-4 (Certification Level 2)

If the outcome of an assessment in accordance with MP 78 is a consequence score of 3 – 4 and there is no *specification* in place the *WMCAB* is to submit for approval:

- (a) to the *administering body*, a *specification* that accurately describes the physical and functional attributes of the material or *product* and relevant tests related to materials and function; and
- (b) to the *administering body*, proposed installation details related to the *product*.

The documentation required in (a) and (b) above is to be in a generic *product* Standard format, called an Australian Technical Specification (ATS).

Note: The *administering body* may request amendments to the *specification* and/or proposed installation details before accepting approval for the *specification*.

Source: ABCB

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Within the ACA, the requirement for the WMCAB is to grant licences against applicable specifications and that they have their own process for product certification. This is detailed in clause 4.3 of the ACA which is provided in Figure .

Figure 20

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### CLAUSE 4.3 – APPROVED CERTIFIER AGREEMENT

4.3 Own Processes

The Approved Certifier must have its own:

- (a) review procedures for the settlement of disputes that does not involve ABCB or any person that may be stipulated by ABCB from time to time;
- (b) procedures for product certification; and
- (c) policy that deals with the non-conformity and/or recall of Plumbing Products on which a WaterMark has been applied by its Approved User (collectively "**Processes**"),

which must be provided to ABCB on request and the Approved Certifier must make such amendments to these Processes as may be reasonably requested in writing by ABCB.

Source: ABCB

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## APPENDIX C – PROCEDURE FOR DEVELOPING TECHNICAL SPECIFICATIONS

### C.4 DEVELOPMENT OF A TECHNICAL SPECIFICATION

Certification of products that require certification, but are not listed on the WaterMark Schedule of Specifications as referenced, depends on the development of a WaterMark Technical Specification that is reviewed and, if found acceptable, is published as a WaterMark Technical Specification (WMTS). This WMTS is used to certify the product in accordance with the WMCS. Once certified, the product is authorised for installation in accordance with AS/NZS 3500.

In developing a WaterMark Technical Specification for submission to the ABCB Office the following points should be addressed:

- (a) Justification for development of a new WMTS supported by reasons why the product is not covered by an existing Standard or WMTS.
- (b) A risk assessment carried out in accordance with MP 78 Manual for the Assessment of Risks of Plumbing Products.
- (c) Documentation search of existing Australian or internationally recognised Standards (ISO, EN, ASTM etc.) that may be adopted or used as the basis of Specification development.
- (d) Test reports, field trial data and/or performance history.
- (e) Existing approvals/certification of the product.
- (f) Installation and maintenance instructions and requirements and whether AS/NZS 3500 adequately addresses these for the product.

*Source: ABCB*

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With the fragmented nature of the above reference documents, a clear, consistent and enforceable means of the development, approval and maintenance of specifications is needed.

As an interim step, the ABCB office generated Notice of Direction 2013/1.0 which graphically details the process of material and product certification. The processes include the preliminary evaluation, standard certification and certification for new and innovative materials and products. The direction:

1. Provides enforcement of appendix C of procedure for developing technical specifications by WMCABs including the required information for consideration of new specifications including a structured specification template; and
2. Outlines the provisions for preliminary evaluation for the certification, development and consideration of new specifications.

The ABCB has clarified the requirements for a preliminary evaluation by the WMCAB across the various reference documents. Critical considerations include:

1. Is the material or product part of a plumbing or drainage installation?
2. Has the material or product been previously certified?
3. Is there a reference specification for the material or product listed on the schedule of specifications?
4. Are there installation provisions for the material or product?

Following this preliminary evaluation, the path of licencing a product should be clear. One of the following outcomes should be achieved:

1. Material or product to be included within the WMCS giving previous history and relevant approved specifications on the WMSS;
  - a. Test,
  - b. Certify, and
  - c. Licence the material or product.
2. Material or product to be included within the WMCS but no currently listed specification exists;
  - a. Make application to WaterMark Administration to include an unlisted or updated listed specification on the WMSS.
  - b. If updated specification approved;



- i. Test,
    - ii. Certify, and
    - iii. Licence the material or product.
3. Material or product to be included within the WMCS but no specification exists;
  - a. Develop technical specification for approval and inclusion within the WMSS;
  - b. If approved;
    - i. Test,
    - ii. Certify, and
    - iii. Licence the material or product.

The ABCB office interim guide on a preliminary evaluation is an initial step for assisting in the determination of material and product licencing.

The incorporation of new and innovative material and products occurs through the inclusion of the relevant specification onto the WMSS. Where a new specification is required to be considered within the WMCS, a clear and uniform review is required by the WaterMark Administration with support from the WMTAC following application by the WMCAB.

The WaterMark administration has clarified the process and steps for consideration of new and innovative specifications for materials and products as outlined in Appendix D.

## 5.6 Development of New WaterMark Technical Specifications

The development of new WMTS for, typically new and innovative, materials and products that have no specification to be evaluated against is the source of much frustration for manufacturers/suppliers, WMCABs and the Administration body. This is due to:

1. Poor control and administration of the process by the Administration body; and
2. Inadequate or incomplete drafting of the technical specification by the WMCAB/manufacturer; and
3. Inconsistent, circular, protracted decision making by the Management body;
4. High costs to initiating manufacturer for technical specification (delays in getting product to market, cost of drafting, input of IP);
5. Perceived market advantage of initiating manufacturer (can tailor specification to individual product, making evaluation of subsequent products difficult);
6. Perceived market advantage of subsequent manufacturers (having avoided costs of specification, can have their product evaluated promptly against a listed specification).

The process has been time consuming, resource intensive and costly for all parties involved.

The present model involves WMCAB developing the specification on behalf of and in consultation with the manufacturer for approval by the Management body via Technical Panel peer review. Alternative models for the development and approval should be considered. Issues such as IP ownership, who pays and who has the opportunity to contribute would require resolution. Possible options include:

1. Present model with greater administrative control of review and acceptance processes, including improved communication, transparency, consistency and timeliness; with greater emphasis on the WMCAB competencies for drafting specifications.
2. Develop all specifications in house – using an expert specification drafter, in consultation with parties interested or with expertise in the product to ensure impartial/generic specifications, streamlined timeframes and capacity to spread costs across the Scheme or direct to proponent.
3. Refer proponents to external standards writing body (such as Standards Australia) to develop the specification and have referenced as per standard NCC referenced document procedure – ie nil ABCB involvement.

4. Appoint expert specification drafter (via tender process) for set term for direct engagement by manufacturer to ensure competencies are brought to the process – only peer review and approvals would be undertaken in house.
5. Enable a performance path for products and materials in PCA Part A (as for building products) that eliminates the need for a specification to be developed and is time and cost effective.

## 5.7 Issues

- Industry practitioners are required to purchase the PCA to obtain the legislative requirements for plumbing materials and product certification.
- The process of material and product certification is fragmented between many reference documents with inconsistencies between each one.
- The process for the use of existing specifications is to be reviewed to provide greater clarity on the most appropriate specification with review of common categories of protection or testing. This should be undertaken in context of plumbing product testing and consultation with NATA or associated test labs.
- A clear and transparent process for the identification of the need and justification for the development of new WMTS is required. Currently the various reference documents being the ACA, the PCA and procedures for developing technical specifications provide different detail on what is required.
- A clear, transparent and independent process for the inclusion and removal of specifications from the WMSS is required.

## 5.8 Recommendations

The following recommendations are made to address the above issues:

- It is recommended that a single consolidated set of rules be developed which is referenced by but independent of the PCA and made freely available on the ABCB website.
- It is recommended that interim measures be taken by the ABCB office to structure the certification process for incorporation within the consolidated rules.
- It is recommended that the procedures for certification as outlined in Appendix D be reviewed in line with all other elements of the rules for material and product certification to create a single reference document.
- The single WMCS reference document is to provide clear and uniform direction on the documentation required for all stages of the certification process by all relevant stakeholders.
- The process for developing a new technical specifications be reviewed to ensure high quality specifications can be developed in a timely, cost effective, transparent and consistent manner.

# CHAPTER 6.

## COMPLIANCE AND ENFORCEMENT

### 6.1 Introduction

This chapter examines the Scheme roles and responsibilities, rules and binding agreements, functions and processes. How has the Scheme performed to date? How effective and appropriate is the current structure for achieving the objectives of the Scheme? What is the level of compliance with the Scheme and how is it enforced? What are the issues and challenges?

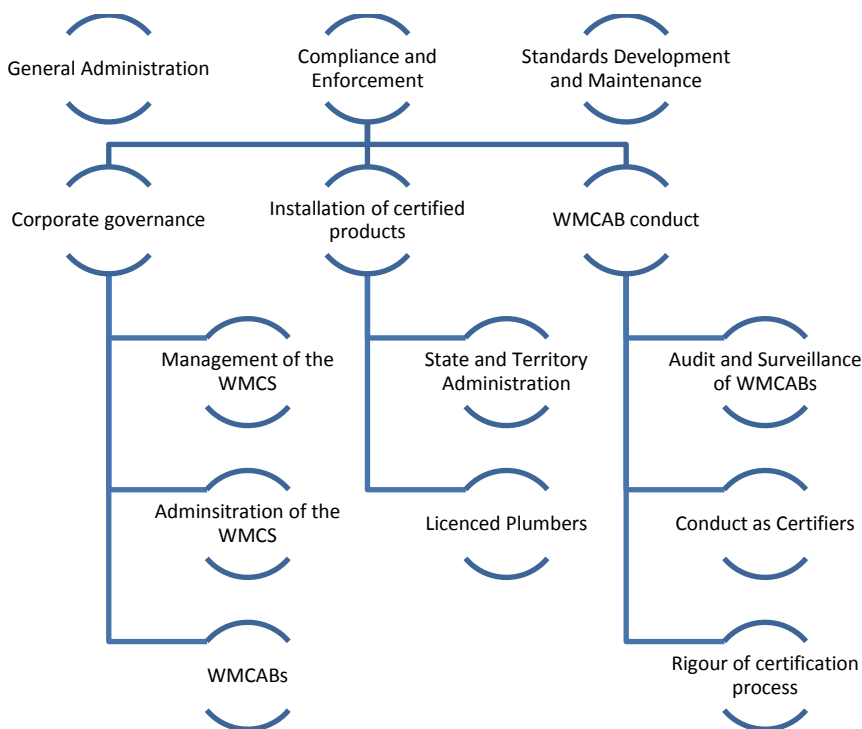
Effective compliance is vital for the future of the WMCS. If manufacturers and plumbing practitioners do not have confidence that products are being certified correctly or that only certified products are being installed, they will be less likely to support the scheme and comply with it themselves. There needs to be consistent application of the Rules to ensure there is a level playing field, reliable and appropriate certification outcomes and to improve stakeholder confidence in the Scheme.

The WMCS has three areas of compliance. The first is the corporate governance (management and administration) of the scheme enforced by the ABCB; the second is enforced by the State and Territory Regulators at the point of product installation; and the third is ABCB's capacity to evaluate the conduct of the WMCABs.

The following diagram details the current structure of the WMCS Compliance and Enforcement.

Figure 22

#### ELEMENTS OF COMPLIANCE AND ENFORCEMENT



Source: ABCB

Of the previous studies of the scheme, the *Managing the Flow* report makes several important points in relation to compliance and enforcement, these include:

*'that the regulatory arrangements for controlling plumbing product quality reflect the level of risk governments are prepared to take with drinking water supplies and sewerage collection; namely public health and environmental risks ...and*

*that improvements are needed when it comes to ensuring and enforcing plumbing product compliance with the relevant schemes and standards. As important as it is to set standards, it is equally as crucial to enforce these regulatory arrangements and supporting standards'*

Industry have concerns of dangers to public health associated with the installation of sub-standard products, such that the present complex regulation coupled with poor enforcement by the jurisdictions does not serve to protect the community and places much of the liability on individual plumbing licence holders.

The KPMG report detailed stakeholder concerns with aspects of the Scheme that were not being administered effectively and thus diminishing the value of the Scheme and creating inefficiencies in the industry – these mirror stakeholder concerns expressed during ABCB consultations. The report recommended:

- Revision of WMCS documentation and agreements to reflect key changes to current operating arrangements
- Recruitment of additional administrative staff and development of a new IT arrangement
- Implement a cost recovery model as soon as practicable
- Periodic and regular review of product certification / registration volumes and the overall effectiveness of the cost recovery model, and the performance of the Scheme Administrator.

## 6.2 Current Compliance and Enforcement

The WMCS has three aspects of compliance. The first is enforced through the management and administration of the scheme, the second is enforced through the auditing of product installation and the third is through monitoring the conduct of the WMCABs in undertaking certification of products.

### 6.2.1 Corporate Governance

The governance of the Scheme is achieved through multiple documents throughout the scheme. The primary reference documents for the WaterMark Trademark include:

1. WMCS Trade Mark Rules, as approved by the Australian Competition and Consumer Commission
2. Approved Certifiers Agreement
3. Approved User Agreement

The primary reference documents for the certification of plumbing and drainage products include:

1. National Construction Code Volume 3 – Plumbing Code of Australia (PCA)
2. SAA MP78:1999 Manual for the assessment of risks of plumbing products
3. WaterMark Schedule of Specifications – located on the ABCB website ([www.abcb.gov.au](http://www.abcb.gov.au))
4. WaterMark List of Exempt Products– located on the ABCB website ([www.abcb.gov.au](http://www.abcb.gov.au))
5. List of Terminated Licences– located on the ABCB website ([www.abcb.gov.au](http://www.abcb.gov.au))

The WMCS Trade Mark Rules detail that each WMCAB is to have their own set of processes. These processes are to be for the following:

1. Review for the settlement of disputes
2. Product certification

3. Non-conformity and/or recall of products on which a WaterMark has been applied by its Approved User.

Several guidance documents for the scheme were drafted by the previous scheme administration. These include:

1. Procedures for Certification of Plumbing and Drainage Products – located on the ABCB website ([www.abcb.gov.au](http://www.abcb.gov.au))
2. Procedure for Developing Technical Specifications – located on the ABCB website ([www.abcb.gov.au](http://www.abcb.gov.au))

In addition, the Joint Accreditation System of Australia and New Zealand has listed the following reference documents for the WMCABs to follow. A number are specific to the WaterMark Scheme and others for accreditation purposes. These WaterMark specific documents are not recognised or enforceable within the WaterMark Certification primary documents or the WMCS Trade Mark Rules.

1. ISO/IEC Guide 65 General requirements for bodies operating product certification systems - available from your national standards writing body
2. IAF GD 5 Guidance on the application of ISO/IEC Guide 65
3. MP 52-2005 Manual of authorization procedures for plumbing and drainage products - available from Standards Australia or Standards New Zealand
4. AS 5200.000-2006 Technical specification for plumbing and drainage products - Procedures for certification of plumbing and drainage products - available from Standards Australia or Standards New Zealand
5. Procedure 3 - Rules of procedure governing the use of the accreditation symbol
6. Procedure 11 - Rules of procedure governing accreditation
7. Policy 03/10 - Interpretation and Guidance on the application of MP 52-2005 – Manual of authorisation procedures for plumbing and drainage products (WaterMark Certification Scheme (WMCS)) and AS 5200.000-2006: Technical specification for plumbing and drainage products - Procedures for certification of plumbing and drainage products
8. Policy 02/11 - Arrangements for the Transition from IAF ML2:2004 to IAF ML2:2011
9. Enclosure 1 for Policy 02/11 - IAF ML2:2011 – General Principles on the use of the IAF MLA Mark
10. Enclosure 2 for Policy 02/11 - IAF PR 4:2010 – Structure of IAF MLA and Endorsed Normative Documents
11. Enclosure 3 for Policy 02/11 - IAF PL 3 - Policies and Procedures for Expansion of the Scope of the IAF MLA
12. Policy 1/12 - WaterMark Certification Scheme (WMCS) – Maintenance of WaterMark Level 2 Certificates of Conformity
13. Policy 5/13 - Arrangements for the Transition from ISO/IEC Guide 65 to ISO/IEC 17065
14. Enclosure 1 for Policy 5/13 - IAF ID ???: 2012: Informative Document for the Transition of Accreditation of Product Certification Bodies to ISO/IEC 17065:2012 from ISO/IEC Guide 65:1996
15. Enclosure 2 for Policy 5/13 - JAS-ANZ Form 49 – ISO/IEC 17065 Checklist
16. Procedure 5 - The conduct of accreditation assessments
17. Advisory Note 1-12 - WaterMark Certification Scheme (WMCS) - Certification of products and materials where there is no appropriate specification

During the interim phase of the scheme following transfer to the ABCB from Standards Australia and the National Plumbing Regulators Forum, the ABCB has implemented the following Notices of Direction for the Scheme stakeholders to follow:

1. NoD 2013/1.0 – WaterMark Certification Process
2. NoD 2013/2.0 – Reference Documents

3. NoD 2013/3.0 – WaterMark Product Database
4. NoD 2013/4.0 – Update of WaterMark Technical Specifications
5. NoD 2013/5.0 – Maintenance of approved user list
6. NoD 2013/7.0 – Financial Arrangements
7. NoD 2013/10.0 – ATS 5200.033
8. NoD 2013/12.0 – WaterMark Risk Assessment Process

Notice of Direction 2013/6.0, 2013/8.0 and 2013/9.0 were discontinued following stakeholder consultation and incorporation of elements into other notices.

There are a large number of reference documents within the scheme for various stakeholders to abide by. Many of these documents conflict with each other as to processes, roles and responsibilities. As a result, a hierarchical structure of documents has been established in Notice of Direction 2013/2.0.

### ***6.2.2 Management and Administration of the WMCS***

The ABCB has carriage of the National Construction Code Volume 3 – Plumbing Code of Australia where the WaterMark Certification Scheme resides within Part G, in addition the ABCB has entered into an agreement with each of the WMCABs. Internally within the ABCB the office has delegated responsibility for the management and administration of the scheme whilst the Board maintains oversight of the actions undertaken by the office.

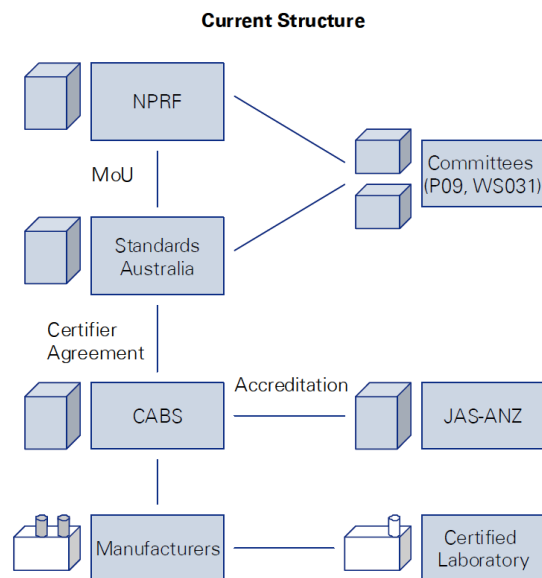
The ABCB monitors the WMCABs through financial arrangements as well as their licence detail that is uploaded to the WaterMark Product Database. In addition to monitoring activities the ABCB receives and actions enquiries, complaints, breaches and terminations.

The ABCB received no previous advice or documentation on the compliance and enforcement process. The ABCB developed an interim enquiries and complaints process. This process is detailed in Figure 8.

The KPMG report details the current basic structure of the WMCS prior to the transfer to the ABCB as follows:

Figure 23

## SCHEME STRUCTURE PRIOR TO TRANSFER TO ABCB



Source: KPMG

Following the transfer of the WMCS to the ABCB, the role of the NPRF and Standards Australia now rest with the ABCB. The ABCB will establish an equivalent technical committee to that of WS-031.

### 6.2.2.1 WMCS Management

The management body, as the owner of the Scheme, is responsible for the overall operation of the scheme including the following:

- Establishing the objectives, outcomes, and performance measures of the scheme and the various components and bodies
- Overseeing the application of all Scheme rules
- Ensuring that the provisions of the WMCS are taken into account in government to government treaties
- Establishing and over-sighting the WMCS
- Monitoring the performance of the accreditation body
- Appointing the WaterMark Administering Body
- Monitoring the performance of the Administering body
- Undertaking a review of the WMCS from time to time and, where appropriate, amending the Scheme Rules
- Approving specifications for use in the WMCS (following advice from the WaterMark Technical Advisory Committee and the WaterMark Administration Body)
- Encouraging promotion of the WMCS operations and objectives to all interested parties, including the benefits of national consistency
- Registering and maintaining the registration of the WaterMark certification trade marks
- Advising the accreditation body of any changes to the scheme rules and the PCA that may affect the accreditation of the WMCABs
- Advising the administrative body of any changes to the PCA or the Scheme rules
- Develop a protocol to monitor changes to referenced specifications

- Nominating regulatory technical experts to participate in the accreditation body audits of certification bodies.

The previous management body was a forum of regulators who managed the scheme in a committee mode. Key decisions were made at regular meetings which occurred up to 4 times a year. Ongoing issues were discussed via a teleconference or via email chain. With the limited capacity of the previous WaterMark Administration Body, the WaterMark Management Body increased their involvement of product compliance and monitoring of WMCABs, addressing significant complaints as well as enforcement of the WMCS.

#### **6.2.2.2 WMCS Administration**

The WaterMark Administrative Body (WMAB) is responsible for administering the WMCS as outlined previously in Section 4.1 of this report.

#### **6.2.2.3 WaterMark Technical Advisory Committee (WMTAC)**

The WMTAC are responsible for:

- Where a new specification is developed by a WMCAB
  - Provide detailed technical comment on the draft specification within a timely manner. This comment shall address the suitability of the product and materials used, operation of the product, installation, inter-operability within the plumbing system or infrastructure, and protection of health and safety and the environment.
- Review other proposed specifications for their suitability for inclusion in the WMCS
- Recommend to the WMCS Administering body that a specification is technically suitable for use within the WMCS.
- Where required provide technical advice or interpretations to the Administering Body.

The WMTAC has been discussed previously in Section 5.4 of this report.

#### **6.2.2.4 WaterMark Conformity Assessment Bodies (WMCAB)**

The WMCABs are responsible for the following:

- Having, and maintaining, accreditation as a Product Certification body by an approved Accrediting Body. The accreditation will need to cover the relevant specifications as specified in the WaterMark Schedule of Specifications.
- Cooperating with the WaterMark Management Body and the WaterMark Administering Body in maintaining the integrity of the WaterMark Certification Scheme
- Engaging a suitably skilled, technically qualified, competent and impartial individual to enable the certification body to carry out its functions and obligations under the WMCS Scheme Rules. This individual shall be:
  - i. Available for sufficient time to allow the WMCAB to efficiently and effectively carry out its functions and obligations under the WMCS Scheme Rules; and
  - ii. Engage on terms and conditions that do not in any way inhibit the exercise of their professional discretion.
- Granting, maintaining, renewing, suspending or withdrawing a WaterMark Licence in accordance with the Rules;
- Where necessary, develop a Technical Specification, and through a peer review process, obtain approval from the WaterMark Management to have the specification endorsed for use within the WMCS
- Supplying the WaterMark Administration body with details of the WaterMark licences issued or amended within seven calendar days of issue. Notification shall include upload to the WaterMark Product Database.



- Establish and maintain a separate website listing of products that have been issued the WaterMark. Authorise the WaterMark Administration body to cross reference to this website listing.
- Keeping a copy of the documentation applicable to issuing the WaterMark licence and making it available for audit. Confidentiality of its records shall be maintained.
- Verifying that Approved Users maintain compliance with the WMCS rules and their Approved User Agreement.
- Undertaking and acting on any reasonable request from the WaterMark Management Body and/or the WaterMark Administering Body in respect of its actions and/or the actions of Approved Users it issues with a WaterMark licence.
- Operating and complying with their Approved Certifier Agreement for the use of the WaterMark Certification Trade Mark.
- Monitoring changes to specifications and ensuring that the Approved User implements the relevant required changes by the expiry of the licence.
- Maintaining an appeals mechanism. The appeals mechanism shall be independent of the WaterMark Management Body or WaterMark Administration Body.
- Paying, in a timely manner, any fees and/or royalties in relation to the WaterMark as required by the Approved Certifier Agreement
- Provide reports to the WaterMark Administration Body as requested.

Further discussion on the operation and performance of the WMCABs is provided in Section 6.2.3 of this report.

#### **6.2.2.5 Rules for the WaterMark Certification Trade Marks (the Rules)**

The Rules for the WaterMark certification trademarks is focused on the function of the trade mark and sets the structure for the granting of licences to use the WaterMark through agreements between the WMCS owner, the Approved Certifiers and Approved users.

As a parent control document for the trade mark, the Rules have sufficient detail and direction to be practical. The Rules could be updated to better reflect the current Scheme, a generic accreditation function and the reference documents.

The greatest enforcement of scheme occurs through the use of the trade mark and the ABCBs capacity to remove a licence for its use and subsequently remove its authorisation for installation.

The Rules for the WaterMark Certification Trade Marks are not inconsistent with the needs or function of the scheme management and administration requirements. It is recommended that the rules reflect relevant reference documents within the scheme and further work be undertaken to refine the requirements of the Approved Certifiers and Approved Users on definitive actions. Following further review of the branding and use of the WaterMark by the ABCB, conditions of use by the parties should be clarified as well as enhancement for the provision of dispute settlement for parties to dispute decisions or actions of any enforcement stakeholder within the scheme.

Changes to the Rules for the WaterMark Certification Trade Marks require approval from the ACCC, as do changes to the attendant agreements. Assistance from a legal drafting consultant would ensure any redrafting to align with an enhanced scheme is compliant with the requirements of the ACCC.

The ACCC scheme rules could be a code of conduct for use of WM certification trade marks, which calls up 'consolidated scheme rules' – and users sign a declaration to comply. The Scheme rules could contain governance; obligations of all parties; attendant fees and charges; 'agreements' of all parties who sign a declaration aligned with the rules. This would simplify documents and put the onus on stakeholders to be responsible for their respective roles.

At the very least, the Rules need to be consolidated and tightened to reduce instances of misinterpretation or inconsistent application.

Although the greatest enforcement action of the WMCS is through the trade mark, it may be effective to review other areas of enforcement control such as the product testing or certification process. It is recommended that consideration for expansion of enforcement control which aligns with Provision G1.3 of the PCA be explored and not solely reliant on the single function of a licence to use the WaterMark Trade Mark.

#### **6.2.2.6 Approved Certifier Agreement**

The Approved Certifier Agreement details a number of key elements in relation to the WaterMark Certification Trade Marks.

These include:

- Defined terms and Interpretations
- Term
- Grant of rights
- Approved certifiers obligations
- ABCBs obligations
- Payment terms
- Indemnity and limitation of liability
- Confidentiality
- Termination
- Consequence of termination
- Notices
- General

The Approved Certifier Agreement forms a critical part of compliance with the WMCS where the administration can uphold the granting of rights and obligations of the WMCAB. It is noted by the WaterMark Administration that the Approved Certifier Agreement expands its function into administrative controls in the requirements for WMCABs to have their own processes, keeping of records, and providing information to the ABCB. These administrative functions are duplicated in other scheme reference documents to a differing degree.

As noted previously, it is not an easy process to update the Approved Certifier Agreement. Consequently, as the various scheme reference documents changed the equivalent clauses within the agreement were not changed. This has resulted in a conflict between the legal agreement and the legislated reference documents.

#### **6.2.2.7 Approved User Agreement**

The Approved User Agreement details a number of key elements in relation to the WaterMark Certification Trade Marks. These include:

- Defined terms
- Grant of licence
- Term
- Approved users obligations
- Fees and payment terms
- Termination
- Consequence of termination
- Governing law and jurisdiction

The ABCB is not a party to the Approved User Agreement. It is reliant on the WMCAB to monitor compliance and enforcement of the agreement. It is noted that the agreement is focused on the licence, yet within the WMCS, the WMCABs document the certification process rather than the licence. A clause does detail the condition of use for the licence. This condition is the only condition for the use of the WaterMark in the agreements. The clause only permits the WaterMark to be used on plumbing products that comply with applicable specifications. No permission is granted within the scheme agreements for the WaterMark to be used for marketing or advertising purposes.

Emphasis has been on certification of products rather than licencing products and use of the certification trade marks. Inconsistent language, including on public website, does not remedy this.

#### **6.2.2.8 The Plumbing Code of Australia**

The Plumbing Code of Australia (PCA) is Volume 3 of the National Construction Code (NCC). The NCC is an initiative of the Council of Australian Governments developed to incorporate all on-site construction requirements into a single code. The PCA is produced and maintained by the Australian Building Codes Board (ABCB) on behalf of the Australian Government and each State and Territory Government.

The goal of the PCA is to enable the achievement of nationally consistent, minimum necessary standards of relevant health, safety, amenity and sustainability objectives efficiently.

The PCA is given legal effect by relevant legislation in each State and Territory. This legislation consists of an Act of Parliament and subordinate legislation which empowers the regulation of certain aspects of plumbing and drainage installations, and contains the administrative provisions necessary to give effect to the legislation. A line diagram detailing the link of State and Territory legislation and the PCA is provided within Appendix A. The PCA is a direct reference document detailed within the Rules for the WaterMark Certification Trade Mark and the principle document for the certification of plumbing materials and products.

Provision A1.5 of the PCA details the requirement for compliance with all Sections of the PCA. Subject to any State or Territory variation, plumbing and drainage systems must be so designed, constructed and installed that they comply with the relevant provisions of Sections A to F (inclusive) of the PCA. Section G of the PCA contains the procedures for certification of plumbing and drainage products for authorised use in new installations, alterations, additions, replacement and repairs to existing installations.

Part A2 of the PCA details the requirements for suitability of materials and products within plumbing and drainage installations.

Figure 24

NCC – VOLUME 3 - PLUMBING CODE OF AUSTRALIA CLAUSE A2.1

**A2.1 Suitability of materials and products**

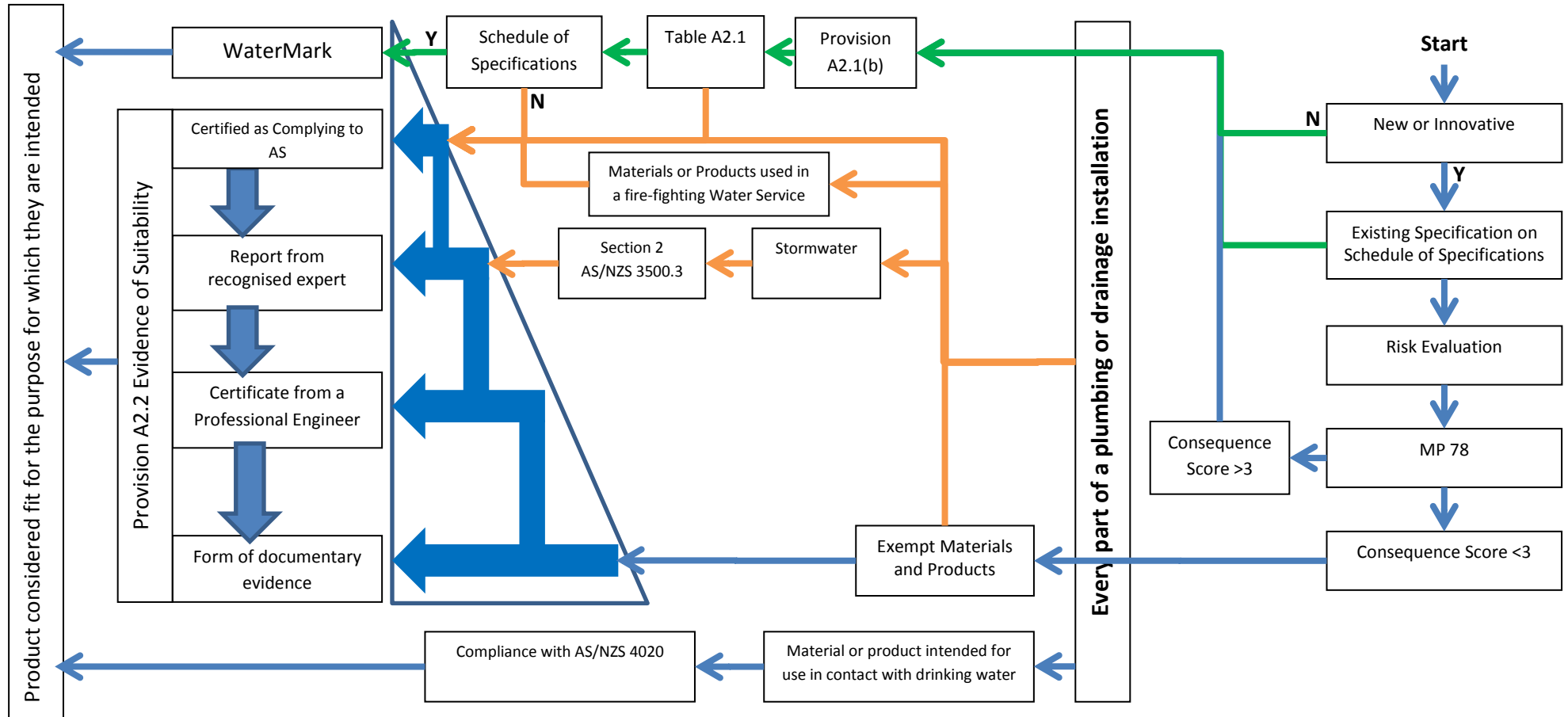
- (a) Every part of a plumbing or drainage installation must be constructed in an appropriate manner to achieve the requirements of the PCA, using materials and products that are fit for the purpose for which they are intended.
- (b) Materials or products listed in Table A2.1 which are used in plumbing or drainage installations must be certified and authorised.
- (c) Product Certification and Authorisation must meet the certification and authorisation procedures set out in Part G of the PCA – **“Materials and Products Certification and Authorisation”**.
- (d) All materials and products intended for use in contact with drinking water must comply with AS/NZS 4020 and be certified and authorised in accordance with the PCA.
- (e) Any new or innovative material or product must be assessed, certified and authorised, if required, in accordance with Part G of the PCA prior to their use in a plumbing or drainage installation.
- (f) A material or product exempted from certification under the PCA is authorised for use in a plumbing and drainage installation if-
  - (i) it is certified as complying with the appropriate Australian Standard(s); or
  - (ii) if an appropriate Australian Standard does not exist, other evidence of suitability in accordance with **A2.2**.
- (g) A material or product used in a fire-fighting water service is authorised for use if it is certified by a recognised body as complying with the relevant Australian Standard(s) for the specific application.
- (h) A material or product used in a stormwater installation is authorised for use if it is certified by a recognised body as complying with Section 2 of AS/NZS 3500.3 in accordance with **A2.2**.

Source: ABCB

The process of compliance with Provision A2.1 (see Figure 24) and determination if the product requires WaterMark is outlined in the following graphic (see Figure 25).

Figure 25

PROCESS OF COMPLIANCE WITH PCA CLAUSE A2.1 SUITABILITY OF MATERIALS AND PRODUCTS

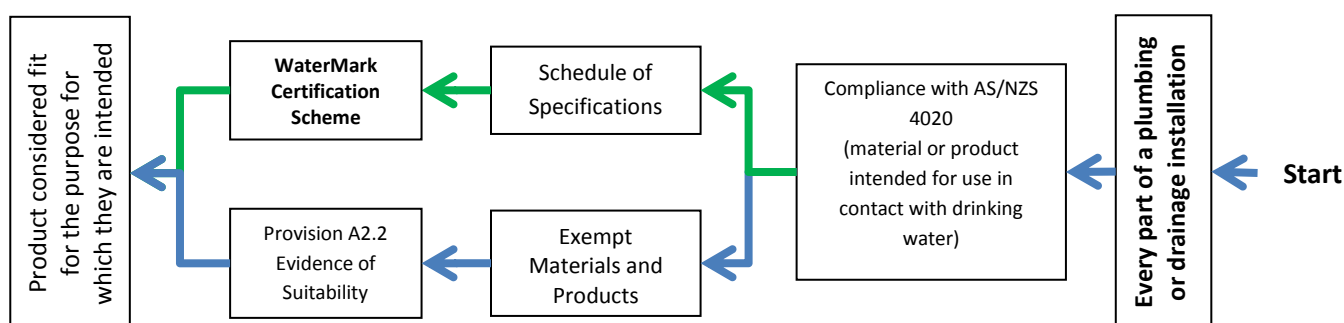


Source: ABCB

It is recommended that the requirements of WaterMark be simplified in Provision A2.1 of the PCA where all products be at least evaluated for compliance, those that have previously been evaluated and included are detailed on the Schedule of Specifications and are a clear indication that WaterMark certification is required. Those products that have been previously evaluated and deemed exempt are listed on the exempt materials and products and require evidence of suitability as per Provision A2.2 of the PCA. For any product that has not been previously evaluated or is new/innovative, it is to be evaluated in accordance with the requirements of the WMCS and determined to be included or excluded. Regardless of other requirements any material or product intended for use in contact with drinking water is to achieve compliance with AS/NZS 4020. The following graphic details the proposed minimum requirements of WaterMark evaluation detail within Provision A2.1.

Figure 26

**MINIMUM REQUIREMENTS OF WATERMAEK EVALUATION IN PCA CLAUSE A2.1**



Source: ABCB

Part G1 of the PCA details the certification and authorisation of plumbing and drainage materials and products so that they may be used or installed in plumbing or drainage installations. Part G1 has been part of the PCA since its conception in 2004. Over time, State and Territories redirected their legislative references from specific Australian Standards to the National Construction Code, which incorporates the PCA. The adoption of the PCA as a direct reference occurred as follows:

Figure 27

**ADOPTION OF THE PLUMBING CODE OF AUSTRALIA**

Administration	Plumbing Code of Australia	Original Adoption Date
Australian Government	2013	1 May 2011
Australian Capital Territory	2011	1 May 2011
New South Wales	2013	1 July 2012
Northern Territory	2013	3 August 2012
Queensland	2013	5 May 2011
South Australia	2011	11 July 2011
Tasmania	2013	1 May 2011
Victoria	2013	1 May 2011
Western Australia	Not adopted	Not adopted

Source: ABCB

Currently the Australian Capital Territory and South Australia continue to reference PCA 2011 and Western Australia does not adopt the PCA. The Western Australia administration adopted the requirement for WaterMark Certification through their Water Services Licensing (Plumbers Licensing and Plumbing Standards) Regulations 2000

Part G1 of the PCA which details certification and authorisation of plumbing and drainage materials and products has not changed since the first publication of the PCA in 2004.

When these State and Territories referenced the PCA within the legislation, the function of MP52 and AS5200 as a principle reference document for the procedures for certification of plumbing and drainage products was removed.

Part G1 of the PCA covers the following elements:

- G1.1 Scope
- G1.2 Application
- G1.3 Objective
- G1.4 Authorisation
- G1.5 Certification and Risk Assessment
  - G1.5.1 General
  - G1.5.2 Materials and products certification
  - G1.5.3 The process
    - G1.5.3.1 Risk assessment process for materials and products for which there is no appropriate specification
    - G1.5.3.2 Consequence score less than 3 (Certification not required)
    - G1.5.3.3 Consequence score of 3-4 (Certification Level 2)
    - G1.5.3.4 Consequence score of more than 4 (Certification Level 1)
  - G1.5.4 Certification
    - G1.5.4.1 Certification Mark
    - G1.5.4.2 Materials and products with a consequence score of 3 – 4 (Certification Level 2)
    - G1.5.4.3 Materials and products with a consequence score of more than 4 (Certification Level 1)
    - G1.5.4.4 Certification licence
  - G1.5.5 Product Marking

Although these elements cover the necessary detail, it is structured in a non-uniform means with no logical order. This is evident in Provision G1.5.2 which duplicates Provision A2.1 (b), describes the two levels of certification, duplication of Provision A2.1(d), duplication of Provision G1.5.3.1 and Provision G1.5.3.2.

A number of errors are identified which present difficulties for administrative enforcement. These include but are not limited to the following:

Provision G1.5.3.3 for the process of Level 2 certification provides a detailed process for where there is no specification in place. This level of detail should be located in Provision G1.5.3.1 Risk assessment process for materials and products for which there is no appropriate specification. In addition the provision requires the certification based on a specification to be valid for a period not exceeding 2 years. Previously AS 5200.000:2006 details that the certification of a Level 2 material or product is valid for 3 years. The paragraph further details that after 2 years if the applicant has failed to participate in the technical specification being converted into an Australian Standard that the certification be withdrawn. The paragraph presents confusion between the certification and the reference technical specification and applicant. These process are typically separate and the various applicants for certification are independent of the drafting of the original technical specification.

The above requirements for when there is no specification in place and the certification and validity in relation to the technical specification are specifically detailed under Provision G1.5.3.3 for Level 2 certification and not Provision G1.5.3.4 for Level 1 certification.

Provision G1.5.4.2 for Level 2 certification details the certification requirements. Provision G1.5.2 requires WaterMark Level 2 to be in accordance with the ISO/IEC Guide 67, System 1b. Provision G1.5.4.2 requires the manufacturer of the material or product must be certified by the WMCAB as having been carried out in accordance with an approved Quality Assurance Program appropriate for the material or product. A system 1b in accordance with ISO/IEC Guide 67 does not require a Quality Assurance Program, only a system 5 and 6 do (level 1 certification is a system 5).

Provision G1.5.4.2 for Level 2 certification details clear requirements for the manufacturer to provide a warranty yet Provision G1.5.4.3 for Level 1 certification does not detail a requirement for the manufacturer to provide a warranty. Provision G1.5.5 for product marking details that a product is not an authorised product if displays a certification mark but without the required warranty. The note under the definition of warranty as per Provision A1.1 details that the warranty can be stamped onto the product, printed on the packaging, or included as part of the installation instructions.

As all State and Territory administrations reference Part G1 of the PCA as the principle requirement for the certification and authorisation of plumbing and drainage materials and products, it is important that the detail not only satisfy the objectives but provide a clear and uniform structure as well as clear and unambiguous provisions for compliance.

The provisions of Part G1 contain appropriate requirements and guidance for the certification and authorisation of plumbing and drainage material and products. It is recommended that Part G1 be restructured in a uniform and sequential order such that a greater level of clarity and compliance is achieved. During the restructuring exercise it is recommended that review and amalgamation of other provisions currently contained in other reference documents should be considered.

#### 6.2.2.9 MP 78:1999

Miscellaneous Publication 78 (MP78) is the manual for the assessment of risks of plumbing products. The document was published in 1999 on behalf of the Agriculture and Resources Management Council Australia and New Zealand (ARMCANS) Committee for Plumbing Product Authorizations (CPPA). The manual was produced as a reference document for those involved with risk identification, risk analysis and risk assessment methods within the scope of certification procedures for the plumbing and drainage industry.

The manual provides an overview of risk management and the procedure for assessing and managing risks of plumbing products. The objectives of the manual are to provide the following:

- A systematic approach to the assessment of risks of plumbing products, appliances and equipment to be used on all products that are within the scope of the National Certification Plumbing and Drainage Products Scheme
- Recommendations on the most appropriate level of control for CPAA consideration and inclusion in MP52 and the National Plumbing and Drainage Code
- A method of analysing a product to identify critical features which should be addressed in the product Standard or specification.

The above objectives indicate all proposed products to be certified are to have a risk evaluation to not only confirm the level of control but to identify any critical features that should be addressed in the product standard or specification. The inclusion of Table A2.1 within the Plumbing Code of Australia has created a pre-established determination for the level of control. The current convention is to use the reference specification as is and the level of control indicated in Table A2.1. The process of and opportunity for evaluating any critical features of the material or product which needs to be addressed which may not align to the specification has been lost.

Although MP78 requires all products that have not previously been certified to have a risk evaluation, irrespective of if the reference specification is listed or not - this has not been enforced.

In consideration of consolidating the rules, the provision for re-instating a risk evaluation for every product as part of the certification process to identify any specific elements that may not be covered by the reference specification is recommended.

In 1995 AS/NZS 3940 Risk Management – principles and guidelines was published and further revised in 1999 and 2004. In 2009 the standard was revised and redesignated as AS/NZS ISO 31000:2009. With the two revisions of the core risk management standard occurring since the publication of MP78, it is considered that should the need for a risk assessment process be required MP78 is to be reviewed and revised to align with the current WMCS reference documents as well as the principles of AS/NZS ISO 31000:2009.



The initial risk evaluation of materials and products is an important element of the WMCS. MP 78, although out of date with limited stakeholder understanding and application, remains a valid document within the scheme. As an interim measure the ABCB has requested risk assessments be submitted for verification prior to decisions being taken as to whether a product should be included in the scheme, and if so at what level, and whether there is a need to develop technical specification.

#### 6.2.2.10 Schedule of Specifications

The WaterMark Schedule of Specifications (WMSS) lists the pre-approved specifications and Standards. Materials and products that do not have a referenced specification listed on the WaterMark Schedule of Specifications are required to be evaluated by a WaterMark Conformity Assessment Body and if needed, have a WaterMark Technical Specification or other approved standard reviewed by the ABCB Office, the WaterMark Technical Advisory Committee and the State and Territory Plumbing Control Administrations for inclusion on the Schedule of Specifications.

The WMSS is an expanded list of Table A2.1 of the PCA. Table A2.1 details various categories of materials and products which require authorisation. This includes appliances and fixtures, pressurised and non-pressurised fittings and accessories, material in contact with drinking water, water supply valves and valve accessories and grey water diversion.

The WMSS does not provide specific detail for material in contact with drinking water (let alone detail products), grey water diversion devices or fire protection water supply valves. A number of products listed within the schedule are not clearly defined as being part of a plumbing or drainage installation yet following a risk assessment in accordance with MP 78 these products present a reasonable risk that requires protection. It has been identified that a number of these products, primarily appliances and water-using appliances have been included within the mandatory requirement for WaterMark Certification

A review of the ATS 5200.101, 104 and 105 has been undertaken. With the exception of the appliances detailed within the scope and unique application, each of these ATSS had an equivalent level of requirements. The provisions focussed on the following key elements;

- watertight seals for the end connectors and any sanitary plumbing connections being compliant with relevant Australian Standards;
- backflow prevention with the requirements to comply with IEC 61770, the backsiphonage test of AS 2845.2 or be supplied with a backflow prevention device.
- Provide a water seal if the appliance as an integral waste trap

The technical specifications for appliances present design controls within the WMCS for the safeguard of public and private infrastructure. Requirements for the safeguard of plumbing and drainage infrastructure currently exist within the objectives of the PCA for water services as well as sanitary plumbing and drainage systems

Following on from the objectives, the PCA Performance Requirements as well as the Deemed-to-Satisfy Provisions presents a number of integral design requirements for water services and sanitary plumbing and drainage systems that are considered to be at least equivalent to the requirements of the above technical specifications. These include the provision of appropriate backflow protection and water seal through appropriate traps with reference to the equivalent design or installation standards for the products.

It has been identified that in the context of appliances as end of line fittings, the scheme has duplicated the local State and Territory regulatory controls on safeguard of people and infrastructure. It is recommended that this duplication is unnecessary and requires further review with the aim to remove this duplication from the WMCS.

It is recommended that review of each category and specification listed on Table A2.1 of the PCA as well as the WMSS be reviewed and justified in the context and objectives of the WMCS.

### **6.2.3 Installation of Products**

State and Territory plumbing regulations stipulate plumbing regulations stipulate that licensed plumbers can only install plumbing and drainage products, which have been certified under the WMCS. Plumbers generally risk losing points against their plumbing license if they do not comply with this requirement. The State and Territory plumbing regulators are responsible for enforcing the installation requirement of the WMCS. Compliance systems range from self-certification and random audit by the relevant regulator, to mandatory inspection by Local Governments.

A breakdown of each State and Territory in Appendix G details the situation for review of installed products and licencing of plumbers. This information was obtained following a second forum discussion with all the State and Territory administrators on 14 October 2013. Through the review, it is noted that no State or Territory plumbing regulator has a dedicated focus of identifying WaterMark products during inspection by department inspectors.

It was a general consensus amongst the regulators that the compliance of products to WaterMark was assumed during typical inspections. The focus of inspections was compliance to the Plumbing Code of Australia and AS/NZS 3500 for installation purposes only. The focus on WaterMark compliance only occurred when product failure or complaints were made directly to the regulator rather than the local council or plumbing inspectors. This risk diversification strategy is a result of constrained resources for actively pursuing all avenues of inspection for compliance.

That said, the State and Territory plumbing regulators seek to retain the Scheme as they believe it is integral to the effective regulation of plumbing and drainage matters in each jurisdiction.

#### **6.2.3.1 Conclusion**

The State and Territory plumbing administrators are a critical element in the enforcement of the WMCS. Their capacity to inform licenced plumbers as well as to verify their work at the installation of plumbing and drainage products presents the greatest strength in the WMCS. Without appropriate information on the mandatory requirements, or appropriate inspection and enforcement of the WMCS at installation, the effectiveness of the scheme will be compromised, thus indicating disconnect between policy and application.

### **6.2.4 WMCAB Conduct and Rigor of Certification Process**

In accordance with the Approved Certifier Agreement, the ABCB has the power to audit and inspect the premises of the WMCAB 'to ensure that the Approved Certifier is complying and is able to continuing complying with its obligations under [the] agreement.' Particularly in relation to the procedures of the WMCAB in granting licenses to use the WaterMark under the Scheme.

The ABCB has a written agreement with each WMCABs which details conduct and requirements of the parties. A Deed of Agreement with the WaterMark Accreditation body, JAS-ANZ, is presently being negotiated.

#### **6.2.4.1 WaterMark Accreditation Body**

The role WaterMark Accreditation Body is currently assigned to the Joint Accreditation System of Australia and New Zealand (JAS-ANZ).

JAS-ANZ is a not for profit, self funding international organisation established under a treaty between the Governments of Australia and New Zealand. It acts as the accreditation body for Australia and New Zealand covering Conformance Assessment Bodies (CABs) that are involved in the certification of management systems, products, inspections and personnel. JAS-ANZ has international recognition through maintenance of its International Accreditation Forum Multilateral Recognition Arrangement signatory status.

JAS-ANZ operates in accordance with publicly available policies and procedures freely available from its website: [www.jas-anz.org](http://www.jas-anz.org).

The role of JAS-ANZ within the WMCS has previously been focused on the maintenance of WMCABs accreditation in accordance with the above guidance documents.

In December 2010, JAS-ANZ extended its role within the scheme and implemented additional policy document 03/10 – Interpretation and Guidance on the application of MP 52-2005 and AS 5200.000-2006.

In February 2012, JAS-ANZ drafted an additional policy 1/12 – WaterMark Certification Scheme – Maintenance of WaterMark Level 2 Certificates of Conformity as well as an advisory note 1-12 – WaterMark Certification Scheme – Certification of products and materials where there is no appropriate specification.

These policy and advisory notes reference documents which are not primary reference documents and focus on processes or requirements that are already established within existing and enforceable reference documents.

JAS-ANZ is currently responsible for:

- Accreditation of WMCABs in accordance with:
  - The accreditation criteria determined by the International Accreditation Forum (IAF) for bodies providing product certification services;
  - ISO/IEC Guide 65
  - JAS-ANZ internal procedures (No 3, No 11 and No 15); and
  - The requirements of specified in the WMCS rules as amended from time to time
- Accredite WMCABs with a scope of accreditation that includes the PCA or parts thereof to operate within the WMCS.
- Within 10 business days of any CAB accreditation being granted, advising the WaterMark Management Body and the WaterMark Administering Body of the details of the newly accredited WMCAB.
- Creating and maintaining on its website details of the WMCS, including a register of all accredited WMCABs
- Conducting periodic reviews (surveillance) of each WMCAB to verify that WMCABs maintain compliance with the Accreditation Body requirements and the WMCS Rules.
- Within 10 business days of any WMCAB surveillance being undertaken, advising the WaterMark Management Body and the WaterMark Administering Body of the WMCAB surveillance and the results of the audit including any potential issues that require further investigation by the WaterMark Administering Body.
- Where a WMCABs accreditation has been suspended or withdrawn, advice of the details including reasons for suspension or withdrawal, and the period of suspension, shall be provided to the WaterMark Management Body and the WaterMark Administering Body.
- Whenever the PCA, WaterMark Scheme Rules or documents referenced therein are amended, the accrediting body shall ensure that all accreditation decisions taken by them are reviewed and appropriate action taken to ensure compliance with the PCA and WaterMark Scheme Rules is maintained.
- When requested by the WaterMark Management Body or the WaterMark Administering Body, investigating matters of concern relating to the decisions and actions of a WMCAB and reporting to the Management Body the outcomes of the investigation.
- Advising the WMCABs of changes required to the operations or accreditation of the WMCABs that may result from changes to the PCA or the WMCS Rules.
- Advising the WaterMark Management Body of the details of any proposed amendments of variations to the ISO, IAF or Accrediting Body standards and procedures, and the likely significance and impact of those amendments or variations on the administration or implementation of any aspect of the WMCS.
- Acting on complaints about WMCABs, Licence holders and about the Accrediting Body.

The process of accreditation by JAS-ANZ against potential WMCABs in the suitability of inclusion within the WMCS has been discussed with the existing WMCABs and JAS-ANZ. The evaluation process for accreditation by JAS-ANZ is established in JAS-ANZ policy 5 – The conduct of accreditation assessments. The policy details the main function of JAS-ANZ is to accredit, following successful assessment, those bodies considered competent and impartial to provide an effective service for which formal application has been made. The Policy further details that JAS-ANZ will carry out a “systems assessment”

The policy is focused on the applicant’s capacity to run the systems and to reach proper conclusions as to awarding certification. The policy does not present any uniform evaluation process to determine the applicant’s competency in the core scheme documents including the rules, agreements and the Plumbing Code of Australia.

Following interviews with the WMCABs and experiences administering the scheme, it appears little evaluation of their competence and capability to apply the Rules, Agreements or the PCA has been evaluated by either JAS-ANZ or the WaterMark Administering Body.

As with that detailed above, the scope of accreditation the WMCABs hold with respect to the PCA as well as each specification within the WMCS does not have a detailed or uniform evaluation process conducted by either JAS-ANZ or the WaterMark Administration Body.

A measureable means for evaluating the WMCABs capability to evaluate products against a variety of specifications is required. It is anticipated that not all the WMCABs would have the capability to certify against every listed specification within the WMCS. Should this be a minimum requirement, appropriate training and evaluation measures are needed to evaluate the WMCAB. Alternatively limited accreditation could be issued.

The JAS-ANZ website has details of the WMCS including a register of all accredited WMCABs. The listing of the WMCABs is split into two – detailing those WMCABs who are accredited with Level 1 or Level 2 capability respectively. As all WMCABs are detailed on both it is assumed all WMCABs have accreditation for both levels.

It is understood that surveillance of the WMCABs has been undertaken on a six monthly basis. It appears that the surveillance for the most part is focused on the WMCABs process and documentation of accreditation.

In the past 18 months, JAS-ANZ has not raised any areas of concern with any of the WMCABs to the WaterMark Administration Body.

Currently no WMCABs accreditation has been suspended or withdrawn.

With each proposed update to the PCA, the ABCB in connection with Standards Australia holds a number of information seminars throughout Australia to detail to practitioners the changes within the PCA as well as reference standards. It is recommended that WMCABs attend these information seminars in the form of ongoing professional development and that the ABCB provide an element of the seminars to cover specific updates to the WMCS.

The accreditation body is expected to monitor a sample of the activities and certification process of each WMCAB. It is not expected that the accreditation body monitor all elements and activities of the WMCABs. However the WMCABs report inconsistencies and varying degrees of scrutiny on the various aspects – process, documentation and technical matters.

Each WMCAB under the PCA and Guide 67 has developed their own process for the certification of plumbing materials and product. The process is approved by the accreditation body at the time of accreditation and reviewed every five years from the original accreditation.

#### **6.2.4.2 WMCAB Conduct**

Specifically, ensuring that the WMCABs undertake their agreed duties correctly in certifying products under the WMCS. Currently there are two elements of WMCAB conduct compliance. Firstly in accordance with the Rules for the WaterMark Certification Trade Marks WMCABs must have and maintain accreditation with an accreditation body. The current accreditation body identified within the Rules for the WaterMark Certification Trademark is the Joint Accreditation System for Australia and New Zealand. An alternative under the same clause within the trademark rules is an accreditation body that has either a bilateral or multilateral recognition arrangement or agreement with JAS-ANZ. Secondly, as part of maintaining their accreditation WMCABs must submit to surveillance visits and a

complete re-assessment of their capability every four years. The focus of this compliance regime is on ensuring that the WMCAB has 'the necessary competence and reliability to operate a conformity assessment system' and specifically satisfy the requirements of:

- ISO/IEC Guide 65:1996 – general requirements for bodies operating product certification systems; and
- IAG GD 5:2006 – IAF guidance on the Application of ISO/IEC Guide 65

Currently there are eleven WMCABs within the WMCS. A number of certifiers have few or no WaterMark Licences. The ABCB in coordination with JAS-ANZ suspended applications for new WMCABs during the review. It is understood that a number of additional organisations are prepared to make application to be a WMCAB within the WMCS. An increase in WMCABs will increase the workload of the WaterMark Administration.

A review and evaluation of the number of WMCABs and proportion of licences is recommended to be undertaken. This is based on two key observations of the WaterMark Administration, the first being the limitations of a single administrator to monitor, liaise and enforce compliance on all WMCABs and the second is the capacity for a single WMCAB to manage a large amount of licences effectively.

Detailed below is the breakdown of WMCABs and the number of active licences registered on the WMPD. Figure details the number of licences amongst the WMCABs.

**Figure 28**

**DISTRIBUTION OF LICENCES TO WMCABS**

WaterMark Conformity Assessment Body	Number of Licences
SAI Global	740
IAPMO R&T Oceana Pty. Ltd	321
Australian Certification Services Pty Ltd	173
Global-Mark Pty Ltd	116
ApprovalMark International Pty Ltd	66
Australian Gas Association	34
BSI Management Systems	18
International Standards Certifications	13
CertMark Australasia Pty Ltd	6
NCS International (NCSI)	0
NSF International	0

*Source: ABCB WaterMark Product Database*

**6.2.4.3 Rigor of Certification Process**

The certification process, although partially detailed within the PCA, is reliant on the WMCAB having their own process based on ISO/IEC Guide 67 with the process and documentation reviewed and accredited by JAS-ANZ.

The own certification process and documentation of each WMCAB has been requested by the ABCB for analysis. At the time of writing, only one WMCAB had provided their process and documentation for certification.

The guidance documents ISO/IEC 65 and 67 present a series of motherhood guidance elements on product certification. Guide 67 presents details such as the context, objective, uses, basics and elements of product certification. A further example is clause 5.1.2 which details "Product certification incorporates at the least the following three functional stages; selection, determination; review and attestation". It is left to the WMCAB to create their own certification documentation on specific process.

The result of having an 'own process' as outlined in the Approved Certifier Agreement clause 4.3 for each of the WMCABs means an additional level of fragmentation within the WMCS as well as different levels of rigor being applied across all certifiers. It is the understanding that JAS-ANZ are assigned the role to regulate the consistency and minimum standards of certification amongst the WMCABs.

The current process of certification has no minimum specification of documentation or records of decision making resulting in a greater reliance on the WMCABs own expertise and professional judgement on the product and its use within the legislative documentation of product certification.

Without controls in place to maintain minimum acceptable qualifications and competency of the WMCABs the rigor of the certification and documentation process is not considered to be at the most efficient acceptance level.

### 6.3 Issued Licences

The current convention across the scheme has been identified as follows:

#### 1 – Product Testing

- Type testing of a product occurring at the initial product review. Type testing is not undertaken again unless a change in the product marking, design performance or documentation for the product or installation occurs.  
This has been the convention of WMCABs following JAS-ANZ Policy 01/12 dated 21 February 2012, clause 4.1.4 on what changes dictate re-testing. JAS-ANZ Policy 01/12 is not a recognised or enforceable reference document within the WaterMark Certification Scheme.

#### 2 – Certification of a product

- The convention for the certification of products is as per the WMCABs own process with the length of time the certification being valid is 5 years for Level 1 and 3 years for Level 2.
- The WMCABs are currently issuing certificates of conformity in their own template, which include the WaterMark.
- The length that a Level 1 certification is valid for is not detailed in any scheme reference document.
- The length that a Level 2 certification is valid for has been documented as 2 years within PCA Provision G1.5.3.3, 3 years in ABCB Procedures for Certification of Plumbing and Drainage Products Table 1, Column B, Row 9 and 3 years in JAS-ANZ Policy 01/12 clause 4.1.2.

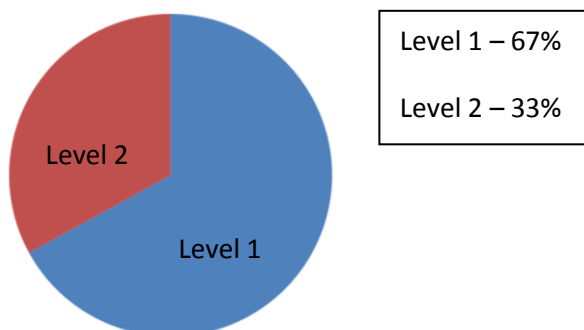
#### 3 – Licencing of WaterMark Products

- The length that licencing of product is valid is detailed in clause 3 of the Approved User Agreement as being 12 months. It is understood that in the current practice of product certification the term of the licence has not been considered by the WMCABs.
- The length of the licence has not been reflected on the WaterMark Product Database. The WaterMark Product Database details the convention for the length of time a product certification is valid for where the convention has been 5 years for Level 1 and 3 years for Level 2.

The above practice does not align with the documented requirements under the reference documents being the PCA, Trade mark rules, the Approved Certifier and User Agreements.

**Figure 29**

#### LEVEL 1 AND LEVEL 2 LICENCES



**Source: ABCB**

In accordance with table 1 of ISO/IEC Guide 67, the key difference between all product certifications systems occurs at the surveillance of the product between the initial granting of the licence and the extending, suspending or withdrawal of the licence. This is highlighted in table 1 of ISO/IEC Guide 67 below.

Figure 30

TABLE 1 ISO/IEC GUIDE 67

Table 1 — Building a product certification system

Elements <sup>a</sup> of product certification system	Product certification systems <sup>b, c, d</sup>						
	1a	1b	2	3	4	5	6
1) Selection <sup>f</sup> (sampling), as applicable	x	x	x	x	x	x	
2) Determination <sup>g</sup> of characteristics, as applicable, by:	x	x	x	x	x	x	x
a) testing (ISO/IEC 17025)							
b) inspection (ISO/IEC 17020)							
c) design appraisal							
d) assessment of services							
3) Review <sup>h</sup> (evaluation)	x	x	x	x	x	x	x
4) Decision on certification	x	x	x	x	x	x	x
Granting, maintaining, extending, suspending, withdrawing certification							
5) Licensing (attestation <sup>i</sup> )		x	x	x	x	x	x
Granting, maintaining, extending, suspending, withdrawing the right to use certificates or marks							
6) Surveillance, as applicable by:							
a) testing or inspection of samples from the open market			x		x	x	
b) testing or inspection of samples from the factory				x	x	x	
c) quality system audits combined with random tests or inspections						x	x
d) assessment of the production process or service				x	x	x	x

Source: ISO/IEC GUIDE 67

It is recommended that evaluation of the most appropriate certification level and the scope of the scheme be undertaken.

The process of licencing, use and marking of plumbing materials and products is documented to some degree within the various reference documents. Due to the fragmented nature of the documents clear comprehension of the actual requirements is not clear. This is evident in the conduct of the WMCABs in the certification process. It is considered that having a single document would resolve a significant portion of ambiguity or missed requirements from many of the WMCABs. In addition the *own process* by the WMCABs has led to many discrepancies and inconsistencies amongst the WMCABs.

In the transition of the WMCS to the ABCB, the ABCB released a notice of direction regarding the product certification and documentary evidence requirements. The notice of direction reflected that detailed above. The requirement for the ABCB to issue the notice of direction occurred following a number of complaints between WMCABs as well as the accreditation body highlighting deficiencies in certification and that the *own process* was a catalyst to the issue.

It is recommended that a work program be established to set a clear and appropriate process of certification including the required documentary evidence to support the certification.

It is recommended that the testing of plumbing and drainage products and the accreditation of the test laboratories be further evaluated. It underpins the evidence of compliance with specifications. Consideration of the activities of the test labs and how they are accredited should be included made in the development of the new scheme. As an interim measure the requirement for NATA registration has been enforced.

## 6.4 Use of Certification Trade Marks and Marking

In accordance with the Rules for the WaterMark Certification Trade Marks the approved users are granted the rights to grant licences to Approved Users. Clause 4.2 of the Approved Certifier Agreement provides the rights for the WMCAB to grant the Approved User a licence.

Figure 31

## ELEMENTS OF COMPLIANCE AND ENFORCEMENT

### 4.2 Granting of licences

- (a) If a person applies to the Approved Certifier for a licence to use the WaterMark, the Approved Certifier will grant it a licence if it is satisfied that the applicant is capable of:
  - (i) in relation to Plumbing Products in connection with which use of the WaterMark is sought, providing such Plumbing Products certified as complying with Applicable Specifications;
  - (ii) complying with the terms of the Approved User Agreement; and
  - (iii) paying any fees or royalties for the licence of the WaterMarks by the due dates.
- (b) The Approved Certifier must enter into a written agreement with each Approved User that contains terms no less onerous than the Approved User Agreement and the Approved Certifier must ensure that the Approved User complies with all the terms of the Approved User Agreement.
- (c) If the Approved Certifier is no longer satisfied that an Approved User is capable of complying with the terms of the Approved User Agreement, the Approved Certifier must terminate its agreement with the Approved User
- (d) The Approved Certifier may only grant licences to Approved Users in accordance with the rights granted to it under clause 3.1 of this agreement.

Source: ABCB

Clause 4.2 of the Approved User Agreement provides conditions of use for the Approved User once granted a licence to use the WaterMark.

Figure 32

## ELEMENTS OF COMPLIANCE AND ENFORCEMENT

### 4.2 Conditions of Use

The Approved User must:

- (a) only apply the WaterMark on Plumbing Products that comply with Applicable Specifications;
- (b) not apply the WaterMark in a way that might be misleading or deceptive;
- (c) if requested by the Approved Certifier or ABCB, promptly submit for inspection samples of the Plumbing Products and materials on which it has applied the WaterMark;
- (d) keep and maintain accurate records and documents to show that it is complying with its obligations under this agreement;
- (e) if requested by the Approved Certifier or ABCB, promptly grant them access to its premises and/or records and documents (including copies of the records and documents) to see if it is complying with its obligations in relation to the use of the WaterMarks; and
- (f) provide all assistance and information as may be required by the Approved Certifier or ABCB in relation to the WaterMarks.

Source: ABCB

The above two clauses present the only conditions in relation to the granting and use of the WaterMark by stakeholders. There are no conditions for the use of the WaterMark by the WaterMark Management Body, WaterMark Administration Body, the WMCABs or JAS-ANZ.

The WaterMark represents an identification of the specific Australian plumbing and drainage materials and products certification scheme. To a limit degree, many of the stakeholders within the scheme will need to use the WaterMark for marketing or identification reasons such as on their website to identify the link to the scheme. It is understood that the use of the mark is for promotional purposes by stakeholders other than approved users and that these stakeholders would not use the mark on products.

Currently all stakeholders use the mark for marketing or identification purposes on their website as well as information brochures. The use of the WaterMark is currently used by many of the Approved Users for promotion of their product rather than the WMCS itself. In accordance with clause 4.2 of the Approved User agreement this use of the WaterMark is not approved. It is considered that provided the use of the WaterMark maintains the integrity and validity of the WaterMark and does not bring the WMCS into distribute, limiting the use of the WaterMark for product marking only is not considered appropriate where an enhanced although controlled brand awareness can be utilised.

As there are identified limitations in the approved use of the WaterMark, a further work program should be undertaken to establish the requirements of brand awareness and the appropriate level of use required by all stakeholders if any. The permitted use of the WaterMark as detailed in the outcomes of the work program is required to be included with any future modification to the trade mark rules.



## 6.5 Complaints and Enforcement

The complaints process for the scheme is not detailed within any WMCS reference document with the exception of dispute settlement when a WMCAB rejects an application to certify a plumbing material or product. The administration body has addressed over 100 technical enquiries, addressed over 350 general enquiries and processed 17 complaints in the initial six months of administering the WMCS. Dispute settlement is detailed within clause 6 of the rules for the WaterMark Certification Trade Marks.

*Figure 33*

### ELEMENTS OF COMPLIANCE AND ENFORCEMENT

#### 6 DISPUTE SETTLEMENT

- (a) If an applicant or Approved User is dissatisfied with a decision of an Approved Certifier to refuse to certify Products or to refuse to allow the use of the WaterMark and wants the Approved Certifier to reconsider its decision, it must do so in accordance with the review procedures of the Approved Certifier.
- (b) If an applicant or Approved User is still dissatisfied with such a decision of the Approved Certifier, it may, after it has exhausted all rights of review under the Approved Certifier's or the applicable JAS-ANZ's review procedures, have the decision of the Approved Certifier reconsidered by ABCB.
- (c) ABCB will publish the procedure for such appeals from time to time on its website. The procedure will allow a reasonable time for parties to provide relevant information and documents and to respond to material ABCB may take into account, for ABCB to inform itself about the issues by any means including commissioning tests or reports and for ABCB to notify the parties of its decision in writing. The parties must comply with ABCB's decision.

*Source: ABCB*

The previous administration provided clarity on the process surrounding the above clause. It is important to note that under this clause, only where a WMCAB has refused to certify a product. The clause does not cover conduct of stakeholders, misleading or effects on the integrity of the WMCS.

The previous process of dispute resolution is summarised as follows:

- Written appeal must be lodged with the Administration Body as well as the WMCAB within 30 days following receipt of final decision by the WMCAB.
- The applicant is to provide a deposit of an undisclosed amount to cover any costs of the appeal. If no deposit is received within 7 days will result in the appeal not being considered.
- The WMCAB is to provide the Administration Body the written grounds of its final decision.
- The applicant and WMCAB may lodge additional documents in support of the appeal
- The administration body may commission independent tests or reports to inform itself of the issues
- The administration body will convene a panel of 3 persons who will review the appeal for determination within 30 days.
- The panel may request appearance of the applicant and/or the WMCAB at the appeal date.
- The panel will make a decision on the appeal within 7 days of the determination.
- If the panel reject the decision of the WMCAB, the WMCAB must comply with its direction.
- If the panel decides to affirm the decision of the WMCAB the matter will be dismissed.
- The applicant or WMCAB may make corrections to the documents as may be needed.
- All correspondence in relation to the appeal must be given to the administering body, approved user and WMCAB.

Following review of the previous administrations records, no evidence was found of the appeals process being triggered.

The conduct of stakeholders, misleading or effects on the integrity of the WMCS may be considered as part of the Approved Certifiers Agreement clause 4 which details the approved certifier's obligations to follow the rules and to co-operate with ABCB to maintain the integrity, validity and ABCB's ownership of the WaterMarks. The compliance with the Approved Certifiers Agreement by the WMCAB can be governed by the ABCB but the actions of the Approved User are not completely

within the direct reach of the ABCB and require the WMCAB to take lead on the situation. This is reflected in the fact that the ABCB is not a party to the Approved User Agreement, only the WMCAB and Approved User are.

Complaints have been raised to the current administration of applicants who are seeking WaterMark certification shopping around for certification when a WMCAB rejects the application. There have been reports of certain applicants consulting multiple WMCABs until one does decide to certify the project. This process is considered to occur due to the WMCS having multiple certifiers (currently 10) and that with a greater division of the market share the WMCABs focus on obtaining the certification work rather than maintaining quality and protection of plumbing materials and products for public health.

Many of the complaints received are typically focused on inappropriate use of the trademark and the perceived passing off of plumbing materials and products to be certified within the WMCS. Other complaints raised with the current administration body are that the process of WaterMark certification is unclear, confusing and costly.

On the issue of perceived passing off of plumbing products and materials to be certified within the WMCS, further investigation by the administration body has found that many instances are due to the Approved Users not understanding the appropriate use of the WaterMark, the method of marking the product and consistency when the product is repackaged by a separate reseller.

It is apparent that many enquiries, complaints and enforcement matters are a result of confusion in how to achieve compliance and what is required under the vast array of reference documents. Many of the complaints occur from manufactures competitors as well as amongst the WMCABs themselves where they monitor each other's activities and the products certified. Means should be put in place to reduce the number of complaints and breaches by stakeholders within the WMCS.

The following outlines a series of suggestions and future work programs to achieve this:

- Consolidate the WMCS reference documents.
- Generate a uniform set of requirements for the process and documentation of plumbing materials and products certification including dispute settlement, and the non-conformity and/or recall of plumbing products.
- Within the consolidated WMCS reference documents, detail the oversight and powers of the WaterMark administration and management bodies in their capacity to maintain the integrity, validity and ownership of the WMCS.
- Provide clear divisions of responsibility and controls for complaints and enforcement handling of the following:
  - conduct of WMCABs,
  - the conduct of approved users,
  - the certification process,
  - the use of the WaterMark,
- Review of the number of WMCABs and the capacity for applicants to shop around for a certification decision. A means may be central reporting by WMCABs of all applicants and progress or final decision of the products certification. This may occur through an improved approved user registration where it includes details of applicants.
- Provide clear and measureable competencies and conduct of WMCABs including potentially a code of conduct for the certification of products and in particular conduct for when they know the applicant has approached other WMCABs with an undesirable decision. Other issues are provisions to discourage the practice of undertaking surveillance of the activities of competing CABs and reporting and/or making vexatious claims.
- Generate a protocol for communication amongst the WMCS stakeholders to address areas of concern, breaches and discrepancies within the WMCS.

## 6.6 Issues

- The WMCS includes 38 different reference documents for stakeholders to follow. Several include strict procedural requirements for product certification and others for the development of technical specifications. In addition to the documents, there are a number of dedicated roles and responsibilities required by the stakeholders detailed throughout the various documents. The fragmented structure, inconsistent language, duplication and contradictions across the many documents results in difficulty for many stakeholders to comply and maintain every element required for compliance.
- The roles and responsibilities for the various stakeholders within the scheme are fragmented amongst the reference documents resulting in omission of required duties.
- The requirement for products to be certified is considered confusing and difficult to determine as detailed in Provision A2.1 of the PCA. The issue is constantly subject to a number of general enquiries to the administration as well as many State and Territory administration enquiries.
- The risk assessment establishes if a product is part of the scheme as well as what certification level is required. The risk assessment documentation is over 15 years old and may not be in-line with current risk evaluation methods or align to any future requirements of product inclusion.
- The State and Territory administrations, although regulating the requirement for materials and products to be WaterMark certified, typically rely on local councils to inspect the installations where 5% to 100% of reported plumbing work is inspected or reviewed by dedicated plumbing administration inspectors and the licencing of plumbers is undertaken by a separate directorate within the State or Territory department. The State and Territory administrations do not actively focus on checking or questioning standard installations for compliance with WaterMark and rarely question the installing plumber. It has been commented that it is given that a WaterMarked product was installed and that there are few other alternatives.
- The current accreditation body has limitations in its capacity to undertake complete and appropriate surveillance of WMCABs as well as adherence to current reference documents. The accreditation body has drafted their own reference documents that are not enforceable within the WMCS and do not align to relevant reference documents. These compliance issues have led to a creep in the compliance and adherence of the WMCABs to the relevant reference documents and the use of all correct reference documents in their hierarchical order. Many WMCABs have raised concern regarding the cost of accreditation with respect to the value add and service provided by the current accreditation body.
- A number of WMCABs have presented conduct unbecoming of a WMCAB to industry, regulators as well as the WaterMark management and administrations. This has included vexatious complaints, and poor compliance with the rules.
- The certification process is fragmented within the reference documents as well as amongst WMCABs. The certification process has not been made consistent by the existing accreditation body. This has created difficulties in client expectations, costing, enforcement and consistency throughout the WMCS.
- The rules and agreements of the WaterMark trademark do not provide clear detail of appropriate use of the WaterMark outside of product marking. Use for advertising or general use of the WaterMark is not clear and potentially misused by approved users including some unapproved users.
- The WaterMark administration has established a complaints and enforcement process that requires further review and refinement. A mechanism to review and have action against the approved users is not possible under the current agreements. Public detail for the lodging of complaints and appropriate evidence of documents for establishing a complaint is to be made clear to the general public. The process should include a disputes settlement for each stakeholder. Provisions and review of repeat offenders is not provided for in the current agreements.

## 6.7 Recommendations

- It is recommended that the scheme reference documents be consolidated into a single document that is independent of the PCA and freely available to the public. The document should remain a primary reference document within the PCA. This should include consideration of the incomplete document unofficially known as the “Draft Consolidated Rules” which is a work in progress from the previous scheme administration.
- It is recommended that the roles and responsibilities for the various stakeholders within the scheme be consolidated and located within the single scheme reference document.
- It is recommended that an appropriate but simplified mechanism be generated to determine material or product inclusion within the WMCS. This may be as simple as water supply lines and waste traps or the material or products risk assessment being led by the WaterMark Administration. Consideration for excluding end of line products, systems and low risk materials and products should be determined through an additional dedicated study.
- It is recommended that a marketing and awareness campaign be generated for State and Territory administrations to deliver as well as marketing brochures and awareness for retailers and licenced plumbers to inform members of the general public on the requirements to install only WaterMark materials and products.
- It is recommended that the function of the accreditation be reviewed and either put to tender or controlled by the administration body where the WMCABs are to maintain their own independent accreditation to ISO/IEC Guide 65 (or ISO/IEC 17065) and the WaterMark administration body undertake periodic auditing of WMCABs certification process, documentation and finances.
- It is recommended that required competencies of WMCABs be established which can include appropriate skill set, training, qualifications, accreditation, comprehension of documents and the English language as well as public health protection awareness and code of conduct amongst WMCABs.
- It is recommended that a clear set of certification requirements including process and documentation be generated within the consolidated reference document that is to be followed by all WMCABs
- It is recommended that clear details on what each stakeholder can and cannot do with the WaterMark and what may be constituted as misuse of the WaterMark.

# CHAPTER 7.

## CONSULTATION

### 7.1 Consultation Activities

The ABCB has consulted broadly as part of this review leading up to the release of the Consultation Draft Report for public comment.

Consultation activities included:

- WMCAB Workshop, Canberra 10 July 2013
- Joint Industry Workshop, Sydney 21 August 2013
- Joint Industry Workshop, Melbourne 22 August 2013
- State and Territory Administrations Workshop, Melbourne 23 August, 2013
- State and Territory Administrations Workshop, Canberra 14 October 2013
- 17 x Industry Interviews, Sydney, Melbourne and via teleconference Sept – Oct 2013
- Interviews with WELS Team, Department of the Environment 2013
- Interviews with Building Policy Section, Department of Industry 2013
- WMCAB paper survey
- WM Approved User paper survey
- Stakeholder paper survey

### 7.2 Consultation Findings

#### 7.2.1 WMCAB Workshop – Key Points

- Consensus that the concept of the Scheme is sound as well as its commensurate national database, accreditation process, Scheme Rules and WMTS process (but they all require review).
- ABCB management and administration seen as a positive for the Scheme.
- The Scheme and the logo are well recognised.
- JAS-ANZ technical competence is a general concern.
- A sense that CABs see the ABCB (or action by the ABCB) as the “answer” to most of their concerns.
- Concerns about a lack of consistency between the CABs in relation to how they operate within the Scheme.
- A need for education and awareness to raise the profile of the Scheme to support greater compliance (particularly with the move off-shore of manufacturers and testing laboratories and the associated technical expertise).

#### 7.2.2 Joint Industry Workshops – Key Points

- Industry is strongly of the view that the national approach and mandatory nature of the Scheme should remain. However, enforcement must be strengthened to support the Scheme.
- The WaterMark brand is well regarded across the industry but there is an issue in relation to awareness at the consumer level.
- The standards set by WaterMark support health and safety of the consumer and confidence for installers.
- The transfer of the scheme administration to the ABCB has been a positive move.
- Industry would like to see WELS and WaterMark merged in some way to support better efficiency.
- Concerns about the relationship between the WMTS and Australian Standards.
- Clarity on the objective of Scheme is required as the basis of the Review.
- Risk assessment is required to ascertain products that should be in or out of the Scheme (once there is clarity of the Scheme’s objective).
- Rigor is required in the enforcement of compliance.

- Need for focus at point of sale to manage the on-line and international markets.
- Rigor and consistency required in the accreditation process.
- Concern that many of the standards were becoming dated and that the development of standards was being overly influenced by commercial considerations
- Concerns about the time and cost to get new and innovative products through certification process and to market.
- Concern about the competency, consistency and capability of JAS-ANZ, CABs and Laboratories.
- Inconsistency of product marking.
- Efficacy of the database.

### **7.2.3 State and Territory Administrations Workshops – Key Points**

#### ***What is Working Well with the Current Scheme?***

- Brand name recognition
- Confidence and support from both industry and regulators
- Framework is established
- Flowchart in PCA
- Level playing field
- Database / website
- Consolidated set of Rules
- Transfer of the Scheme to the ABCB

#### ***Issues with the Current Scheme***

- Enforcement at point of sale.
- Process for addressing complaints about CABs
- Timing
- How to resolve.
- Need to better manage the inconsistency of CABs.
- Need a more effective process to deal with failure of accredited products.
- WMTSs and whether they over-rule 3500 series?
- Product capture - what products are in and what are out of WaterMark?
- Risk assessment process is ineffective.
- WaterMark and WELS need to be integrated in some way.
- Backflow requirements are not properly considered.
- Remnant marking is not suitable.
- WMTSs becoming Standards
  - What has happened to the process?
  - Are the sunset clauses still in place for WMTSs?
- WMTSs need to be reviewed and better organised.
- Process to obtain a WMTS is slow and inefficient.
- Lack of expertise in JAS-ANZ and CABs.
- Implications for “plug-in” devices and how to manage.
- When developing an ATS, where AS 3500 does not cover installation, installation matters need to be resolved somehow.
- Plumbers know they are required to comply with the PCA and WaterMark but building practitioners do not and will import containers of non-compliant product and then expect plumbers to install.
- Requires increased awareness of WaterMark requirements for building practitioners (and government procurement agencies that have similar expectations of plumbers).
- PCA needs better articulation of the fact that alternative solutions still need to use WaterMarked products because the alternative solution is with the design of the installation not the component products.

#### ***Other Points***

- ABCB could prepare training material on annual PCA amendment for Admins to coordinate dissemination. (Some Admins undertake substantive awareness/training of plumbing practitioners, generally ‘piggybacking’ events rolled out by the utilities/master plumbers/other industry associations).
- The WELS complaints procedure may be worthy of investigation in relation to a more effective complaints mechanism.

- Once established, the ABCB technical panel should consult with the PCC
  - Will the technical panel consult with WS14 (installation committee responsible for AS3500)?
- In determining the scope of product captured by the Scheme, high risk product is product that:
  - is in contact with drinking water
  - contains water under pressure in buildings (product containing water that is not under pressure is considered to be low risk).
- Revised WaterMark Rules need to be clear and concise so they are not open to interpretation.

#### 7.2.4 Industry Interviews – Key Points

ISSUES	COMMENTS
<b>A. WATERMARK ISSUES</b>	
<b>A1. General Issues</b>	
A1.1 Lack of awareness of the WMCS and plumbing regulatory framework	The perception of the industry is that the general public is largely unaware of the WMCS. The plumbers are generally aware of the WMCS but not the regulatory framework. The referenced standards are much better known than the PCA. The manufacturers/suppliers are the most informed group and the industry relies on them to supply the appropriate products.
A1.2 Support for WMCS as a national scheme to continue.	The industry overwhelmingly supports the WMCS for a variety of reasons, mostly about limiting liabilities and having a level playing field.
A1.3 Support for ABCB as the administrator and manager of the WMCS	The recent change of manager and administrator of WMCS is generally seen as a positive move and most people expect the scheme to work better under new management.
A1.4 Where to go when there are problems with WMCS	Both industry and the general public do not know where to go to get information when there are problems with WMCS. For example, the ABCB public database on watermark-listed products is generally not known, even in industry circle.
<b>A2. Technical Issues</b>	
A2.1 Concerns with current 'policing' of the system	For those who are involved with WMCS, the general feeling is that there is not sufficient supervision of the CABs, there are variations in the standard interpretation and assessment, testing regime etc. among the CABs, resulting in CABs 'shopping' for easier passage through WMCS
A2.2 Concerns with the lack of testing of systems, acceptance of overseas test data and capabilities of some laboratories	While WMCS requires components to be tested, there is no such requirement for the whole system. There are also concerns expressed with the acceptance of overseas test data and capabilities of some laboratories both in Australia and overseas to carry out certain tests.
A2.3 Industry ignorance of the risk assessment process of MP78	We have met nobody who claims that he/she knows, understands or uses MP78. It appears that Table A2.1 of the PCA and AS/NZS3500 are the main source of information in deciding products that require authorization.
A2.4 Concerns about the effectiveness of the current QA requirements for Level 1 certification	There are concerns that the current method of annual factory inspection allowed under WMCS may not be adequate as the QA measure.

<b>B. NON WATERMARK ISSUES</b>	
B1. Concerns about non-Watermark products	Most firms will not use Non-WaterMarked products because of the potential consequences of failure. Most firms will install non-Watermark products if requested to do so but will not accept responsibilities if problems arise.
B2. Concerns about plumbers education	There appears a gradual reduction in the level of training provided for plumbers by educational institutions. Some firms provide extra in-house training to ensure that the plumbers will work correctly.
B3. Concerns about the level of inspection provided by the plumbing regulatory authorities	It appears that only 5% to 15% of the plumbing works are inspected. The amount and method of inspection vary with States and Territories.
B4. On Water Efficiency Labeling (WEL)	WELS is better known than WMCS because there was more publicity for it. WELS point of sale legislation is recognised as a better method for control. Many are also in favour of combining the two schemes when appropriate.
B5. Clearer and more equitable share of responsibility between the parties	Current regulation puts the responsibility at the point of installation. It is felt that too much responsibility/control is placed on the plumbers. Designers of the system and suppliers should also have their responsibility defined.

### 7.3 List of Stakeholders Consulted

The following stakeholders were consulted during the workshops and interviews.

#### 7.3.1 Industry

Norm Anderson – NSG Plumbing  
Warren Anderson – Network Plumbing  
Michael Benton – Benton’s Plumbtec  
Glenn Bines – Reliance Worldwide - Auspex  
Elizabeth Bryce – International Standards Certification  
Michael Calvert – Plumbers Supplies Co-Op  
Ian Carmody – Con-Serv Corporation Aust  
Carmel Coate – PPI Group  
Steve Cummings – GWA Group  
Iain Ewing – Qld Brassware Association  
Tim Fisher – PPI Group  
Peter Flynn – Reliance  
Evan Foster – PPI Group  
Ken Gardiner – Master Plumbers Australia  
Justin Geale – Boone & Willard Plumbing  
Jeremy Gledhill – Reliance Worldwide - Auspex  
Stephen Godfrey – CDC Plumbing & Drainage  
Dustin Haass – Applied Installations  
Jennifer Harwood – Standards Australia



Mark Heathcote – PIPA  
Stuart Henry – PPI Group  
Brett Hyland – NATA  
Kate Jennings – ACO  
Peter Jensen – Worboys  
Dennis King – D R King Plumbing  
Alan Law – Rheem  
David Lawrence – Housing Industry Association, NSW  
Graeme Little – Little Holland  
Peter McLennan – Backflow Prevention Association of Aust  
Neil McPherson – WaterMark Product Solutions  
Peter Meredith – Master Builders Association of NSW  
Richard Michaels – Zetco Valves  
Scott Michaels – Zetco Valves  
Raymond Ng – SAI Global  
Terry Nguyen – Prove Standards & Engineering  
Phillip Nichols – International Copper Association  
Lorenzo Poletto – Chiswick Plumbing  
Gavin Rowson – Wood & Grieve Engineers  
Steve Shenton – PPI Group  
Stephen Smith – CSIRO  
Gennaro Sposato – Hydroflow Distributors  
Terry Stewart – Benton's Plumbtec  
Adam Stingemore – Standards Australia  
Hugh Wakeham – Wilson Industries  
Jianwen Wang – Dek's Industries  
Alan Whittle – PIPA  
David Wood – Association of Hydraulic Services Consultants Aust

### **7.3.2 JAS-ANZ and WMCABs**

James Galloway – JAS-ANZ  
Steve Keeling – JAS-ANZ  
Peter Lee – JAS-ANZ  
Simon Fraser – SAI Global  
Paul Greig – Australian Certification Services  
Sam Guinidi – NCS International  
Osvaldo Marques – SAI Global  
Ivan Marsic – Australian Gas Association  
Herve Michoux – Global-Mark  
Luke Owen-Jones – CertMark Australasia

John Prasad – ApprovalMark International  
Glenn Tate – IAPMO R&T Oceana  
Amit Verma – International Standards Certification  
Chris Wealthy – Australian Gas Association  
Adam Wegmann – IAPMO R&T Oceana

### **7.3.3 Government**

Robert Beard – SA  
Phil Denham – Qld  
Mark Fraser – ACT  
Steve Green – Vic  
Paul Harris – Vic  
Alan Humphreys – Tas  
Paul Makrievski – Vic  
Steve Popple – NT  
Mike Read – WA  
Jim Sebbens – NSW  
Frank Spinelli – NSW  
Bruce Edwards – Department of the Environment  
Peter Hughes – Department of the Environment  
Gary Davis – Department of Industry  
Detlef Jupertz – Department of Industry  
Lisa Koch – Department of Industry  
Greig Ryan – Department of Industry

# REFERENCES

Rules for the WaterMark Certification Trade Marks, as approved by the Australian Competition and Consumer Commission

Approved Certifier Agreement for the WaterMark Certification Trade Marks

Approved User Agreement for the WaterMark Certification Trade Marks

National Construction Code – Volume Three – Plumbing Code of Australia (PCA)

SAA MP78:1999 Manual for the assessment of risks of plumbing products

WaterMark Schedule of Specifications – located on the ABCB website ([www.abcb.gov.au](http://www.abcb.gov.au))

WaterMark List of Exempt Products – located on the ABCB website ([www.abcb.gov.au](http://www.abcb.gov.au))

List of Terminated Licences – located on the ABCB website ([www.abcb.gov.au](http://www.abcb.gov.au))

Procedures for Certification of Plumbing and Drainage Products – located on the ABCB website ([www.abcb.gov.au](http://www.abcb.gov.au))

Procedure for Developing Technical Specifications – located on the ABCB website ([www.abcb.gov.au](http://www.abcb.gov.au))

ISO/IEC Guide 65 General requirements for bodies operating product certification systems - available from your national standards writing body

IAF GD 5 Guidance on the application of ISO/IEC Guide 65

MP 52-2005 Manual of authorization procedures for plumbing and drainage products - available from Standards Australia or Standards New Zealand

AS 5200.000-2006 Technical specification for plumbing and drainage products - Procedures for certification of plumbing and drainage products - available from Standards Australia or Standards New Zealand

JAS-ANZ Procedure 3 - Rules of procedure governing the use of the accreditation symbol

JAS-ANZ Procedure 11 - Rules of procedure governing accreditation

JAS-ANZ Policy 03/10 - Interpretation and Guidance on the application of MP 52-2005 – Manual of authorisation procedures for plumbing and drainage products (WaterMark Certification Scheme (WMCS)) and AS 5200.000-2006: Technical specification for plumbing and drainage products - Procedures for certification of plumbing and drainage products

JAS-ANZ Policy 02/11 - Arrangements for the Transition from IAF ML2:2004 to IAF ML2:2011

Enclosure 1 for Policy 02/11 - IAF ML2:2011 – General Principles on the use of the IAF MLA Mark

Enclosure 2 for Policy 02/11 - IAF PR 4:2010 – Structure of IAF MLA and Endorsed Normative Documents

Enclosure 3 for Policy 02/11 - IAF PL 3 - Policies and Procedures for Expansion of the Scope of the IAF MLA

JAS-ANZ Policy 1/12 - WaterMark Certification Scheme (WMCS) – Maintenance of WaterMark Level 2 Certificates of Conformity

JAS-ANZ Policy 5/13 - Arrangements for the Transition from ISO/IEC Guide 65 to ISO/IEC 17065

Enclosure 1 for Policy 5/13 - IAF ID ???: 2012: Informative Document for the Transition of Accreditation of Product Certification Bodies to ISO/IEC 17065:2012 from ISO/IEC Guide 65:1996

Enclosure 2 for Policy 5/13 - JAS-ANZ Form 49 – ISO/IEC 17065 Checklist

JAS-ANZ Procedure 5 - The conduct of accreditation assessments

JAS-ANZ Advisory Note 1-12 - WaterMark Certification Scheme (WMCS) - Certification of products and materials where there is no appropriate specification

ABCB Notices of Direction:

NoD 2013/1.0 – WaterMark Certification Process

NoD 2013/2.0 – Reference Documents

NoD 2013/3.0 – WaterMark Product Database

NoD 2013/4.0 – Update of WaterMark Technical Specifications

NoD 2013/5.0 – Maintenance of approved user list

NoD 2013/7.0 – Financial Arrangements

NoD 2013/10.0 – ATS 5200.033

NoD 2013/12.0 – WaterMark Risk Assessment Process

*Future Administration of the WaterMark Certification Scheme – Business Case*, KPMG, December 2010

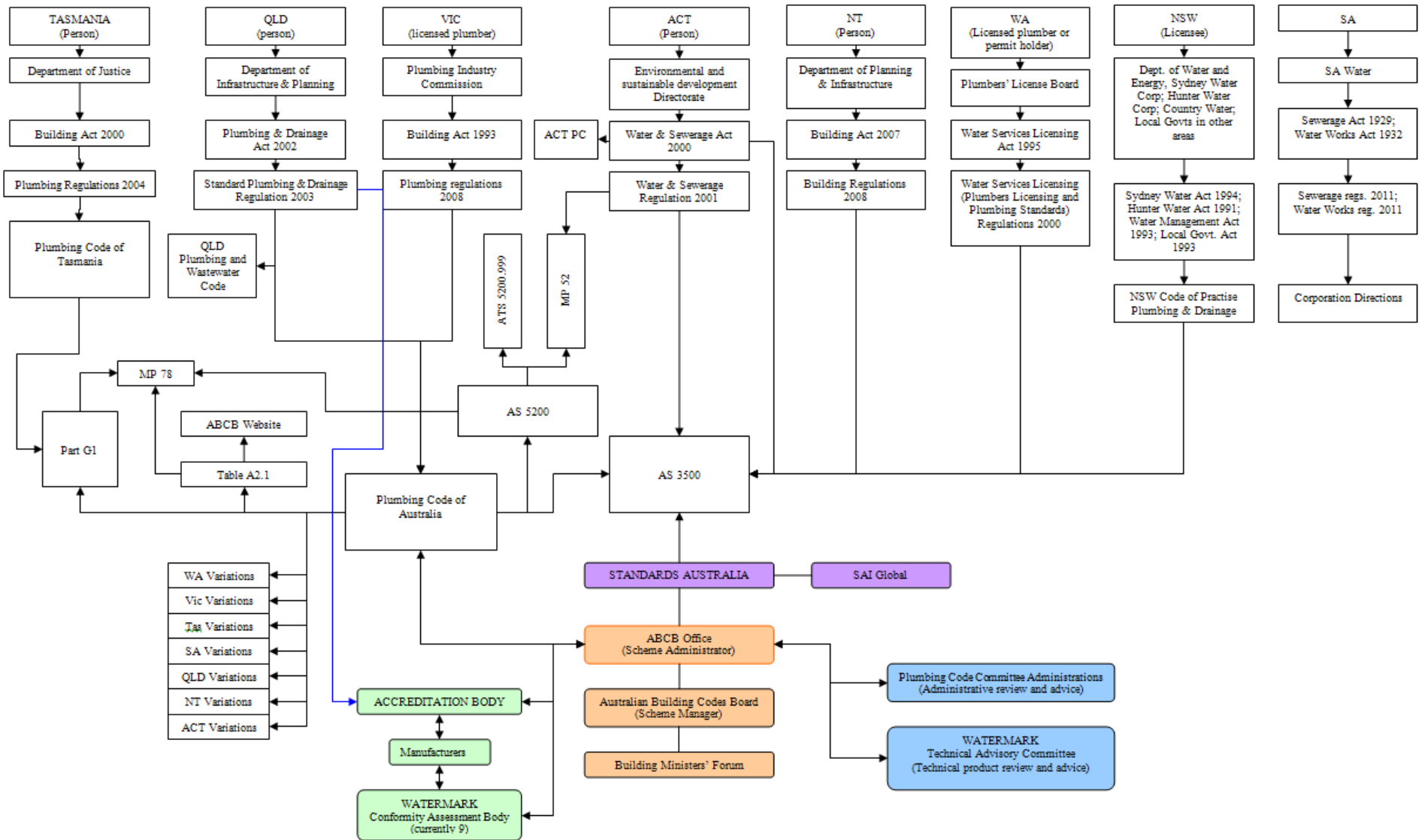
*Future Governance and administration of the WaterMark Certification Scheme*, The Allen Consulting Group, October 2009

*Linkages between the WaterMark and Water Efficiency Labelling and Standards (WELS) Programs*, George Wilkenfeld and Associates Pty Ltd, January 2014

*Managing the Flow – Regulating plumbing product quality*, House of Representatives Standing Committee on Environment and Heritage, September 2007

# APPENDIX

## Appendix A – Legislative Flow Chart of Plumbing Regulations



## Appendix B – JAS-ANZ WMCAB Accreditation to Specifications

Standards list from WaterMark Product Database	Licences	ACS	AGA	AMI	BSI	CMA	GM	IAPMO	ISC	NCSI	NSFI	SAIG
AS 1172.1:1993		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 1172.1:2005		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 1172.2:1999		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 1357.1:2004		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 1357.1:2009		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 1357.2:1998		☒	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 1357.2:2005		☒	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 1432:2004		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 1589:2001		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 1628:1999		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 1631:1994		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☒
AS 1646.1:2000		☑	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
AS 1646.2:2000		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
AS 1646.3:2000		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
AS 1646.4:2005	Licence issued	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
AS 1646:2007		☒	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 1910:2004		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 2419.2:1994		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 2419.2:1996		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 2419.2:2009		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 2492:1994	Licence issued	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
AS 2537:1994		☑	☑	☑	☑	☑	☑	☑	☑	☒	☑	☑
AS 2638.1:2002		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 2638.1:2011		☒	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 2638.2:2002		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 2638.2:2011		☒	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 2638.2:2006		☒	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 2887:1993		☒	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 3494:1997		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 3495:1997		☑	☑	☑	☒	☑	☑	☑	☑	☑	☑	☑
AS 3498:2003		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 3498:2003/AMDT1		☒	☑	☑	☑	☑	☒	☑	☑	☑	☒	☑
AS 3498:2009		☒	☑	☑	☑	☑	☒	☑	☑	☑	☒	☑
AS 3517: 2007		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 3517:1995		☒	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 3565:2004		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
AS 3571:1989		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 3688:1994		☒	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 3688:2005		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 3691:1989		☒	☒	☒	☑	☑	☒	☒	☒	☒	☒	☑
AS 3795:1996		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 3952:2002		☒	☒	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 3982:1996	Licence issued	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
AS 3996:1992		☑	☒	☑	☑	☑	☒	☒	☑	☑	☑	☑
AS 3996:2006		☒	☒	☑	☑	☑	☒	☒	☑	☑	☒	☑
AS 4032.1:2002		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 4032.1:2005		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 4032.2:2002		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 4032.2:2005		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 4032:2002		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
AS 4139:2003		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☒
AS 4176.2:2010		☒	☒	☑	☒	☒	☒	☒	☒	☑	☑	☑
AS 4176.3:2010		☒	☒	☑	☒	☒	☒	☒	☒	☑	☑	☑
AS 4176.8:2010		☒	☒	☑	☒	☒	☒	☒	☒	☑	☒	☒
AS 4176:1994		☒	☑	☒	☑	☑	☑	☑	☑	☒	☒	☒
AS 4181:1994		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 4181:1999		☒	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 4441:2003		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
AS 4794:2001		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS 4795.1:2011		☑	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
AS 4795.2:2011		☑	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
AS 4796:2001		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS 5081:2008		☑	☒	☒	☒	☒	☒	☒	☒	☑	☒	☑

AS 5082.1-2007		☒	☒	☒	☑	☒	☑	☒	☒	☒	☒	☒
AS 5082.2-2007		☒	☒	☒	☑	☒	☑	☒	☒	☒	☒	☒
AS 5200.007-2008		☑	☒	☑	☒	☒	☒	☑	☒	☒	☒	☒
AS 5200.037.2-2008		☑	☒	☑	☒	☒	☒	☑	☒	☑	☒	☑
AS 5200.053-2008		☑	☒	☑	☒	☒	☒	☑	☒	☑	☒	☑
AS 5200.458-2008		☒	☒	☒	☒	☒	☒	☒	☒	☑	☒	☒
AS 5830.1-2012		☑	☒	☒	☒	☒	☒	☒	☒	☒	☒	☑
AS/NZS 1167.1:2005		☒	☒	☒	☒	☒	☒	☒	☒	☑	☒	☒
AS/NZS 1254:2010		☒	☒	☑	☒	☑	☒	☑	☑	☑	☒	☑
AS/NZS 1260:2002		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS/NZS 1260:2009		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS/NZS 1477:1999		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS/NZS 1477:2006		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS/NZS 1730-1996		☒	☒	☑	☒	☑	☒	☑	☒	☒	☒	☑
AS/NZS 2023:1995		☒	☒	☑	☒	☒	☒	☒	☒	☒	☒	☒
AS/NZS 2280:2004		☑	☒	☑	☑	☑	☑	☑	☑	☑	☒	☒
AS/NZS 2492:2007		☑	☑	☑	☑	☑	☒	☑	☑	☑	☑	☑
AS/NZS 2537.1:2011		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☑
AS/NZS 2537.2:2011		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☑
AS/NZS 2642.1-2007		☒	☒	☒	☑	☒	☒	☑	☑	☒	☒	☒
AS/NZS 2642.2:1994		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS/NZS 2642.2:2008		☒	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS/NZS 2642.3:1994		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS/NZS 2642.3:2008		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS/NZS 2845.1:1998		☑	☒	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS/NZS 2845.1:2010		☒	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS/NZS 3497:1998		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS/NZS 3499:1997		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS/NZS 3499:2006		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS/NZS 3500:2003		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
AS/NZS 3518:2004		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS/NZS 3662:1996		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS/NZS 3662:2005		☒	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS/NZS 3718:2003		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS/NZS 3718:2005		☒	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS/NZS 3879:1995		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS/NZS 3879:2006		☒	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS/NZS 3982-1996		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS/NZS 4129:2000		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS/NZS 4129:2008		☒	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS/NZS 4130:2003		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS/NZS 4130:2009		☒	☒	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS/NZS 4130-209		☒	☒	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS/NZS 4327:1995		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS/NZS 4401:1999		☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS/NZS 4401:2005		☒	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS/NZS 4401:2006		☒	☑	☑	☑	☑	☑	☑	☑	☑	☒	☑
AS/NZS 4441:2008		☑	☑	☑	☒	☑	☑	☑	☑	☑	☑	☑
AS/NZS 4765:2000		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS/NZS 4765:2007		☒	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
AS/NZS 4936:2002		☑	☑	☑	☑	☒	☑	☑	☑	☑	☑	☑
AS/NZS 4999:2003		☑	☒	☑	☒	☒	☒	☒	☑	☑	☒	☑
AS/NZS 4999:2006		☒	☒	☑	☒	☒	☒	☒	☑	☑	☒	☑
AS/NZS 5065:2005		☑	☒	☑	☒	☑	☑	☑	☑	☑	☒	☑
AS/NZS 7671:2010		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
AS/NZS ISO 17025:1999		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
AS/NZS ISO 17025:2005		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
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AS/NZS ISO 9000:1994		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
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ATS 5200.004:2005		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
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ATS 5200.014:2004		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
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ATS 5200.501-2011		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ATS 5200.999:2006		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
BSI EN 877:1999		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
EN 13598.1:2003		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
EN 295:1992		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

ISO 15874.1:2003		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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ISO 15874.3:2003		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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ISO 7682:2003		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ISO/IEC Guide 76: 2004		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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SA MP 52:2001		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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WMTS004:2013		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WMTS504:2013		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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WMTS509:2013		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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CAB scope of accreditation includes this specification

CAB scope of accreditation does not include this specification

## Appendix C – NATA Registered Laboratory Accreditation to Specifications

Standards list from WaterMark Product Database	Licences issued	CSIRO	ALS Laboratory Group Industrial	Veolia Water Operations	GSA Industries	Water Corporation of Western Australia	Itron	University of South Australia	Sydney Mechanical testing Laboratory	Plumbing Testing Laboratory	Philmac	Queensland testing Laboratory	Australian national testing Laboratories	PROVE Standards & Engineering	Caroma Industries	RAK Ceramics	Vipac Engineers & Scientists
AS 1172.1:1993		✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✓	✓
AS 1172.1:2005		✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✓	✓
AS 1172.2:1999		✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✓	✓
AS 1357.1:2004		✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 1357.1:2009		✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 1357.2:1998		✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
AS 1357.2:2005		✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
AS 1432:2004		✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
AS 1589:2001		✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
AS 1628:1999		✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
AS 1631:1994		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 1646.1:2000	N	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 1646.2:2000	N	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 1646.3:2000	N	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 1646.4:2005	Y	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 1646-2007	Y	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 1910:2004		✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 2419.2:1994		✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
AS 2419.2:1996		✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
AS 2419.2:2009		✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
AS 2492:1994		✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
AS 2537:1994		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 2638.1:2002		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 2638.1:2011		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 2638.2:2002		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 2638.2:2011		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 2638.2-2006		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 2887:1993		✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 3494:1997		✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 3495:1997	Y	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 3498:2003		✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
AS 3498:2003/AMDT1		✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
AS 3498-2009		✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
AS 3517: 2007	Y	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 3517:1995	N	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 3565:2004		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 3571:1989	N	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 3688:1994		✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
AS 3688:2005		✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
AS 3691:1989	N	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 3795:1996	Y	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 3952:2002		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 3982:1996		✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 3996:1992	N	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 3996:2006	N	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 4032.1:2002		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓
AS 4032.1:2005		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓
AS 4032.2:2002		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓
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AS 4032:2002	N	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 4139:2003	N	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 4176.2:2010	Y	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 4176.3:2010	Y	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 4176.8-2010		✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
AS 4176:1994		✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
AS 4181:1994	N	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AS 4181:1999	Y	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗





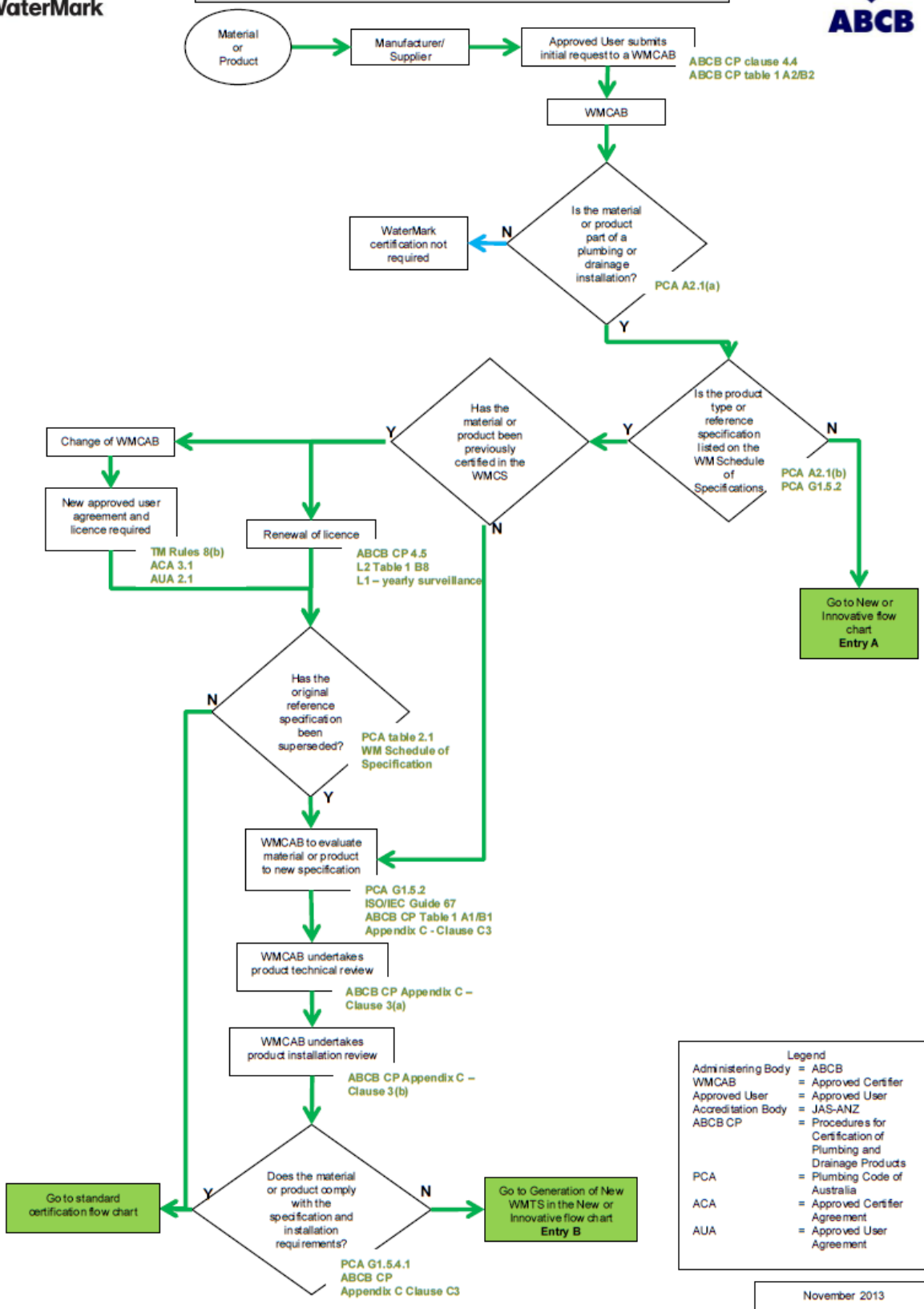
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ATS 5200.999:2006	N	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
BSI EN 877:1999	N	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
EN 13598.1:2003	N	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
EN 295:1992	N	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
ISO 15874.1:2003	Y	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
ISO 15874.2:2003	Y	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
ISO 15874.3:2003	Y	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
ISO 15874:2003	N	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
ISO 7682:2003	N	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
ISO/IEC Guide 76: 2004	N	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
PCA 2004	N	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
SA MP 52:2001	N	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
SA MP 52:2005	Y	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
WMTS004:2013	N	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
WMTS504:2013	N	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
WMTS508:2013	N	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
WMTS509:2013	N	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
WMTS510:2013	N	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
WSA 107	N	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
WSA 109	N	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒

- NATA has granted Test Lab full scope of accreditation to this specification
- NATA has granted Test Lab partial scope of accreditation to this specification
- NATA has not granted Test Lab accreditation to this specification
- NATA has not granted accreditation for these specifications on which licences have been granted

## Appendix D – Process of Material and Product Certification

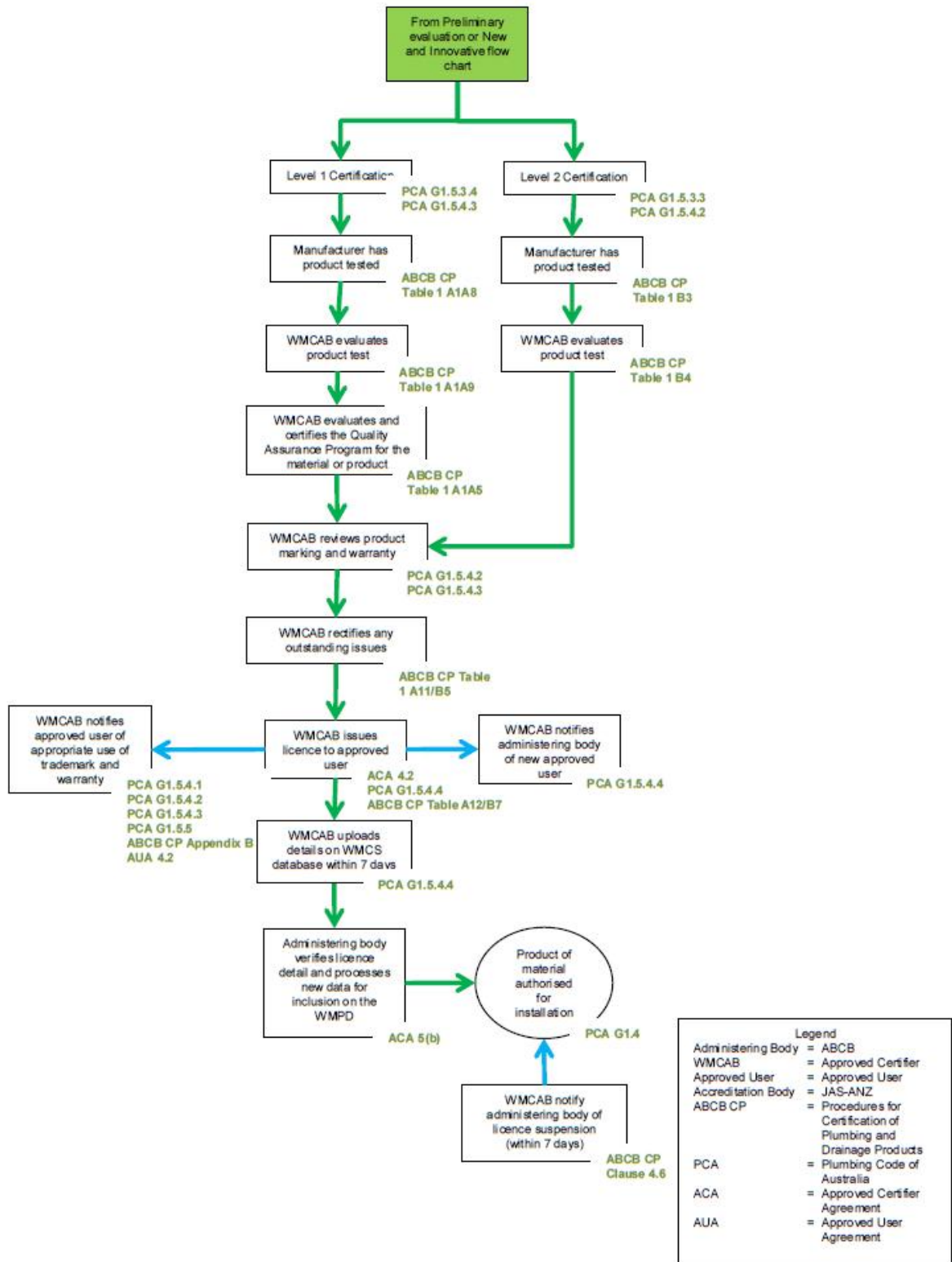


### WaterMark Certification Preliminary Evaluation Flow Chart



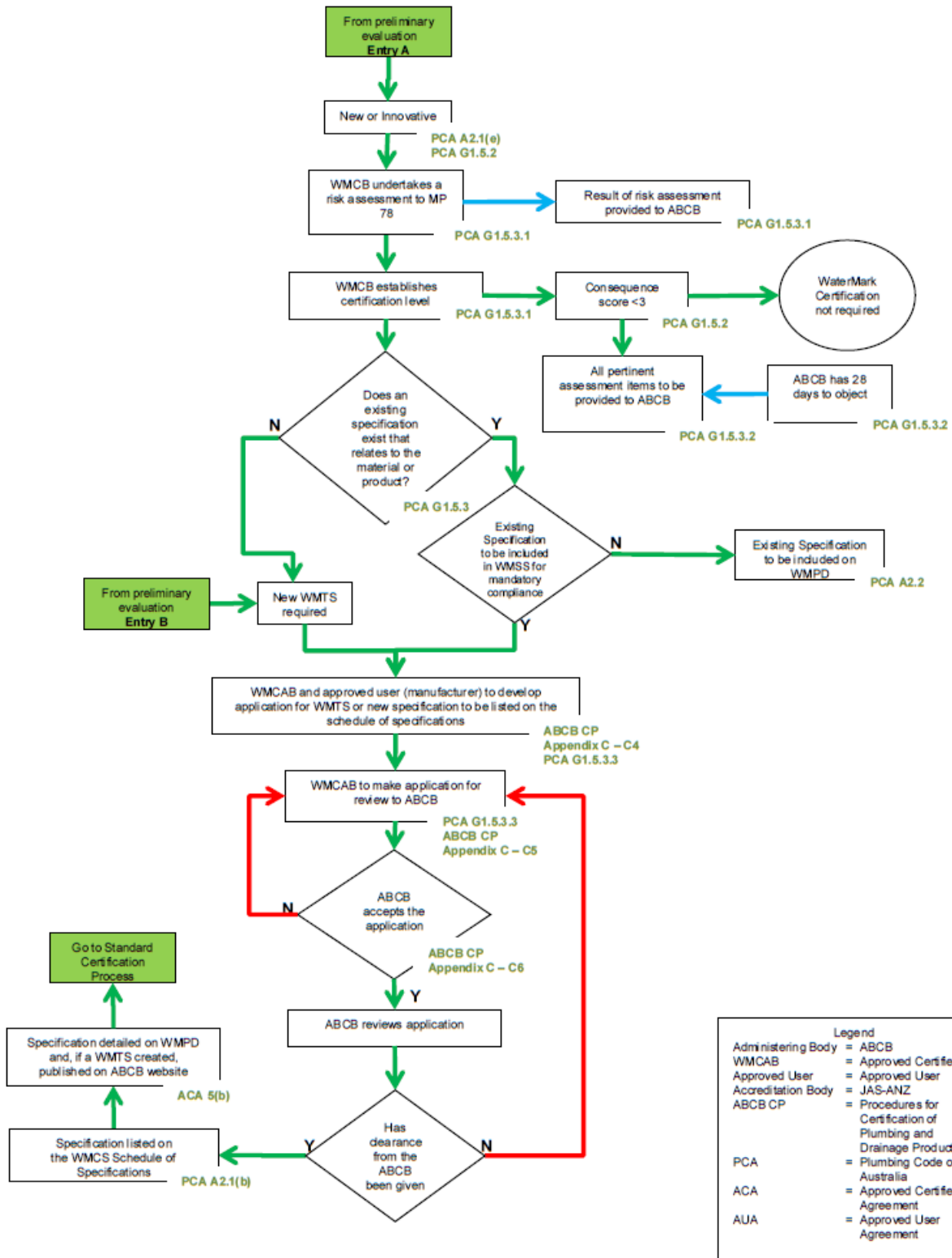


# WaterMark Standard Certification Flow Chart



November 2013





## Appendix E – Other Certification Scheme Models

### Introduction

This report provides information and the history of a select number of industry certification schemes that operate throughout Australia. The objective of this report is to provide a better idea of how other certification schemes are operated and provide direction and working examples for the Australian Building Codes Board (ABCB) CodeMark and WaterMark Certification Schemes.

### Background

A Certification Trade Mark (CTM) shows that a manufacturer or tradesperson's goods or services are certified to meet particular standards.

The Standards most commonly certified against are:

- quality
- content
- method of manufacture
- geographic origin

A CTM will usually be used on the goods or services of different traders, not just on those of one particular trader.

### Certification Trademark Rules

The rules for the use of a CTM must specify as a minimum (stated on the IP Australia website):

- the standards that goods or services must meet
- how it will be decided if the standards have been met
- the requirements an approved certifier must meet
- the requirements the owner of the CTM, or an approved user, must meet
- any other requirements for the use of the CTM
- the procedure for resolving a dispute about whether goods or services meet the certification standards, or about any other issue regarding the CTM.

### The Role of the ACCC

#### *Assessing certification trade marks*

The Australian Competition and consumer Commission's (ACCC) role involves assessing and approval of the rules for the use of CTMs. The ACCC's assessment includes:

- assessing the requirements that goods/services/persons must meet in order to be eligible to have a CTM applied to them;
- assessment of the proposed process by which compliance with certification requirements will be judged and
- examination of the rules to ensure they are not in themselves anti-competitive or misleading or deceptive.

### *Certification trade mark process*

- Businesses wishing to register a CTM must first apply to the Registrar of Trade Marks at IP Australia. As part of the CTM application process the requesting business must also provide a set of rules on how to use the CTM. These rules are to be filed with the Registrar with the application or shortly thereafter.
- The Registrar then assesses the CTM application against the general trade mark requirements. If the application complies with the mandatory requirements, the registrar sends it (along with the CTM rules) to the ACCC for consideration.

When the CTM rules are received by the ACCC from the Registrar of Trade Marks:

- the ACCC issues an initial assessment to CTM owners giving its preliminary view on whether or not the test in the Trade Marks Act is satisfied.
- this initial assessment is advertised by the Registrar in the Official Journal of Trade Marks.
- the CTM owner or any other person who objects to the initial assessment have one month to lodge a written submission with the ACCC and/or request the ACCC to hold a conference to make an oral submission.
- after holding a conference (if one is called) and considering any written submissions, the ACCC issues a final assessment to the CTM owner and notifies the Registrar and any interested parties of its decision.
- a copy of the CTM certificate and CTM rules certified by the ACCC is returned to the Registrar.

## **Australian Made Australian Grown (AMAG)**

### *About Australian Made*

The Australian Government created the Australian Made certification trade mark as part of its Australian Made, Australian Grown Campaign promoting Australian made products in local and export markets.

The Australian Made, Australian Grown (AMAG) CTM is administered by the Australian Made Campaign Limited (AMCL). The AMCL is a not-for-profit public company established in 1999 by the Australian Chamber of Commerce & Industry (ACCI) and the network of state and territory chambers of commerce, with the cooperation of the Federal Government.

AMCL is not a government department and no government funding is received for its core operations, which are licensing companies to use the logo and promoting Australian products both in Australia and overseas.

The Federal Government transferred ownership of the CTM to AMCL via a Deed of Assignment and Management in 2002, which outlines the strict conditions under which AMCL may administer the CTM.

The AMAG CTM is a certification trade mark, registered with the Federal Government, and with a strict set of rules (Code of Practice) governing how it can be used. Products must be registered with AMCL and must meet the criteria in the Code of Practice to use the CTM.

### *What Are They Trying to Achieve?*

- provide information to licensees of the Australian Made, Australian Grown Campaign on their rights and obligations to ensure the consistent, correct usage of the Australian Made, Australian Grown logo;
- build consumer confidence that goods promoted in association with the Australian Made, Australian Grown CTM comply with established legislative consumer information and country of origin labelling standards and promote the benefits of buying Australian goods;
- raise the domestic and international profile of goods that are produced in Australia.

## *Structure*

The AMCL is governed by a Board of Directors which is elected by its Members which consists of the Australian Chamber of Commerce and Industry (ACCI) the State and Territory chambers and the National Farmers Federation. This Board of Directors then reports to the Department of Industry regarding any changes they may wish to make.

## *Scheme Rules*

Attached below is the AMAG's Code of Practice containing the rules and regulations for the information of licensees and consumers. This document can also be found online at IP Australia's website under the AMAG scheme information page.

## *How Much Does It Cost?*

The campaign to promote and administer the AMAGCTM is not for profit and funded by the licence fees businesses pay to use the logo. The campaign is not funded by Government.

- The annual licence fee is based on the projected sales over the next 12 months of the products registered to use the CTM. As of July 1 2014 this format will be changed and fees will depend on exact sales figures from the previous 12 months.
- The minimum fee is \$300 plus GST for annual sales up to \$300,000.
- For annual sales over \$300,000 and up to \$20 million, the fee is \$1 for every \$1000 of sales - plus GST.
- Where annual sales exceed \$20 million, the licensee fee will be \$20,000 plus 20 cents for every \$1000 over \$20 million, up to a maximum fee of \$25,000 (plus GST).

## **Woolmark**

### *About Woolmark*

The Woolmark Company is the global authority on Merino and also the world's best-known textile fibre brand. The primary objective is to provide consumers with a guarantee of fibre content as well as quality assurance.

The Woolmark Licensing Program offers three different brandings and standards for products to be assessed against. In addition to the Woolmark logo for 100% pure wool, the Woolmark Company also provides logo for 50-99% wool (Woolmark Blend) and 30-49% wool (Wool Blend) with each of the CTM's a slight variation on the original (see below).

### *What Are They Trying to Achieve*

The Woolmark Company operates a global licensing program which enables Woolmark licensees to use one of The Woolmark Company's CTM's as an independent quality endorsement on the licensee's products.

The Woolmark CTM denotes that the products bearing the mark are made according to guidelines set out by the Australian Wool Research and Promotion Organisation that include the material content, mode of manufacture, treatment, quality, technical performance, style or other characteristics.

The Woolmark Licensing Program ensures that any product bearing the Woolmark CTM meets strict wool content and quality and performance criteria based on the exacting demands of today's customers.

Each of their three main brands – Woolmark, Woolmark Blend and Wool Blend – are licensed separately.

### *Structure*

The Woolmark Company and its affiliates own the Woolmark CTM. The Woolmark Company Pty Ltd is a subsidiary of Australian Wool Innovation Limited, a not-for-profit company owned by more than 25,000 Australian woolgrowers.

### *Rules*

Attached below is a copy of the Rules for Woolmark Scheme which contains all of the rules and regulations for the scheme for the benefit licensees and consumers. This document can also be found online at IP Australia's website under the Woolmark scheme information page.

## **TCA**

### *About TCA*

Transport Certification Australia Limited (TCA) was established by government agencies, representing State, Territory and Australian governments, as a company limited by guarantee established under the Corporations Act (Cth).

### *What are they trying to achieve*

- TCA's vision is to be recognised as the Australian leader in the provision of high quality advice, accreditation and administration services to improve mobility through information, communications and sensor solutions.
- TCA provides assurance in the use of information, communications and sensor solutions through identifying, delivering and deploying quality systems.
- Provision of high quality:
- Advice founded on a demonstrated capability to design and deploy operational systems as enablers for reform
- Accreditation in the type-approval and certification of telematics and intelligent technologies and services that give confidence to all stakeholders for their consideration of use
- Administration of programs, such as the Intelligent Access Program (IAP)
- Assurance means 'Accessibility', 'Integrity' and 'Productivity'

The vision acknowledges that TCA is no longer simply the administrator of the IAP. It reflects and responds to the growing use of telematics and other intelligent technologies to address public policy needs.

TCA will:

### **Identify**

- Current and anticipated needs that inform governments and strategic policy environments.
- State-of-the-art national and international developments and strategic implications that inform current and emerging public policy needs.
- Requirements that address public and private outcomes.

## **Deliver**

- Independent qualified domain expertise.
- Trusted advice that is informed by an understanding of public and private spheres of influence, strategic policy directions of government, and international development and best practice principles.
- Specifications and associated collateral that address public and private outcomes.

## **Deploy**

- Fit for purpose business and operational models that deliver assurance.
- Administrator and managerial services.
- Accreditation services.

## **In**

- Quality systems for the mobility of people, products and assets

*TCA's functions are as follows:*

- manage the certification and auditing regime for the IAP
- certify, audit and cancel the certification of IAP Service Providers
- select and coordinate IAP Auditors
- be a focal point for the IAP
- undertake communication and disseminate information in the IAP
- monitor technological developments
- liaise with government authorities and IAP Service Providers
- manage and generally implement further public-purpose road-transport reform certification, auditing and like regimes, as the Members may from time to time agree to fund and by unanimous decision approve
- manage and generally implement such incidental public-purpose projects as the Members approve

## *Governance*

TCA is a public company established under the Corporations Act (Cth) and the Constitution provides for nine Members, which comprise of the Australian Government and State and Territory Road Agencies.

TCA has a Board of Directors which is responsible for its overall governance. The Board is made up of a Chairperson and up to nine other Directors. Each Member is entitled to nominate a Director (and an alternate) and other than the Chairperson, each Director must be nominated by a Member. The Directors appoint the Chairperson. The Board sets the Strategic Direction of TCA, with the support of the Chief Executive Officer, and oversees operational performance.

The Chief Executive Officer is responsible for the day-to-day management of the TCA.

The business structure of a company limited by guarantee established under the Corporations Act was chosen because it provided the ability to facilitate cross jurisdictional membership and the necessary rigour in the governance arrangements to certify, audit and as necessary cancel the certification of service providers who operate on a national level.

The Board has a program of on-going evaluation and development. This includes matching Board needs to Directors' expertise; aimed at delivering a well-rounded membership.

### Current Members

Department of Infrastructure, Energy and Resources - TAS

Department of Infrastructure and Transport - CTH

Department of Planning, Transport and Infrastructure - SA

Department of Transport - NT

Department of Transport and Main Roads - QLD

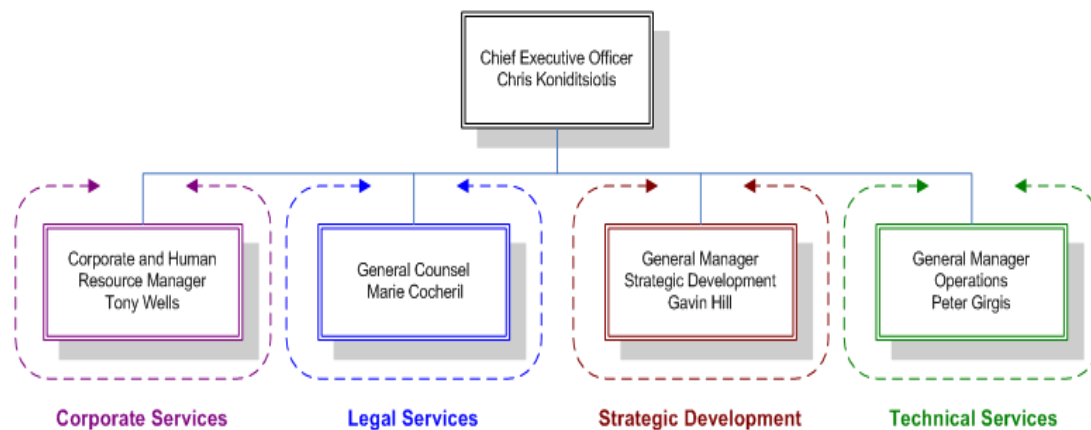
Justice and Community Safety Directorate - ACT

Main Roads Western Australia - WA

Roads and Maritime Services – NSW

VicRoads – VIC

### TCA Corporate Structure



### How much does it cost

It is expected that the costs to TCA for the certification of one IAP Service Provider system, the associated endorsement to use a specific type of IVU and the assessment of a SDID or alternative to the SDID will be in the region of \$289,470 (including GST). This is for the current IAP parameter set of spatial, temporal and speed compliance and the self-declaration function which allows for vehicle configuration, total combination mass and a comments field. Costs, or components of costs, are payable at each stage, these are detailed in Table 1.

## Appendix F – WMTAC Terms of Reference

Under the Inter-Governmental Agreement (IGA) between the Commonwealth, State and Territory Governments (2012), the ABCB (that is, the Board) may establish committees, from time to time, as required (clause 13.2) and it may determine the composition and operation of a committee (clause 13.3). The Board may delegate some functions and powers to the General Manager of the ABCB Office (clause 15.5 of the IGA). The power to establish the WMTAC and determine its composition and operation has been delegated to the General Manager of the ABCB Office.

The role of the WaterMark Technical Advisory Committee (WMTAC) is to provide technical advice to the Australian Building Codes Board (ABCB) Office.

The WMTAC will assist the ABCB Office during the interim period when the WaterMark Certification Scheme (WMCS) has been transferred from Standards Australia to the ABCB Office. The ongoing role of the WMTAC will be evaluated as part of the review of WMCS policy objectives and the Scheme rules.

The primary function of the WMTAC is to establish a group of industry advisers that can assist the ABCB Office in its consideration of technical matters relevant to the WMCS.

The WMTAC will review applications from WaterMark Conformity Assessment Bodies (WMCABs) and product manufacturers for the inclusion of a new specification or an existing standard on the WaterMark Schedule of Specifications (WMSS). Testing, product design and installation elements are to be addressed by the WMCABs and the product manufacturers in the application.

The ABCB Office will be responsible for making sure all administrative processes, documentation and timelines are adhered to.

The composition of the WMTAC consist of the following 7 members –

- A senior representative of the ABCB Office who shall be the Chair.
- One member with expertise in the plastic piping industry.
- One member with expertise in the copper piping industry.
- One member with expertise in the area of testing plumbing products.
- One member with expertise in the use of plumbing products in commercial and residential construction.
- One member with expertise in plumbing installations.
- One member with expertise in the plumbing products industry.

Upon acceptance of an application, the ABCB Office will issue the documentation to the WMTAC members for peer review. The WMTAC is to conduct its deliberations informally mainly via email and the Chair will ensure timelines are met.

Where a new specification or an existing standard is being considered for inclusion on the WMSS, upon application by a WMCAB and product manufacturer, the WMTAC will review the application before:

- (a) Recommending acceptance of the application as received and confirming the certification level;
- (b) Recommending acceptance of the application in principle with amended technical requirements and confirming the certification level;
- (c) Requesting an independent appraisal/assessment of the product;
- (d) Returning the application due to insufficient technical/product information; or
- (e) Rejecting the application with comment.

Comments shall address relevant aspects such as the design, performance, materials used, installation, operation, maintenance, application, suitability of product, protection of health, safety and the environment.

Where a member of the WMTAC recommends that the application not go ahead, then they shall provide specific technical reasons.

If there is an existing specification that is applicable to the product then this shall be included in the response from members.



In making comments to the ABCB Office, the Chair will have regard to any dissenting views and solutions that can be recommended. Documents considered to be insufficient will be returned to the WMCABs who are responsible for the technical accuracy of the documents.

On considering an application, WMTAC members may:

- (a) Request a panel discussion (via teleconference or meeting) in part or whole; or
- (b) Declare the specification falls outside their area of expertise.

In considering applications, the WMTAC may request further clarification from the WMCAB, its suppliers, agents, other stakeholders or relevant technical bodies, regarding new or existing specifications, standards or products. Such requests will be coordinated by the ABCB Office.

Following the WMTAC review and its advice, the ABCB Office will forward the application and WMTAC commentary to the PCC State and Territory Administrations for endorsement. Once endorsement is received, the ABCB Office will approve the application.

The ABCB Office will inform the WMCAB of the application's progress at its various stages as well as the final outcome of the application and any listing of specifications on the WMSS.

Where the applicant does not agree with a rejection, the applicant may appeal to the General Manager of the ABCB Office.

## Appendix G – State and Territory Plumbing Inspection Regimes

### 7.3.3.1 Australian Capital Territory

The regulation of plumbing installations as well as licencing of plumbers occurs through the ACT Government Environment and Sustainable Development Directorate with the plumbing regulator and inspectors being part of the Planning and Land Authority.

In relation to plumbing work, a 100% Inspection requirement exists on new buildings and refurbishment. ACTPLA plumbing inspectors undertake the inspections.

Most product compliance issues are identified at the final inspection stage as well as when failure of products occur. It is typically left to the plumbing contractor to confirm that materials and products are certified where required to the WMCS; no guidance or check requirement exists with the Territory plumbing inspectors.

### 7.3.3.2 New South Wales

The regulation of plumbing installations as well as licencing of plumbers occurs through the Department of Fair Trading.

In relation to plumbing work, an audit based Inspection requirement exists on new buildings and refurbishment where the local state council undertakes the inspection.

Most product compliance issues are identified at the final inspection stage as well as when failure of products occur. It is typically left to the plumbing contractor to confirm that materials and products are certified where required to the WMCS; no guidance or check requirement exists with the council plumbing inspectors. Where the council plumbing inspectors require further assistance in complex or suspicious installations these matters are referred to the state department.

### 7.3.3.3 Tasmania

The regulation of plumbing installations occurs through the State Department of Justice

The licencing of plumbers occurs through Workplace Standards which is a division of the State Department of Justice.

In relation to plumbing work, a permit requirement exists on new buildings and refurbishment where the local state council undertakes the inspection as they see fit.

It is typically left to the plumbing contractor to confirm that materials and products are certified where required to the WMCS, no guidance or check requirement exists with the council plumbing inspectors. Where the council plumbing inspectors require further assistance in complex or suspicious installations these matters are referred to the state department.

### 7.3.3.4 South Australia

The regulation of plumbing installations as well as the licencing of plumbers occurs through the State Office of the Technical Regulator.

The licencing of plumbers occurs through Workplace Standards which is a division of the State Department of Justice.

In relation to plumbing work, a permit requirement exists on new buildings and refurbishment where the local state council undertakes an inspection of 60% commercial work and 30% residential work as they see fit.

It is typically left to the plumbing contractor to confirm that materials and products are certified where required to the WMCS; no guidance or check requirement exists with the council plumbing inspectors. The department is making attempts to improve the education within the industry of the WaterMark requirements. Where the council plumbing inspectors require further assistance in complex or suspicious installations these matters are referred to the state department.

### 7.3.3.5 Victoria

The regulation of plumbing installations as well as licencing of plumbers occurs through the Building Authority of Victoria.

In relation to plumbing work, an audit based inspection requirement exists on new buildings and refurbishment where the local state council undertakes the inspection.

It is typically left to the plumbing contractor to confirm that materials and products are certified where required to the WMCS; no guidance or check requirement exists with the council plumbing inspectors. It is typically a 'dobbing' in of competitors that trigger the VBA review of WaterMark compliance. Where the council plumbing inspectors require further assistance in complex or suspicious installations these matters are referred to the state department.

#### **7.3.3.6 Western Australia**

The regulation of plumbing installations as well as licencing of plumbers occurs through the Western Australian Building Commission (WABC).

In relation to plumbing work, an audit based Inspection requirement exists on 5% of new buildings and refurbishment where the local state council undertakes the inspection.

It is typically left to the plumbing contractor to confirm that materials and products are certified where required to the WMCS; no guidance or check requirement exists with the council plumbing inspectors. The WABC provides notes to industry and plumbing consultants on the requirements of WaterMark. Where the council plumbing inspectors require further assistance in complex or suspicious installations these matters are referred to the state department.

#### **7.3.3.7 Northern Territory**

The regulation of plumbing installations as well as licencing of plumbers occurs through the Department of Lands, Planning and the Environment.

In relation to plumbing work, an audit based inspection requirement exists on drainage installations where the local state council undertakes the inspection.

It is typically left to the plumbing contractor to confirm that materials and products are certified where required to the WMCS; no guidance or check requirement exists with the council plumbing inspectors. A complaint system is in operation to inform of non-compliant products.

#### **7.3.3.8 Queensland**

The licencing of plumbers in Queensland occurs through the Plumbing Industry Council (PIC). The PIC is housed under the Department of Housing and Public Works (DHPW). Although the PIC is housed under the DHPW, the PIC is independent of the Plumbing Regulator who is located within the Queensland Building Code Division of the DHPW. The PIC communicates to their members through the connect newsletter. Each licence plumber is to submit details of notifiable work. Notifiable work includes most plumbing and drainage work performed in existing homes including:

- kitchen and bathroom additions and renovations
- installing or replacing hot water heaters including electric, solar or heat pump hot water heaters
- installing additional fixtures such as toilets, showers and sinks
- extending or altering pipe work.

Some plumbing and drainage work will also be able to be performed on commercial buildings.

To help ensure that the health and safety standards currently enjoyed by Queenslanders remain high, the Plumbing Industry Council and local governments will work together to audit licensees and plumbing work respectively to ensure that plumbers and drainers are complying with their obligations. No guidance or check requirement exists with the council plumbing inspectors in relation to WaterMark products.