

Proposed Implementation of Mandatory Water Efficiency Labelling

Discussion document for consultation under the Fair Trading Act 1986

Prepared by the Ministry of Consumer Affairs

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Achieving A Sustainable Economy

A big priority this year for the government is to raise awareness of households about sustainable practice in energy and water use, transport and waste disposal. This priority contributes to the goal of putting sustainability at the heart of our nation's thinking and decision-making. The government has announced its aim for New Zealand to be the first nation that is truly sustainable. This outcome complements New Zealand's enviable reputation as a country with a clean environment, smart and innovative people and an inclusive community.

One tool for encouraging new behaviours and businesses which are more sustainable is "information" to consumers to help guide their purchases. Water efficiency labelling is such an information tool. This discussion paper outlines proposals for mandatory water efficiency labelling for six specific products – washing machines, dishwashers, taps, toilets, showerheads and urinals.

In New Zealand we have had a tendency to take water for granted. In the main we have good rainfall and access to river, lake and aquifer systems. There are times, however (especially dry summers), when freshwater supply to some areas is not able to meet demand. The choices for extending water supply are often expensive and technically complex. There are also competing uses for land, lakes and rivers that need to be taken into account.

Using our water resources in a smarter, more sustainable way

Using our water resources in a smarter, more sustainable way is a good thing to do and it will be positively beneficial to our economy by reducing or removing the need for new investment in water supply and achieving more from our resources.

Research (Moxie Design group) indicates that nearly a third of New Zealanders avoid buying from companies because of their impact on society or the environment; and will pay a premium for products and services which have a positive social or environmental benefit. Water efficiency labelling based on accurate, comparable and relevant information will help those households and businesses who are keenly taking up the sustainability challenge with enthusiasm. When consumers have good information about what is available and the implications of their choices, they have the tools to make responsible decisions around their consumption.

Confident and responsible consumers will move society towards a sustainable future.

Saving water will save consumers money

There are also financial reasons for consumers to care about their water usage. In parts of Auckland, Tauranga, Tasman and Whangarei variable charges are levied for water supply. Two local network operators also have variable charges for wastewater. For most New Zealanders though, the biggest water efficiency savings will come via their power bills. Improvements in the water efficiency of appliances and fixtures that use hot water will also result in energy savings. Cost benefit analysis suggests water efficiency labelling of washing machines, dishwashers, showers and taps would result in national energy savings of 47.7 TJ (13,250,000 kW/h¹) by 2020.

¹ The average New Zealand Household uses 11,000 kW/h per annum of energy

When a consumer makes an electrical appliance purchase, they can factor the energy efficiency of the appliance into their purchasing considerations. The consumer may be motivated by different factors, such as the capital outlay versus the cost of running the appliance, a desire to minimise carbon emissions or wanting to ensure energy demand does not outstrip production or transmission capacity. Regardless of what factors may contribute to a decision, a consumer has energy efficiency and consumption information available through mandatory energy efficiency labelling. There is evidence that the energy efficiency labels influence purchasing decisions. A 2006 UMR Research nationwide omnibus survey of New Zealanders concluded that of those who had purchased an appliance, 22% declared labelling had a lot of influence on their decision and 22% some influence (20% were neutral and 35% stated that it had very little influence²).

Water efficiency labelling will give consumers information on expected water consumption when in use of washing machines, dishwashers, taps, toilets, showerheads and urinals. This information will also allow consumers to compare different brands or models to assess which is the most water efficient. The information on the label will be based on tests conducted by certified laboratories.

The proposed water efficiency labelling requirements complement those already in place in Australia. Australia introduced a mandatory water efficiency labelling scheme as part of the Water Efficiency Labelling and Standards Act 2005 (Cth). This legislation and the underlying regulations also require all designated products to be registered. The Australian regime came into force on 1 July 2006, however, grace periods (of six to 18 months) apply to products imported or manufactured before 1 July 2006.

Under a special agreement between Australia and New Zealand – the Trans Tasman Mutual Recognition Arrangement (TTMRA) – goods that can be legally sold in New Zealand can be legally sold in Australia. This means that water-using fixtures and appliances imported into Australia from New Zealand just need to meet New Zealand's regulatory requirements. If New Zealand and Australia do not have a similar approach to providing consumers with water efficiency information, there is a risk for Australia in terms of New Zealand goods undermining the effectiveness of the Australian scheme. The severity of water shortages in Australia is the strong driver for water efficiency labelling there. New Zealand supports Australia's initiatives in this area and has given a commitment that we will introduce similar labelling requirements in New Zealand.

The Australian labelling grace period has already expired for some products. This means there is a degree of urgency for New Zealand to introduce our own labelling scheme.

² UMR Research (December 2006) Energy Label Omnibus Results. EECA.



Summary Of Proposed Regulations

- Washing machines, dishwashers, toilets, showers, tap equipment and urinal equipment made available for sale, lease, hire or hire purchase to a consumer must have a water efficiency label.
- The water efficiency labels will provide consumers with information on the absolute water consumption of the product, as well as a comparative 'star rating'.
- The determination of the water consumption and star rating must be carried out by an IANZ accredited laboratory.
- There will be some flexibility around the size and placement of the label. In some instances the label may be attached by a swing tag.
- Water efficiency information will also be required on information and displays used to advertise products.
- On advertising, the information may be provided by 'text advice' if there is insufficient room to place a label of readable size.
- The product manufacturer or importer must ensure that the product has been tested in accordance with the regulations and the water efficiency label conveys the correct information.
- It will be the responsibility of the retailer to ensure product for sale is labelled.
- The value of the star ratings are largely the same as those specified in AS/NZS 6400:2005. The only significant difference is around the star ratings of products intended for use in low pressure systems.
- For showers and tap equipment a manufacturer must specify whether the product is intended for use in a low or high pressure supply system. The product will be tested against a different testing protocol depending on the intended use. The water efficiency label will inform the consumer about which supply system the product is intended for.
- The regulations will apply to products manufactured or imported into New Zealand after 1 July 2008.

Timeline

Submissions on discussion document due 10 August 2007

Notification of regulations in the *New Zealand Gazette* Estimated December 2007

Regulations will come into effect 28 days after they have been notified in the New Zealand Gazette. The regulations will apply to products manufactured or imported into New Zealand after **1 July 2008**.

DISCUSSION QUESTION PROMPTS

The proposed timeline will give a minimum of five months lead-in time. Will this be sufficient for manufacturers, importers and retailers to make the necessary preparations? Goods manufactured or imported before 1 July 2008 will not be required to adhere to the regulations. Is it acceptable that consumers will not be able to access water efficiency information for older products?

Objectives Of Water Efficiency Labelling

In considering the nature of the water efficiency labelling regime that New Zealand should adopt, the Ministry of Consumer Affairs has identified four primary objectives:

1. Any water efficiency label should give consumers correct and adequate information in relation to water-using fixtures and products. This information must also be provided at the appropriate time and place, so consumers can weigh water efficiency into their decision-making.
2. The labelling regime should be straight-forward for businesses to comply with and not impose any unjustifiable costs.
3. The labelling regime must meet New Zealand's commitments under the Trans Tasman Mutual Recognition Arrangement (TTMRA).
4. The regime must be suited to New Zealand conditions and reflect the environment in which New Zealanders are purchasing water-using fixtures and appliances.

Legal Basis – Fair Trading Act 1986

It is proposed that a Consumer Information Standard, under the Fair Trading Act, be created to require the mandatory labelling of washing machines, dishwashers, lavatory equipment, showers, tap equipment and urinal equipment. There are currently Consumer Information Standards covering the requirement to provide country of origin labelling for clothing and footwear, the need to provide fibre content labelling, the requirement to provide the consumer with information on washing instructions and how to care for items and information to be provided by the trader for the sale of second hand motor vehicles.

The Fair Trading Act 1986 (“the Act”) came into force on 1 March 1987. In the Long Title it is described as “An Act to prohibit certain conduct and practices in trade, to provide for the disclosure of consumer information relating to the supply of goods and services, and to promote product safety”. The Act provides the empowering legislation to issue regulations to prescribe a consumer information standard requiring disclosure of information relating to the kind, grade, quantity, origin, performance, care, composition, contents, design, construction, use, price, finish, packaging, promotion, or supply of the goods or services.

The Fair Trading Act and subordinate regulation are administered by the Ministry of Consumer Affairs and enforced by the Commerce Commission, however, individuals and corporations can also take action under the Act. Members of the public and businesses are encouraged to contact the Commission and provide information about behaviour that appears to breach the Fair Trading Act. The Commission assesses information it receives in this way, along with information it gathers from its own market monitoring and surveillance activities, to determine the investigations that it carries out into unfair or misleading trading practices.

If the Commission considers that a breach of the Act may have occurred, it has a number of options open to it for resolving each investigation. The options include prosecuting the offending business where this is considered the most appropriate action. Only the courts can give an authoritative ruling as to whether a behaviour breaches the Act and award appropriate penalties.



Criminal court action may result in fines of up to \$60,000 for individuals. Companies or incorporated associations may incur fines of up to \$200,000. The maximum fine may be imposed for a single conviction. However, if more than one offence in respect of a contravention of the same provisions is committed at about the same time, total fines imposed cannot exceed the stated maximum. The Commission also has the right to apply to the courts for corrective advertising orders. Where it is satisfied that a business has contravened the Act, the court may order the business to:

- disclose information to the public generally, or to an affected section of the public;
- publish corrective statements.

The business has to bear the costs of this remedial action. The court may grant a number of other remedial orders, including orders that:

- a contract be altered or made void;
- money be refunded;
- goods be repaired or services supplied.

The Proposed Labelling Requirements

It is proposed to have Consumer Information Standard (Water Efficiency Labelling) Regulations issued under the Fair Trading Act 1986. These regulations will require that washing machines, dishwashers, toilets, showers, tap equipment and urinal equipment are labelled with water efficiency information which must be disclosed on supply or possible supply to a consumer. The regulations will also require that water efficiency information is provided on any product specification, brochure, advertising, magazine, catalogue or website where the product is profiled and also at showrooms as well as display homes or display units. These requirements are not proposed to apply to the private sale of second-hand appliances or fixtures.

The regulations will also set out that the following information is on the label: the water consumption in a unit appropriate to the appliance or fixture (e.g. litres per minute; litres per wash), a star rating (see pages 8–12 for information on the proposed calculation of star ratings), a unique testing number issued by the testing agency, the model number, and the appropriate testing standard used. Where an appliance is awarded a zero star rating a water warning label must be attached. This does not specify the water consumption but instead informs the consumer that the appliance or fixture is a high water use product (see page 16).

The process – getting the label

In order to determine the water consumption and star rating of an appliance or fixture, the manufacturer or importer will need to have the item tested. The proposed regulations will require that the water efficiency label matches the results of this testing and that the testing is done by an accredited laboratory, which is either a laboratory accredited for the relevant test by International Accreditation New Zealand (IANZ) or an equivalent overseas laboratory recognised by IANZ under a mutual recognition agreement.

Before the water efficiency labelling regulations come into force, in early 2008, IANZ accredited laboratories will be invited to ask the Ministry for the Environment to issue a unique water

efficiency labelling code. For example 'Judith's Plumbing Testing Lab' might be issued with number WL01. When 'Judith's Plumbing Testing Lab' tests a shower head to determine its water efficiency, the lab will issue the manufacturer with a test certificate, which would have a unique test report number e.g. 12345, stating the test results. For the purposes of the water efficiency label, this test report number will be prefixed with the water efficiency labelling code issued by the Ministry for the Environment e.g. WL01 12345. At the same time as giving each laboratory a unique water efficiency labelling code, the Ministry for the Environment will also give the testing laboratory a template for the water efficiency label. After testing a product, the laboratory will fill in the label particulars (water consumption, star rating, test report number etc) and send an electronic version of the label to the manufacturer or importer. The manufacturer may then get the labels printed in the number and size/format required (provided they are still in keeping with the regulation requirements).

Test calibration and/or inspection reports from IANZ accredited organisations are recognised worldwide through Mutual Recognition Arrangements (MRA) with sixty-three other counterpart authorities in forty-eight other economies. Mutual Recognition Arrangements enable test and inspection reports from the exporting country to be accepted in the importing country, avoiding requirements for re-testing and saving importers time and money³. The proposal is that international laboratories will also request a unique water efficiency labelling code from the Ministry for the Environment and will be given the label template. This should allow importers to have their products tested only in one country saving on money and compliance. This proposal does not extend as far as to mutually recognise other countries water efficiency standards, as this creates the potential to mislead consumers or be very costly in terms of implementation.

As an alternative to following the above process, manufacturers and importers will be considered to have complied with the New Zealand Regulations if they have complied with AS/NZS 6400:2005. The process outlined in this standard includes registration with the Australian Water Efficiency Labelling Standards (WELS) Regulator (for more information on Australian WELS labelling and registration visit the Australian Government website – www.waterrating.gov.au).

DISCUSSION QUESTION PROMPTS

Is the proposed testing regime reasonable? Do you think consumers will have enough assurance about the accuracy of the information on the water efficiency label? Will the provisions for international water efficiency labelling testing be sufficient?

The process – from label to consumer

The proposed regulations will prohibit the sale of items covered by the water efficiency regulations to any consumer in New Zealand unless the correct water efficiency label is attached to the appliance or fixture. The regulations will put a duty on manufacturers and importers that they must provide the correct water efficiency label. The regulations will also put a duty on to those selling, leasing or hiring that they ensure the water efficiency label is provided and must not sell, hire or lease the appliance or fixture without a correct label. The regulations

³ The international laboratory would undertake testing to the New Zealand requirements.



will also impose a duty on anyone authorising any product specification, brochure, advertising, magazine, catalogue or website to ensure a correct water efficiency label or text advice (e.g. water efficiency 3 star, 9L/min) about the water efficiency is provided. The regulations will also put a duty onto anyone responsible for a showhome, display home or display unit to ensure a correct water efficiency label is displayed where water using appliances and/or fixtures are showcased as part of the sale package.

A correct label is one (i) that conforms to the requirement of the water efficiency labelling regulations, and (ii) on which the water efficiency rating information on the label corresponds to the water efficiency performance of that item, and (iii) on which the model and brand designations on the label correspond to the model and brand designation of that item and (iv) on which the water efficiency test report number corresponds to that issued on the test report by the accredited testing laboratory.

For the private sale of second hand appliances or fixtures, there will be an exemption from the regulations. Regarding the retail sale of second-hand goods, hiring and leasing the requirement for labelling will apply to goods manufactured or imported after 1 July 2008 and up to 5 years old. For example a dishwasher that was manufactured in 2009 will still have to display its water efficiency label until 2014 if being hired, leased or sold by a second-hand dealer. If the label has been removed by a customer the retailer must contact the manufacturer, importer or testing laboratory to get a new copy of the label. In this instance, the product would not have to be retested.

The label – placement

The idea behind the water efficiency label is that consumers are provided with accurate and comparable information about the water efficiency performance of a product at the time the consumer is considering a purchase. This may be, but is not necessarily, the point of sale. For this reason, it is important that the regulations retain a certain amount of flexibility regarding the placement of the label. In general the proposal is that labels be adhered to the upper front portion of the appliance or fixture. Of course, the nature and placement of the label will need to take into account the fixture itself and the way it is sold. Due to their size, it may not be possible to stick a label of readable dimensions on some products e.g. showerheads and taps. In this instance a label could be attached to a swing tag. Similarly if the finish of a product is likely to be damaged by the adherence of a label, a swing tag could be attached. Where the product is likely to be sold without being unpacked from its box or packaging, it may be appropriate to affix the label to the packaging, rather than the product itself. Again, it may be impractical to provide a readable copy of the label in advertising material or product specification booklets (or even showrooms). It is proposed that text advice will be able to be provided in these situations.

DISCUSSION QUESTION PROMPTS

Do the label placement proposals seem workable; are there any other alternative label placement options you would like considered? Do you think water efficiency information should be included in advertising? If so, what form should this take? Are the proposals practical for goods that are leased, or hired or sold by second-hand retailers?

Star Ratings

The following water star ratings and label design are largely the same as those presented in AS/NZS 6400:2005, with the exception of low pressure supply systems (more fully discussed on page 13). They have been adapted to suit the New Zealand practical and regulatory environment. *Reproduced from AS/NZS 6400: 2005 with the permission of Standards New Zealand under Licence 00664.*

It is envisaged that the regulations will cite a number of Australian/New Zealand Standards:

- The following star rating applies to showers as defined in AS/NZS 3662 and the water consumption of a shower intended for use in a high pressure system is taken to be the nominal flow rate determined in accordance with this standard.
- The table relates to dishwashers as specified in AS/NZS 2007.2 and clothes washing machines are those specified in AS/NZS 2040.2.
- Lavatory equipment is that listed in AS 1172.1, AS 1172.2, ATS 5200.020, ATS 5200.021 and ATS 5200.030.
- Urinal equipment is that specified in AS 3982 or ATS 5200.004 and the water consumption of urinal equipment is the volume of discharge as determined in accordance with AS/NZS 3982.
- Tap equipment is considered to be that specified in AS/NZS 3718, however it does not apply to any tap or tap outlet that is solely for use over a bath, or part of an appliance such as a chilled or boiling water dispenser. The water consumption of tap equipment intended for use in a high pressure system is taken to be the nominal flow rate determined in accordance with AS/NZS 3718.



		Rating							
Item	Product Type	Water Consumption Unit	0 Stars (warning)	1 Star	2 Stars	3 Stars	4 Stars	5 Stars	6 Stars
1	Showers intended for use in high pressure systems	L/min <i>The nominal flow rate determined in accordance with AS/NZS 3662</i>	More than 16.0	More than 12.0 but not more than 16.0	More than 9.0 but not more than 12.0	More than 7.5 but not more than 9.0	Not currently available	Not currently available	Not currently available
			To be confirmed						
2	Dishwashers	L/place setting	<p>Where: Star Rating Index = fractional star rating used to determine the number of stars to appear on the label, rounded down to the nearest half star</p> <p>WC = water consumption of the model in litres, determined under the same conditions used for the energy consumption tests as specified in AS/NZS 2007.2.</p> <p>BWC = base water consumption = 2.5 + P x 1.6 (P = number of place settings of the dishwasher)</p> <p>WRF = water reduction factor per additional star (17.5%) = 0.175</p> <p>If a dishwasher achieves less than 1 on the star rating index, the rating of the dishwasher is zero stars.</p>						

$$\text{Star Rating Index} = 1 + \frac{\log_e \left(\frac{WC}{BWC} \right)}{\log_e (1 - \text{WRF})}$$

		Rating							
Item	Product Type	Water Consumption Unit	0 Stars (warning)	1 Star	2 Stars	3 Stars	4 Stars	5 Stars	6 Stars
3	Clothes washing machines	L/load capacity							
							$\text{Star Rating Index} = 1 + \frac{\log_e \left(\frac{WC}{BWC} \right)}{\log_e (1 - WRF)}$		
									<p>Where: Star Rating Index = fractional star rating used to determine the number of stars to appear on the label, rounded down to the nearest half star</p> <p>WC = water consumption of the model in litres. The water consumption of a clothes washing machine shall be taken to be the higher of –</p> <p>a) the claimed total water consumption of the warm-wash or</p> <p>b) the claimed total water consumption of the cold-wash, when each is determined under the conditions used for the energy consumption tests as specified in AS/NZS 2040.2.</p> <p>BWC = base water consumption = 30 x C (C = rated load capacity of the clothes washer (kg) as determined under AS 2040.1)</p> <p>WRF = per additional star (30%) = 0.30</p> <p>If a clothes washing machine achieves less than 1 on the star rating index, the rating of the clothes washing machine is zero stars.</p>



Item	Product Type	Water Consumption Unit	Rating					
			0 Stars (warning)	1 Star	2 Stars	3 Stars	4 Stars	5 Stars
4	Urinal equipment	L/single stall or L/600 mm width of continuous wall <i>The volume of discharge as determined in accordance with AS/NZS 3982</i>	More than 2.5 serving a single stall or 4.0 for two stalls or equivalent width of continuous wall, or having an adjustable activation device with a sensitivity field greater than 300 mm from the front of the urinal, or having a flushing control mechanism that flushes more than two stalls or equivalent width of continuous wall	Not more than 4.0 serving two stalls or equivalent width of continuous wall, and conscious, demand driven or smart-demand operation	Not more than 2.5 serving a single stall or equivalent width of continuous wall, and conscious, demand driven or smart-demand operation	Not more than 2.0 serving a single stall or equivalent width of continuous wall, and conscious, demand driven or smart-demand operation	Not more than 1.5 serving a single stall or equivalent width of continuous wall, and smart-demand operation	Not more than 1.0 serving a single stall or equivalent width of continuous wall, and smart-demand operation with a urine sensing device

Item	Product Type	Water Consumption Unit	Rating						
			0 Stars (warning)	1 Star	2 Stars	3 Stars	4 Stars	5 Stars	6 Stars
5	Tap equipment, intended for use in high pressure systems	L/min <i>Taps – Nominal flow rate determined in accordance with AS/NZS 3718</i>	More than 16.0	More than 12.0 but not more than 16.0	More than 9.0 but not more than 12.0	More than 7.5 but not more than 9.0	More than 6.0 but not more than 7.5	More than 4.5 but not more than 6.0	Less than 4.5
	Tap equipment, intended for use in low pressure systems	L/min	To be confirmed						
6	Lavatory equipment	L (average flush volume)	More than 5.5	More than 4.5 but not more than 5.5	More than 4.0 but not more than 4.5	More than 3.5 but not more than 4.0	More than 3.0 but not more than 3.5	More than 2.5 but not more than 3.0	Not more than 2.5

The water consumption of lavatory equipment is taken to be –

- for single-flush cisterns – the discharge flush volume, determined in accordance with AS 1172.2
- for dual-flush cisterns – the average flush of one full-flush discharge and four reduced-flush discharge volumes, with the full-flush discharge flush volume and reduced-flush discharge volumes determined in accordance with AS 1172.2



Low Pressure Systems

The most common New Zealand hot water cylinder uses an electric element to heat water, which is then stored until needed inside an insulated cylinder (the hot water cylinder). Whenever you turn on a hot tap, water is drawn off from the top of the cylinder and cold water enters at the bottom of the cylinder to replace it and be heated up ready for use. The majority of New Zealand homes have hot water installations that use low pressure cylinders. This is in contrast to Australia where there is a predominance of high pressure hot water installations. Low-pressure cylinders are made of copper, which is durable but can withstand only limited pressure. Pressure is reduced by running the mains water into a header tank, just like a toilet cistern, which in turn feeds water into the hot water cylinder. As the water is heated it expands and the pressure is relieved by the water rising in a vent pipe up through the roof. Low pressure systems are defined as delivering water at below 150kPa, but in reality many New Zealand homes have a supply below 50kPa and some as low as 20kPa. Installations using low pressure cylinders invariably have high pressure cold water supplies (ranging from 500kPa up to as high as 1000kPa). That means that when water from these supplies mix, there can be a ratio of 10:1 or more.

In Australia, and increasingly in New Zealand, many homes are employing full mains pressure – such that the hot and cold water are delivered at the same or approximately the same pressure (both being above 120kPa). This requires a steel cylinder and a combination of valves and filters to give consistent hot and cold flow that will work best with efficient modern fittings.

The star ratings listed for tap equipment and showerheads have been calculated using the protocol outlined in AS/NZS 3718 and AS/NZS 3662:2005 respectively. As this is currently worded it does not cater for low pressure supply situations. The result of this is that New Zealand products specifically designed for use in low pressure systems will be awarded a very low (or possibly zero) star rating when tested under a mains pressure testing regime. Work has been done by Standards New Zealand to amend AS/NZS 3718 and AS/NZS 3662:2005 to allow for an alternative testing protocols for fixtures intended for use with low pressure supply systems. The Ministry of Consumer Affairs is working with Standards New Zealand to ensure there is either a joint Australia/ New Zealand or New Zealand only low pressure supply system standard that will be cited in the proposed regulations.

Low pressure systems – labels

There is some anecdotal evidence that New Zealand consumers sometimes buy the wrong type of fixture as they cannot easily determine which fixtures are intended for low pressure or mains pressure systems. Some fixtures can be adapted for both situations with the addition or removal of a flow restrictor.

It is proposed that water efficiency labels on shower heads and taps state whether the item is intended for low or mains pressure or both. This would also tie into the testing protocol used to determine the star rating. A fixture intended for low pressure only would be tested using the (yet to be determined) low pressure testing protocol – a star rating would then be given. The label would then state that this fixture was intended for use in low pressure supply situations. The opposite would be the case for fixtures intended for use in mains pressure supply situations.

Although a fixture may have been primarily designed for use in a low pressure situation, many low pressure fixtures can be used in mains pressure systems. In this instance, the manufacturer would still specify the intended supply situation (low pressure) but the label would also include a disclaimer along the lines of *“This showerhead is intended for use in low pressure water supply conditions. The water consumption and efficiency figures stated are those produced when tested under low pressure conditions. If the showerhead is used in mains pressure supply the water consumption of this product will be higher than that stated.”*

Fixtures intended for use in mains pressure supply situations can generally not be used effectively in low pressure situations. However, some fixtures are able to be legitimately (and without negating the consumer’s warranty) modified for use in both situations. As above, the manufacturer would specify the intended supply situation (mains pressure) and include a disclaimer *“This showerhead is intended for use in mains pressure water supply conditions. The water consumption and efficiency figures stated are those produced when tested under mains pressure conditions. If the showerhead is used in low pressure supply conditions (in accordance with the manufacturer’s instructions) the water efficiency of this product will differ from that stated.”*

DISCUSSION QUESTION PROMPTS

Have we appropriately addressed testing fixtures intended for low pressure supply situations? Will the proposals for presenting this information to the consumer work?

Exceptions To The Regulations

It is proposed that the following categories will be exempt from the requirements of water efficiency labelling:

- Products destined for export or in transit (this exemption will apply to products to be exported to any country, however, any water efficiency requirements in the importing country would still need to be complied with).
- Privately sold second-hand items or items for second-hand retail sale or hire or lease where the appliance or fixture was manufactured or imported into New Zealand after 1 July 2008 and is more than 5 years old.
- Where only 50 or fewer products are ever imported into New Zealand or manufactured for sale in New Zealand.

DISCUSSION QUESTION PROMPT

Are there any other situations where you consider exemptions to the regulations are needed?

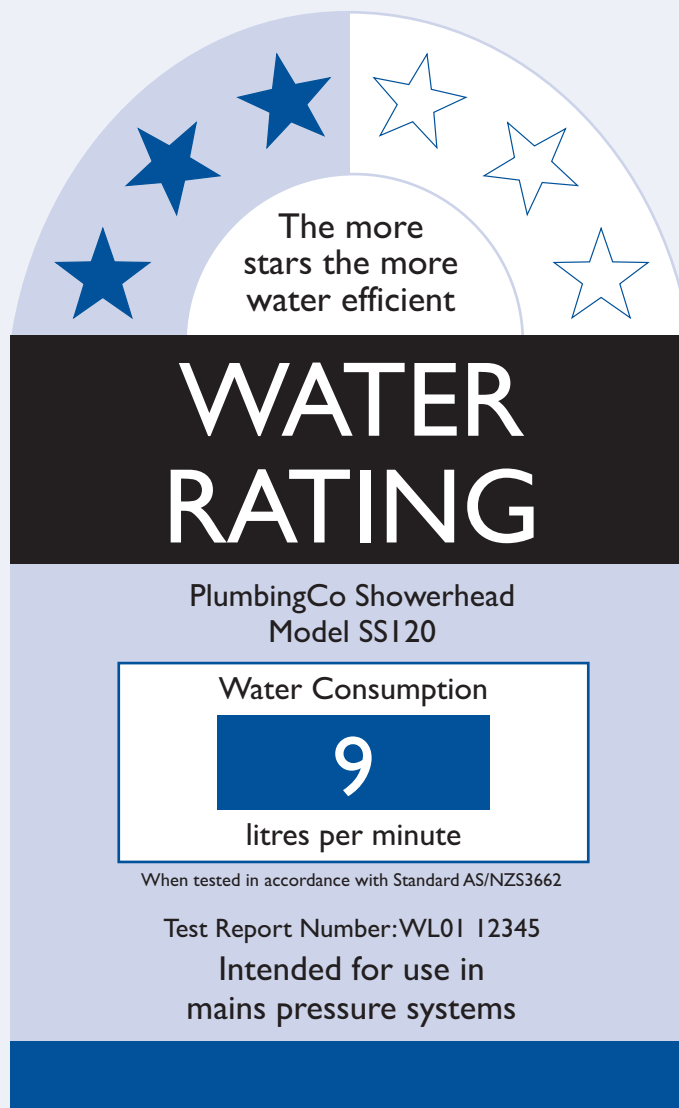


Label Designs

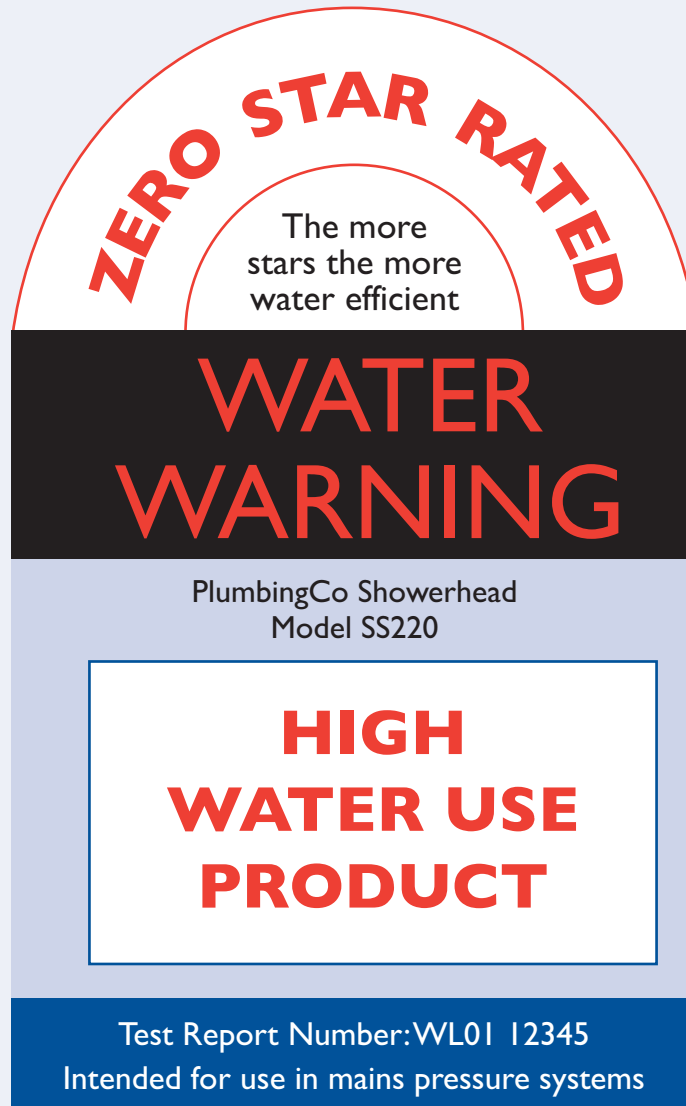
Every different type of product will need to have a slightly different label as there is different information that will need to be disclosed. For example, shower and tap labels must state whether the fixture is intended for use in mains or low pressure situations. Dishwasher labels must state the number of place settings and clothes washing machines must state the load capacity. Toilets need to give information for full and half flush as well as the average flush volume. Where a toilet does not have a dual-flush mechanism, then the half-flush number of the label will be recorded as zero.

This discussion document does not provide a model for what every label is proposed to look like, however, to give an idea of the label the following shows a shower with a three star rating and a shower with a zero star rating (water warning label).

Mock shower with three star rating



Mock shower with zero star rating (water warning)



DISCUSSION QUESTION PROMPT

Is there other information you would like to be included or excluded from the water efficiency label?



Benefits Of Water Efficiency Labelling

One measure of the success of the water efficiency labelling scheme will be the extent to which consumers consider water efficiency information as part of their purchasing decisions. While the emphasis is on informed consumers rather than water conservation, we can reasonably expect that some consumers will be influenced by the water efficiency label, and will make a more sustainable choice than they otherwise would. A Cost Benefit Analysis (CBA) conducted by Covec has based its benefit calculations on a 1% shift in product purchases towards more efficient products. This is a conservative figure when one considers the UMR Research study into the effects of energy efficiency labelling. The CBA assumed that the regulations started in 2006 and operated until 2021.

There are two types of benefit to be derived from reducing water consumption: water saved and energy saved. The value of water savings is made up of savings in variable costs – such as energy costs for pumping and for chemicals for water treatment – and capital costs – largely the cost of the deferral of capital works to expand capacity, or a reduction in the additional capacity required.

Energy savings result from improvements in the water efficiency of the products that use hot water – washing machines, dishwashers, showerheads and taps. There are also capital cost savings in relation to the deferral of capital works to electricity generation. Energy savings are estimated to be in the order of 47.7TJ by 2020. These energy savings will also reduce CO₂ emissions by 7.1 kT over the same period.

Cost of Testing, Labelling And Advertising

The costs of the proposed scheme for companies are the costs of testing products, labelling the products and including water efficiency information in advertising. For those products that are compliant with the Australian water efficiency labelling scheme requirements, the testing costs will have been incurred already. There will be testing costs for product lines that are sold in New Zealand but not in Australia; however, the Covec CBA estimates that there are no more than 1 in 100 product lines for which this will be the case (this is largely restricted to taps and showerheads). The absolute cost of getting a product line tested will depend on the economies of scale that the manufacturers or importers can leverage. It has been estimated by a large manufacturer that the cost of testing 100 products for both markets would be in the order of \$25,000. However, to test a single product line may cost up to \$1,500.

Labelling costs include the costs of printing the label and the costs of putting the label on the product. The CBA estimated the cost of label production to be NZ\$0.20 per item. The cost of affixing the label to the appliance varies between \$0.20 to \$2.00 per item depending on where the item is manufactured and the nature of packaging and display. Total costs of labelling are therefore between \$0.40 and \$2.20. The CBA assumed the average cost of labelling to be \$0.50 per item. Advertising costs have been estimated to result in additional costs in the order of \$0 – \$400,000 (about \$0.35 per item).

There may also be additional costs for retailers and plumbers depending on the consumer reaction to the scheme. Salespeople and plumbers may have to upskill so that they can provide accurate advice to consumers.

When all the costs are considered, the CBA predicts that water efficiency labelling will increase the cost of water-using appliances and fixtures by about \$1 per product item sold.

DISCUSSION QUESTION PROMPTS

Do the costs listed seem reasonable? Are there other costs that have not been considered?

In summary the costs and benefits expected from the introduction of water efficiency labelling, assuming a 1% shift in product purchases is (at a 5% discount rate):

Product	Total Cost \$M	Total Benefit \$M	Net Present Value \$M	Energy Saved TJ (2020)	Water Saved Million L (2020)
Washing machines	0.81	7.30	6.50	25.1	631.7
Dishwashers	0.28	0.66	0.38	2.6	30.8
Showers	0.59	3.04	2.45	15.0	121.8
Taps	1.07	1.01	-0.05	5.0	40.6
Toilets	0.76	0.08	-0.68	0.0	27.1
Urinals	0.64	0.01	-0.63	0.0	7.8
Total	4.14	12.12	7.98	47.7	859.8

Voluntary Declaration Website

The Ministry of Consumer Affairs suggests it would be useful for consumers to have a website where they could compare the water efficiency of different appliances and fixtures. It is proposed that the Ministry for the Environment would run this website and manufacturers and importers could get their products listed for free. It would be voluntary for manufacturers and importers to participate. After testing, manufacturers and importers would forward a certified copy of their testing certificate to the Ministry for the Environment along with a completed form about the type and features of the item. The Ministry for the Environment would conduct regular audits of the information on the website to ensure the information was correct and the item was still for sale.

DISCUSSION QUESTION PROMPTS

Do you think the voluntary declaration website is a good idea? What information would you like to see the website contain?



Differences From Australian WELS Scheme

The water efficiency labelling regulations are modelled on the Australian water efficiency labelling scheme. The New Zealand proposals, however, have a number of elements that are fundamentally different. The most substantial difference is that Australia requires all water-using appliances and fixtures to be registered before they are labelled and sold. It is not proposed that a government mandated registration scheme be introduced for New Zealand, although industry may wish to establish their own voluntary registration scheme, for example to give consumers additional assurance.

Another difference is that in Australia there are minimum performance requirements for toilets and urinals. Items which do not meet these requirements are disallowed or strongly discouraged from sale. It is not proposed that New Zealand introduce similar minimum performance requirements.

Making A Submission

The Ministry of Consumer Affairs (MCA) wants to hear your views on the proposed regulations outlined in this document, and how to implement them. In particular we want to hear your views on:

- How to introduce and administer the regulations in a way that will minimise costs, especially compliance costs to business
- How to ensure that the requirements are fair and equitable.

Submissions on proposals in this discussion document will be accepted until 10 August 2007. During this time MCA will also be contacting a number of known affected groups to discuss their views.

Please contact Rosamond Connelly at MCA (telephone (04) 474 2750), if you would like to discuss your ideas and views.

Submissions should be posted to:

Water Efficiency Labelling Regulations
Ministry of Consumer Affairs
PO Box 1473
WELLINGTON

Or faxed to: 04 473 9400

Or emailed to: wel@mca.govt.nz

Please provide your name, address and contact details with your submission.

Official Information Act 1982

Please note that any submission that you make may become publicly available under the Official Information Act 1982. If you feel there is any part of the submission that should not be publicly available, please indicate this clearly in your submission.