

OFFICIAL



**Australian Government**  
**GEMS Regulator**

# **Greenhouse and Energy Minimum Standards Check Testing Policy – with Validity Criteria**



GREENHOUSE & ENERGY  
**MINIMUM  
STANDARDS  
REGULATOR**

OFFICIAL

# 1. PURPOSE

The Greenhouse and Energy Minimum Standards (GEMS) Check Testing Policy outlines the principles used by the GEMS Regulator to verify, through laboratory testing, whether models of GEMS products (models) meet relevant GEMS requirements that apply to the product class against which they are registered. Defined terms used in this GEMS Check Testing Policy have their meaning in the GEMS Act unless otherwise indicated.

The GEMS Regulator, a position established by section 70 of the Greenhouse and Energy Minimum Standards Act 2012 (GEMS Act), is responsible for monitoring and enforcing compliance with the GEMS Act. Further information can be obtained in the [GEMS Compliance Policy](#).

The Check Testing Validity Criteria for each product contained in the Appendix have been approved by the GEMS Regulator exclusively for the purpose of this GEMS Check Testing Policy. The validity criteria do not apply for the purpose of the GEMS Regulator considering whether to approve an application to register a model under section 43 of the GEMS Act.

# 2. CHECK TESTING

Check Testing, also known as verification testing, refers to the activities undertaken by and on behalf of the GEMS Regulator, in forming a view as to whether a registered model complies with the relevant GEMS determination.

Section 61 of GEMS Act allows for the GEMS Regulator to give a notice to a registrant of a GEMS product requiring them to take specified action where the GEMS Regulator believes, on reasonable grounds, that a model does not comply with the GEMS determination against which it is registered.

This includes:

- GEMS level requirements relating to energy use and greenhouse gas production in accordance with section 25 of the GEMS Act;
  - specifically minimum energy performance standards (MEPS).
- GEMS labelling requirements in accordance with section 26 of the GEMS Act;
  - as they relate to energy efficiency claims.
- GEMS other requirements in accordance with section 27 of the GEMS Act;
  - specified performance requirements (generally included to ensure that a minimum acceptable standard of service is provided by the product, e.g. a refrigerator maintains acceptable compartment working temperatures).

Check Testing activities occur both before and after the issue of any notice by the GEMS Regulator under section 61 of the GEMS Act. Subject to consideration of individual circumstances, the method and requirements for Check Testing that will be followed by the GEMS Regulator are set out in this GEMS Check Testing Policy.

## 3. THE CHECK TESTING PROCESS

Check Testing is normally conducted in two Stages.

### 3.1. Stage 1 Check Testing

#### 3.1.1. Selecting models

The GEMS Regulator selects models for Stage 1 Check Testing using an intelligence led, risk based approach. Further information and the criteria adopted by the GEMS Regulator in selecting models for Check Testing is set out in the [GEMS Check Testing Selection Criteria](#).

#### 3.1.2. Acquiring sample products

In order to ensure the samples of products selected for the Stage 1 Check Tests are representative of the models registered, the GEMS Regulator, where practical, sources samples of products anonymously and directly from the market.

In limited circumstances where it is not practical to purchase the product in this way, the GEMS Regulator may under section 57 of the GEMS Act, require a registrant to give a product to a GEMS inspector or person authorised by the GEMS Regulator for Check Testing. Such circumstances may include where a purchase was refused, the product is specialised or custom, or no products were found in the market.

The Appendix to this document sets out the number of samples of products to be tested for Stage 1 Check Tests in relation to products registered against each of the GEMS determinations. For most products, a single product is tested. For some products identified in the Appendix (e.g., some lighting products), more than one sample of the product is acquired and tested for the purposes of stage 1 check testing.

#### 3.1.3. Conduct of Stage 1 Check Testing

Stage 1 check tests are conducted by National Association of Testing Authorities (NATA) accredited or affiliated laboratories either in Australia or overseas on products selected and acquired by (or on behalf of) the GEMS Regulator. The [Greenhouse and Energy Minimum Standards \(Authorisation Requirements for Testing GEMS Products\) Instrument 2021](#) sets

out the requirements that a laboratory must satisfy in order to be authorised to test GEMS products.

The selected laboratory is responsible to ensure the integrity of the Stage 1 Check Testing results via controls in accordance with their accreditation relating to product identification, acquisition, transport, secure storage and access. This is to ensure that Stage 1 Check Testing is conducted in accordance with the relevant GEMS determination (including any applicable testing standards).

The GEMS Regulator may decide to test a product against all or only some of the relevant GEMS requirements under the GEMS determination against which the product is registered.

The GEMS Regulator does not routinely notify registrants prior to completing the Stage 1 Check Testing unless further information or assistance is required for the purpose of conducting the Stage 1 Check Testing.

Check Testing will be undertaken in accordance with the approved test standard that is indicated in the product registration and any supporting information submitted by the supplier (including any test report). Where the test standard permits alternative options for test materials and/or test conditions, the check test laboratory will attempt to replicate these materials and conditions, as far as practicable, when conducting the check test. Where the specified test material is unavailable or has become obsolete, the check test laboratory will conduct testing in accordance with an alternate material approved by the GEMS Regulator.

As far as practical, the GEMS Regulator will advise the check test laboratory of all the relevant test settings, test material specifications and quantities to allow the test laboratory to replicate to the extent allowable under the provisions of the applicable test standards, the same test conditions as indicated in the product registration details.

#### **3.1.3.1. Thresholds (Stage 1)**

The result of the Stage 1 Check Testing is assessed by the GEMS Regulator in order to draw a conclusion as to whether the product meets the requirements under the applicable GEMS determination. Specific thresholds and tolerances (Check Testing Validity Criteria) are applied by the GEMS Regulator in determining whether a product sample that has been tested is deemed to meet or not meet the GEMS requirement.

The Check Testing Validity Criteria that are applied by the GEMS Regulator for the purpose of the Stage 1 Check Tests are set out in the Appendix.

#### **3.1.3.2. Stage 1 Check Testing - Pass**

Having regard to the Check Testing Validity Criteria, if the Stage 1 Check Testing results indicate that the product meets all the requirements of the GEMS determination that were tested, the GEMS Regulator will determine that the model passes the Stage 1 Check Testing.

The GEMS Regulator then notifies the registrant that Stage 1 Check Testing has taken place and that no further action is required to be taken.

#### **3.1.3.3. Stage 1 Check Testing - Fail**

Having regard to the Check Testing Validity Criteria, if the Stage 1 Check Testing results do not indicate that the product meets all of the requirements of the GEMS determination that were tested: the GEMS Regulator will notify the registrant that, on the basis of the Stage 1 Check Test results, it appears that the relevant model(s) of the product does not comply with the GEMS determination against which it is registered.

Before the GEMS Regulator decides whether to issue a notice under section 61 of the GEMS Act in relation to the relevant model(s) of the product that was subject to Stage 1 Check Testing: the GEMS Regulator will supply the registrant with the test results and allow the registrant 14 days in which to provide the GEMS Regulator with any further information they believe may have impacted on the Stage 1 Check Testing results, or that is otherwise relevant to the decision of the GEMS Regulator to issue a notice under section 61.

After the expiration of the 14 day period, the GEMS Regulator will consider any further information received from the registrant and either:

- a. decide to issue a notice under section 61 of the GEMS Act requiring the registrant to apply to cancel the registration of the model(s), or arrange for further testing at their expense in accordance with the process set out below for Stage 2 Check Testing;
- b. decide not to issue a notice under section 61 based on the further information provided by the registrant; or
- c. decide not to issue a notice under section 61 for the time being, subject to the registrant agreeing to conduct further testing or take other steps as required by the GEMS Regulator.

Should the registrant be unable to be contacted, fail to, or refuse to respond to the GEMS Regulator following the expiration of the 14 day period, the GEMS Regulator will consider either;

- d. issuing a notice to the registrant under section 61 of the GEMS Act, or
- e. suspending the model's registration under section 49 of the GEMS Act, or
- f. cancelling the model's registration under section 54 of the GEMS Act.

The GEMS Regulator may also consider additional enforcement responses as applicable to the circumstances.

If after the issue of a section 61 notice, the registrant does not agree to cancel the registration, or believes that the results of the Stage 1 Check Test do not accurately reflect the model(s) true performance, then the registrant may arrange for Stage 2 Check Testing to be conducted in accordance with the section 61 notice and at the registrant's expense.

If after the issue of a section 61 notice should the registrant; be unable to be contacted, fail to, or refuse to respond to the GEMS Regulator, the GEMS Regulator will consider actions under 3.1.3.3(e) and (f).

## 3.2. Stage 2 Check Testing

### 3.2.1. Conduct of Stage 2 Check Testing

The registrant must arrange for any Stage 2 Check Testing in accordance with the section 61 notice that has been issued by the GEMS Regulator. Subject to the relevant section 61 notice, the GEMS Regulator requires that Stage 2 Check Testing be undertaken in accordance with the process in this GEMS Check Testing Policy.

The same accreditation requirements apply for laboratories conducting Stage 2 Check Testing as for Stage 1 Check Testing, under the [Greenhouse and Energy Minimum Standards \(Authorisation Requirements for Testing GEMS Products\) Instrument 2021](#) .

In order to ensure the independence of the Stage 2 Check Testing results, the GEMS Regulator also requires that (unless otherwise agreed in writing) the Stage 2 Check Testing not be conducted by an in-house or registrant-associated laboratory, being a laboratory that is either owned or has a substantial part of its operations funded by the registrant or a related body. The GEMS Regulator will only agree to accept Stage 2 Check Testing results from a registrant-associated laboratory where there is no reasonable alternative. Registrants should seek confirmation that the GEMS Regulator does not object to the chosen laboratory prior to the conduct of the Stage 2 Check Testing. Additional controls (such as the presence of a third party expert witness) may be imposed by the GEMS Regulator if a registrant-associated laboratory is the only option.

Unless set out otherwise in the section 61 notice, Stage 2 Check Testing must be conducted in relation to each of the GEMS requirements for which the model(s) of the product were tested as part of the Stage 1 Check Testing, not just the GEMS requirements for which the model did not pass the Stage 1 Check Testing.

The registrant must ensure that a copy of the Stage 2 Check Testing laboratory report is provided to the GEMS Regulator following completion of the testing and in accordance with the timeframes and requirements specified in the section 61 notice.

#### 3.2.1.1. Acquiring sample products

In order to ensure the samples of products selected for the Stage 2 Check Tests are representative of the models registered with the GEMS Regulator, the GEMS Regulator will stipulate in a section 61 notice, the means for product selection. Such means may include:

- a. arranging for the check test laboratory to procure the samples directly from the market at the registrant's expense;



- b. requiring the registrant to make available to the regulator, access to their warehouse such that the regulator or their nominated agent can select samples as required;
- c. requiring the registrant to provide the regulator with a complete list of product serial numbers of available stock of the model within the registrant's warehouses. The regulator will then select serial numbers from the list and the registrant will be required to deliver the samples with those serial numbers to the test laboratory;
- d. any other means as prescribed by the regulator.

### **3.2.1.2. Thresholds (Stage 2)**

As for Stage 1 Check Testing, specific Check Testing Validity Criteria are applied for Stage 2 Check Testing to determine whether a product sample that has been tested and failed to meet the relevant GEMS requirement indicates that the entire population of the model is likely to fail to meet the GEMS requirement.

The Check Testing Validity Criteria often differ between Stage 1 and Stage 2 and the criteria for both are set out in the Appendix. Typically, where the Stage 1 check test fail relates to a performance requirement (GEMS level requirement or GEMS other requirement):

- Initially, two further products must be tested
- If both products fail, the model fails; if both products pass, the model passes
- If one product fails and one product passes, a third product is tested
- If two of the three products fail, the model fails
- If two of the three products pass, the model passes.

Typically, where the Stage 1 check test fail relates to a supplier declaration (GEMS labelling requirement):

- three units (selected by the GEMS Regulator) are to be check tested at the supplier's expense
- as a general rule, if the mean of the three additional units check tested is found to be more than 10% worse than the supplier declaration, the model fails. In terms of the applied tolerance, there are exceptions to this general rule so reference must be made to the relevant standard.

The number of samples of products to be tested and the means for determining a pass or a fail result (i.e. the validity criteria) is prescribed by the Appendix, which may vary depending on the product class.

### **3.2.1.3. Stage 2 - Check Testing - Pass**

Having regard to the Appendix and the Check Testing Validity Criteria, if the Stage 2 Check Testing results indicate that the product meets all the requirements of the GEMS determination that were required to be tested: the GEMS Regulator will notify the registrant that it is satisfied that the model meets the relevant GEMS requirements and that no further action is to be taken.

#### **3.2.1.4. Stage 2 Check Testing - Fail**

Having regard to the Appendix and the Check Testing Validity Criteria, if the Stage 2 Check Testing results do not indicate that the product meets the Check Testing Validity Criteria for all of the relevant GEMS requirements tested: the GEMS Regulator may suspend (under section 49 of the GEMS Act) or cancel (under section 54 of the GEMS Act) the model's registration and/or consider other enforcement responses in accordance with the GEMS Act.

### **3.3. Performance claims**

If the Stage 2 Check Testing results indicate that the product tested does not meet applicable GEMS labelling requirements, but does meet any applicable GEMS level requirements and any other GEMS requirements (or alternatively if no GEMS level requirements or other GEMS requirements apply): then the registrant may apply under the GEMS Act for the model of the product to be re-registered if accompanied by a test report from an accredited test laboratory that is accepted by the GEM Regulator for registration purposes, and subject to any other rectification requirements determined by the GEMS Regulator.

### **3.4. Same registration test report**

Any model of a product that is registered using the same registration test report or with the same model specifications (and therefore exhibiting the same or similar performance parameters), as a model of a product that failed a Stage 1 Check Test or a Stage 2 Check Test, will be treated as though it has also failed those tests. As such, the registrant relying on the relevant test report or with the same model specifications will be notified and be subject to the same process as for the original registrant under this GEMS Check Testing Policy.





OFFICIAL

OFFICIAL