

EXPLANATORY STATEMENT

Issued by the authority of the Minister for Resources, Energy and Northern Australia

Greenhouse and Energy Minimum Standards Act 2012

*Greenhouse and Energy Minimum Standards (Clothes Washing Machines)
Determination 2015*

Purpose and Operation

The *Greenhouse and Energy Minimum Standards (Clothes Washing Machines) Determination 2015* (**Determination**) establishes energy labelling requirements, and associated requirements for conducting tests, for clothes washing machines.

The Determination revokes and replaces the previous *Greenhouse and Energy Minimum Standards (Clothes Washing Machines) Determination 2012* (**revoked Determination**). This replacement Determination provides additional test load options to manufacturers and suppliers of clothes washing machines, extends the energy rating label to ten stars, and provides additional label placement options. These amendments have been introduced as a result of technological advancement in the marketplace outpacing the current Australian standard for the product class.

Background

The *Greenhouse and Energy Minimum Standards Act 2012* (**Act**) established a national framework for regulating the energy efficiency of products supplied or used within Australia, implementing Australian Government and the Council of Australian Governments (**COAG**) commitments to establish national legislation to regulate energy efficiency and labelling standards for appliances and other products. The national legislation permits the Australian Government to set mandatory minimum efficiency requirements for products, to drive greater energy efficiency for regulated products. The Act also allows the Australian Government to set nationally-consistent labelling requirements, to increase Australians' awareness of options to improve energy efficiency and reduce energy consumption, energy costs and greenhouse gas emissions.

Selected definitions and text are extracted in the GEMS Determinations from the relevant Australian or Australian/New Zealand Standard. This is done with the intention of making it possible to determine if a product is covered (or excluded) by the GEMS Determination without having to refer to the relevant standard. The standards referenced in the Determination (AS/NZS 2040.1:2005 and AS/NZS 2040.2:2005) are available for from Standards Australia and SAI Global.

Energy labelling requirements primarily relate to requirements for the display of energy rating labels, such as those commonly seen on products including refrigerators, dishwashers and televisions, amongst others. Energy rating labels allow consumers to compare the energy consumption of similar products, and factor

potential cost savings into their purchasing decision. For some products, labelling requirements also relate to specific information that must be marked on the product itself or the box in which it is supplied.

Other regulatory requirements include requirements relating to high efficiency levels, product performance, and the impact of the product on the environment or the health of human beings:

- *High efficiency level* requirements allow suppliers or manufacturers to differentiate more efficient products in the market, where the product does not carry an energy rating label, provided they meet a specified efficiency benchmark over and above the nominated GEMS level requirements.
- *Product performance* requirements are intended to ensure that minimum efficiency requirements, or a higher number of stars on an energy rating label, are not achieved by reducing the effectiveness of the product in its primary function. An example of this is the setting of minimum requirements for soil removal for clothes washing machines.
- Requirements in relation to the *impact of a product on the environment or the health of human beings* are intended to ensure that greater energy efficiency does not come at the expense of the environment or human health. An example of this is the setting of a maximum limit for the amount of mercury that may be contained in a compact fluorescent or linear fluorescent lamp. Some level of mercury is necessary for these energy efficient lamps to operate, so limits are set to keep mercury content within safe levels for human health and the environment.

Authority

Under subsection 23(1) of the Act the Minister may, by legislative instrument, make a determination (a GEMS determination) that specifies one or more classes of products, if the products in those classes use energy or affect the amount of energy used by other products. A GEMS determination is the vehicle by which energy efficiency requirements (GEMS level requirements), energy labelling requirements (GEMS labelling requirements) for classes of products and other requirements for a product class are established.

Under section 25 of the Act the GEMS level requirements specified in a GEMS determination may be:

- requirements relating to one or more of the following:
 - the amount of energy used in operating products in relevant product classes;
 - the amount of greenhouse gases resulting from operating products in the relevant product class;
 - the effect of those products on the amount of energy used by operating other products; and

- requirements for conducting tests in relation to products in the relevant product class, in order to determine whether the products meet the specified requirements.

Under section 26 of the Act the GEMS labelling requirements specified in a GEMS determination may be:

- requirements relating to the information that must be communicated in connection with supplying, or offering to supply, products in the relevant product class;
- requirements relating to the manner in which that information must be communicated; and
- requirements for conducting tests in relation to products in the relevant product class in order to determine whether the products meet the specified requirements.

Under section 27 of the Act other requirements that may be specified in a GEMS determination are:

- requirements for products in the relevant product class to meet a specified level (the high efficiency level);
- requirements relating to the performance of products in the relevant product class;
- requirements relating to the impact of products in that product class on the environment or on the health of human beings;
- requirements for conducting tests in relation to products in the relevant product class in order to determine whether the products meet the specified requirements; and
- requirements of a kind specified in the regulations for the purposes of this paragraph.

Under section 35 of the Act the Minister may:

- revoke a GEMS Determination that covers one or more product classes; and
- make another GEMS Determination that specifies that it replaces the revoked determination.

The revoked Determination will cease to be in force immediately before the replacement Determination comes into force.

Consultation

The Australian Government consulted with industry stakeholders throughout the development of the replacement Determination. During the development of the Determination, industry stakeholders were further consulted on the specific aspects of the amendments included with the replacement Determination, including the extended

test load table, the increased star rating for appliances, and additional label placement options.

Industry stakeholders representing businesses affected by the proposed regulation were first consulted on the proposed changes in November 2014. Further consultation was undertaken in March 2015, and again in August 2015. Throughout this process general issues were raised, and subsequently resolved, around the proposed extended test load table to the satisfaction of industry attendees. Stakeholder input was taken into account in drafting the replacement Determination.

Regulatory Impact

The Office of Best Practice advised a Regulatory Impact Statement was not required for the replacement Determination. Consequently, no further regulatory impact analysis was considered necessary in relation to the proposal.

Details of the Determination

Section 1 – Name of Determination

This section sets out the title of the Determination.

Section 2 – Commencement

This section provides that the Determination commences the day after it is registered on the Federal Register of Legislative Instruments. It also provides that this Determination revokes and replaces the *Greenhouse and Energy Minimum Standards (Clothes Washing Machines) Determination 2012* (F2012L02117).

Section 3 – Definitions

This section sets out definitions for key terms used in the Determination. The definitions include:

- definitions relating to the various Australian/New Zealand Standards by which the requirements of the Determination are specified;
- a definition of “clothes washing machine”, which is given the same meaning as in Australian/New Zealand Standard AS/NZS 2040.1:2005;
- definitions of “energy efficiency label” which means the label specified in section 5 of Australian/New Zealand Standard AS/NZS 2040.2:2005 (the six star label), and “super-efficiency label” which means the label specified in Part 2 of Schedule 1 of the Determination (the ten star label); and
- a definition of “standard”, which means an Australian Standard, an Australian/New Zealand Standard or any other equivalent document.

Section 4 – Interpretation

Section 4 provides guidance for interpreting certain aspects of the Determination.

Subsection 4(1)

The purpose of this subsection is to avoid any inconsistency in terminology between the Determination (and other elements of the GEMS legislation) and the standards referenced in section 3 of the Determination. It indicates that where a term used in the Determination is not defined in any part of the GEMS legislation, but is defined in a standard referenced in section 3, for the purposes of the Determination the term has the meaning set out in the applicable standard.

Subsection 4(2)

Unless otherwise specified, the applicable version of a document incorporated by reference in a legislative instrument is the version that existed on the date the instrument came into force. This is made clear for standards specifically referenced in section 3 of the Determination. However, often these standards refer to other standards or documents which also contain requirements that must be applied to give

effect to the Determination or a standard referred to in the Determination. The purpose of this subsection is to make clear that the applicable version of these further documents is also the version that existed on the day the Determination came into force.

Section 5 – Specified product classes covered by the Determination

Section 5 sets out the scope of the Determination.

Subsection 5(1)

Subsection 5(1) provides that the Determination covers clothes washing machines, as defined in section 3, which are ordinarily supplied and used for personal, domestic or household use. This reflects the scope of the revoked Determination, and that of AS/NZS 2040.1:2005 and AS/NZS 2040.2:2005.

Subsection 5(2)

Section 11 of the Act provides that a determination must specify one or more product classes that it covers. This subsection specifies clothes washing machines covered by the Determination form a single product class.

Subsection 5(3)

This subsection sets out product classes that are not covered by the Determination. These are clothes washing machines with a capacity of 2 kilograms or less that cannot be connected to a mains water supply, and clothes washing machines that are only capable of being used with cold water. This reflects the product classes excluded under the revoked Determination.

Subsection 5(4)

This subsection defines the terms “automatic fill control” and “rated load capacity” for the purposes of section 5. Both terms are given the same meaning as they have in AS/NZS 2040.1:2005.

Section 6 – GEMS level requirements

There are no GEMS level requirements for clothes washing machines covered by the Determination.

Section 7 – GEMS labelling requirements

Section 7 specifies GEMS labelling requirements for clothes washing machines covered by the Determination, including requirements for conducting tests in order to demonstrate compliance with the energy labelling requirements, under section 26 of the Act.

Subsection 7(1)

This subsection provides that the GEMS labelling requirements are those set out in sections 2, 5 and Appendix B of AS/NZS 2040.2:2005, except that:

- Part 1 of Schedule 1 of the Determination applies instead of clauses 1.5.7 and 2.8 of AS/NZS 2040.2:2005; and
- Part 3 of Schedule 1 of the Determination applies instead of clause 5.1 of AS/NZS 2040.2:2005.

These modifications provide an expanded table for working out a product's star rating, allowing up to 10 stars, and revised requirements for label placement.

Section 2 of AS/NZS 2040.2:2005 sets out the process for calculating the star rating. In order to meet the test criteria specified in section 2 of AS/NZS 2040.2:2005, the supplier must nominate a program for energy efficiency labelling which meets the product performance requirements specified in section 3 of AS/NZS 2040.2:2005.

Subsection 7(2)

This subsection provides that, where a star rating of seven stars or greater is achieved, the labelling requirements are either those specified in sections 2, 5 and Appendix B of AS/NZS 2040.2:2005, or the Super-Efficient Label in accordance with the Part 1 of Schedule 2 of the Determination.

This allows suppliers to choose which version of the label they wish to display on their product in such circumstances.

Subsection 7(3)

This subsection specifies that the requirements for conducting tests are those set out in section 2 of AS/NZS 2040.1:2005, subject to a number of modifications.

Paragraph 7(3)(a) provides alternative requirements for the composition of the standard mixed cotton test load, to allow clothes washing machines with a rated capacity of greater than 10kg but not greater than 20kg, to be tested using a test load matched to their rated capacity. AS/NZS 2040.1:2005 currently only allows for test loads of up to 10kg. This paragraph specifies that:

- for test loads of 10kg or less, the requirements are as shown in Table C2 of AS/NZS 2040.1:2005, made up from the components detailed in Table C1 of AS/NZS 2040.1:2005; and
- for test loads greater than 10 kg but not greater than 20 kg, the requirements are as shown in the Table in Part 1 of Schedule 2 of the Determination, made up from the components detailed in the Table C1 of AS/NZS 2040.1:2005

Paragraph 7(3)(b) specifies that products larger than 20kg must be rated and tested at 20kg in accordance with the Determination.

Paragraph 7(3)(c) provides revised requirements relating to the number of swatches that must be used for each component of a test load, to accommodate test loads of greater than 10 kg but not greater than 20 kg. The paragraph specifies that the total

number of swatches required is determined according to Part 2 of Schedule 2 of the Determination.

Subsection 7(4)

This subsection replaces the requirement at subclause N 3.2 (g) of Appendix N of AS/NZS 2040.1:2005 with a transmittance requirement of between 80 per cent and 100 per cent.

The rinse performance of clothes washing machines is determined by measuring the mass, per kilogram of clothes load, of a chemical marker (PBIS) present in the rinse liquor that is retained in the wet load at the end of the program. This is done by measuring the transmittance of ultraviolet light through a sample of the liquor with a quartz cell spectrophotometer. A 2009 amendment to AS/NZS 2040.1:2005 erroneously changed the acceptance criteria for quartz cells from a minimum of 80 per cent transmittance to a minimum of 97.949 per cent.

Subsection 7(5)

This subsection replaces the limit for this residual PBIS level set in subclause M 5.1 of Appendix M of AS/NZS 2040.1:2005 with a PBIS limit of 0.2 milligrams per litre.

After a clothes washing machine rinse performance test is completed it is important that the test laboratory thoroughly rinse out the clothes that comprised the test load before they undertake a new test. This is to ensure that as much of the residual detergent, soil and particularly PBIS marker used in the rinse performance assessment is removed from the clothes load before starting a new test using the same load. At the end of the rinsing process a sample of liquor is taken from the re-conditioned load and checked for residual PBIS level using the test protocol specified in AS/NZS 2040.1:2005. The limit for residual PBIS level set in AS/NZS 2040.1:2005 has been determined to be unrealistic.

Section 8 – Other GEMS requirements

There are no other GEMS requirements for products covered by this Determination.

Section 9 – Family of models

Section 28 of the Act provides that a GEMS determination must specify, for each product class covered by the Determination, the circumstances in which two or more models in that product class are in the same family of models.

This section specifies that the family of models circumstances for clothes washing machines covered by this Determination are those set out in subclause 1.5.4 of AS/NZS 2040.2:2005.

Section 10 – Product categories

Section 29 of the Act requires that a GEMS determination specify whether the products it covers are category A or category B products. Category B products are subject to higher penalties than category A products for certain offences under the

Act, on the basis that category B products have a high impact on energy use or greenhouse gas production.

Section 10 specifies that clothes washing machines covered by the Determination are category A products.

Section 11 – Registrations affected by this Determination

Section 36 of the Act provides that if a replacement determination does not specify that it affects a model's registration, the model is taken to be registered against the replacement determination.

This section specifies that the Determination does not affect the registration of any model registered against the revoked Determination. Consequently, all models registered under the revoked Determination are considered to be registered against this Determination.

Schedule 1 - Variation to AS/NZS 2040.2:2005 – GEMS star rating and labelling requirements

Schedule 1 provides the necessary information for clothes washing machines that fall within the scope of the Determination to be labelled up to ten stars, along with associated labelling requirements.

Part 1 - Modifications to the Australian Standards to provide for Energy Efficiency and Super-Efficient Star Ratings

Part 1 of Schedule 1 of the Determination provides an extended Star Rating Index table to allow for a clothes washing machine star rating between a minimum of one and a maximum of ten stars.

Part 2 – Labelling Requirements

Part 2 of Schedule 1 of the Determination sets out the labelling requirements for the Super-Efficiency Label for paragraph 7(2)(b) of the Determination, in relation to dimensions and colours.

Part 3 – Label Placement

Part 3 of Schedule 1 of the Determination sets out the requirements for the placement of the Energy Efficiency Label and Super-Efficiency Label on clothes washing machines, for paragraph 7(1)(b) of the Determination. The preferred placement is the upper-front part of the product, however additional placement options are provided if that is not feasible or practical (for instance, if the label is too large to fit on the upper-front part, or if more than one type of label is required to be displayed on the product and there is not enough room for all of them on the upper-front part).

Schedule 2 – Make-up of test loads and number of swatches

Schedule 2 of the Determination provides revised requirements for the make-up of test loads and number of required swatches for clothes washing machines with a

capacity greater than 10kg but not greater than 20kg, to allow such products to be tested at their rated capacity.

Part 1 – Make-up of test loads

The table provided in Part 1 of Schedule 2 of the Determination sets out, for subparagraph 7(2)(a)(ii) of the Determination, the number and type of components that make up the test load for clothes washing machine test loads greater than 10kg but not greater than 20kg, by reference to the test load mass.

Part 2 – Number of swatches per test load component

The table provided in part 2 of Schedule 2 of the Determination sets out, for paragraph 7(2)(c) of the Determination, the number of swatches required for the test load, and for each component of the load, for clothes washing machine test loads greater than 10kg but not greater than 20kg, by reference to the test load mass.

Statement of Compatibility with Human Rights

Prepared in accordance with Part 3 of the Human Rights (Parliamentary Scrutiny) Act 2011

Greenhouse and Energy Minimum Standards (Clothes Washing Machines) Determination 2015

This Legislative Instrument is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Overview of the Legislative Instrument

The *Greenhouse and Energy Minimum Standards (Clothes Washing Machines) Determination 2015* prescribes matters relating to energy labelling requirements for clothes washing machines under the *Greenhouse and Energy Minimum Standards Act 2012*. The Determination establishes requirements for energy labelling, including requirements for conducting tests in order to demonstrate compliance with those requirements. The Determination also sets out the circumstances in which two or more models in a product class may be a family of models, and establishes the applicable product category for the purposes of calculating certain penalties under the Act.

Human rights implications

This Legislative Instrument does not engage any of the applicable rights or freedoms.

Conclusion

This Legislative Instrument is compatible with human rights as it does not raise any human rights issues.

The Hon Josh Frydenberg MP
Minister for Resources, Energy and Northern Australia