



Why it's Important to Revalidate Dangerous Goods Packaging Approvals

"We revalidate packagings to ensure that their original design and performance don't diminish over time despite changes to companies, industry, and technology."

Background

In this article, we only focus on why it's important to revalidate Dangerous Goods Packaging Design approval numbers ("approvals") of plastic jerrycans since they comprise of the majority of the dangerous goods (DG) packaging market. The article's points can be appropriately compared to other packagings and their material types.

There is a Competent Authority for each state & territory ("state") of Australia and they each reserve the right to issue a *revalidation* requirement with their issued approvals. Revalidation requires that an approval must be re-reviewed and re-tested after a period of time set by the Competent Authority of each state. Approvals are issued in perpetuity, but if they don't meet the revalidation requirement, then they are made dormant. At the time of writing, only the Victorian Competent Authority enforces the revive clause and dictates that approvals must be revalidated every seven (7) years since it was last tested. Sometime in 2019, we expect the Competent Authority Panel (CAP) will standardise the revive clause across all states and reduce it to five years.



The DG codes

The Dangerous Goods (Transport by Road or Rail) Regulations ("the regulations") refers to the Australian Dangerous Goods Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) which incorporates the requirements of the international United Nations Recommendations on the Transport of Dangerous Goods (UNRDG) ("the codes"). The codes state that "tests must be repeated on production samples at intervals established by the Competent Authority (6.1.5.1.3)."

Why we revalidate

We revalidate packagings to ensure that their original design and performance don't diminish over time despite changes to companies, industry, and technology. Over time, subtle changes may compound and a packaging can eventually become entirely different to when it was initially approved.

Possible changes

- **Manufacturing changes** (using different moulds, different machines, reduction in the amount of material used to save money, different material distributions in variable parison machines, changes to heating and cooling temperatures of the moulds),
- **Supplier changes** (a company's material supplier may change; a supplier may stop producing a certain grade of material),
- **Company changes** (changes in staff & management, changes in manufacturing & quality assurance procedures, re-allocation of funding, pressure from management & clients),
- **Industry and technology changes** (new moulding techniques are used, new machines are built, material supply may change),
- **'Subtle' design changes** (changes in quantities of additives, changes in quantities of pigments, slight changes in packaging dimensions with wear of the moulds, changes to the method of assembly),
- **'Blatant' design changes** (changes in closures, neck finishes, packaging height, or method of sealing. Usually occurs when the regulations have been mis-interpreted or the company tries to 'fly under the radar'),
- **Regulatory changes** (revalidation allows that packages are maintained to the updated revisions of test standards and regulations), **and**
- **Natural product changes** (only really for wood or fibres, these natural products will change over time. For example, the fibres of recycled board decrease in length every time they're processed and, thus, require additives to maintain their strength).

After seven years of changes, it's understandable that an approval may no longer be appropriate for use. Even when comparing an old and new packaging side-by-side, they may look similar, but their performance can be entirely different.

What to walk away with

1. A Victorian issued DG approval must be revalidated every seven (7) years since it was last tested.
2. Revalidations must prove that an approval has maintained at least an equivalent level of performance despite changes to companies, industry, and technology. Approval holders must be able to prove this with a NATA endorsed test report at the request of the Competent Authority.
 - a. (6.1.5.1.8) *The Competent Authority may at any time require proof, by tests in accordance with this section, that serially-produced packagings meet the requirements of the design type tests.*
3. Each approval, including each *variation of an approval*, requires revalidation testing as the Competent Authority dictates.
4. Approvals are issued in perpetuity, but if they don't meet the revalidation requirement, then they are made dormant. Marking packagings with an approval number that has not met its revalidation requirements is in breach of the regulations and is illegal.
5. Over time, approvals must be kept as close to their original design and manufacture specifications as possible. If it's suspected that an approval has changed, then it must be assessed by the approval holder as to whether the change:
 - a. is classified as a *variation of an approval* (which *may* require re-testing), or
 - i. For information about variations of DG packaging designs then check out our article link below
 - b. warrants a new approval number (which does require re-testing).

Support

We're here to help support you with any questions you have. If you have any questions or concerns about revalidation testing then we will be happy to share our insights. Email: info@auscompliancelab.com.

For information about variations of DG packaging designs then check out our article [The Allowable Variations to Dangerous Goods Packaging Approvals](#).

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