



Dangerous goods safety information sheet

Dangerous Goods Safety (Road and Rail Transport of Non-explosives) Amendment Regulations 2018

Introduction

This information sheet summarises the amendments made to the Dangerous Goods Safety (Road and Rail Transport of Non-explosives) Regulations 2007 (the Regulations) which took effect on 1 September 2018. The amendments implement the National Transport Commission's (NTC) fifth national reform package for Western Australia.

The amendments gave effect to edition 7.6 of the *Australian Code for the Transport of Dangerous Goods by Road and Rail* (ADG Code). The changes made to the ADG Code are optional until 1 July 2019, after which they become mandatory. The major changes in edition 7.6 of the ADG Code are listed in Tables A and B below.

The other significant amendment is the introduction of a new offence provision at r. 109A for consignors and transporters of dangerous goods in tank vehicles and portable tanks. This new provision aims to prevent the display of misleading advertisements that have the potential to cause confusion about the nature of the contents of the tank.

Confusion about the real contents of dangerous goods tanks has occurred in the past. Emergency services in regional Western Australia rely heavily on the police, volunteers and members of the public and, without specialist knowledge, it is easy to see how an oversized advertisement for non-dangerous goods can mislead from a distance, particularly when it dwarfs the dangerous goods information in the much smaller Emergency Information Panels (EIPs). Confusion causes delays in the emergency response and, when explosion risk dangerous goods are involved, delays could potentially cost lives.

This new provision will be mandatory from 1 July 2019.

Significant changes in edition 7.6 of the ADG Code

The latest two-yearly update of the 20th edition of the *United Nations Recommendations on the Transport of Dangerous Goods* (UN Recommendations) contained changes that have been adopted in edition 7.6 of the ADG Code. These are primarily technical improvements, and include changes to packing instructions, special provisions and new entries in the Dangerous Goods List.

Other changes to the ADG Code are Australian-specific and were developed by the NTC in collaboration with states and territories. Australian-specific amendments are important because the UN Recommendations are generic, catering for sea and air transport as well as road and rail transport, and consequently only impact on half of the chapters in the ADG Code.

Significant changes to the ADG Code are summarised in Table A and Table B below.

Table A Some significant changes adopted from the UN Recommendations

Reference in the ADG Code	Description
References to “risk” have been replaced by “hazard”	<p>All references to <i>subsidiary risk</i> have been replaced with <i>subsidiary hazard</i> to rectify the long-standing error of using the wrong safety terminology.</p> <p>All safety information on the hazardous properties of dangerous goods in the ADG Code is hazard-based and not risk-based, in line with the hazard-based information on hazardous chemicals in the <i>Globally Harmonised System of classification and labelling of chemicals</i> (GHS).</p> <p>The ADG Code can only warn of the hazard of dangerous goods. The actual risk is unknown and specific to the many different prevailing circumstances of the transport operation. Only a full understanding of all those specific circumstances in detail would allow the risk (probability) of an accident scenario to be calculated.</p>
Note 1 in chapter 1.1 – General provisions	<p>All references in the ADG Code refer to the sixth edition of the UN Manual of Tests and Criteria, as well as Amendment 1 of the UN Manual of Tests and Criteria.</p> <p>Amendment 1 includes a new section 39 providing the procedure for the classification of “<i>ammonium nitrate based fertilizers</i>” and the new “<i>US flash composition test</i>”, which represents the first practical method of classifying fireworks in conjunction with the default fireworks classification table 2.1.3.5.5.</p>
New entries in Table 3.2.3 – Dangerous Goods List	<p>UN No’s 3535 – 3548 comprise 14 new entries:</p> <ul style="list-style-type: none"> • 12 entries involve generic, not otherwise specified (NOS) entries for articles containing different classes of dangerous goods • UN 3535 – Toxic solid, flammable, inorganic, NOS • UN 3536 – Lithium batteries installed in cargo transport units
Amended UN entries for <i>ammonium nitrate based fertilizer</i> in Table 3.2.3 – Dangerous Goods List	<p><i>ammonium nitrate based fertilizer</i> entries for UN 2067 (Division 5.1) and UN 2071 (class 9) have new wording in their respective special provisions SP 307 and SP 193.</p> <p>The new wording no longer explains how to classify these fertilisers and refers the reader to a new section 39 of the UN Manual of Tests and Criteria and its flowcharts to determine the classification of the fertiliser into UN 2067, UN 2071, non-dangerous or class 1.</p>
New chapter 2.8 for the classification of Class 8 – corrosive substances	<p>Chapter 2.8 covers definitions, criteria to determine hazard classification for skin corrosivity and criteria for assignment to packing groups.</p>

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<p>New chapter 3.5 – Dangerous Goods packed in excepted quantities</p>	<p><i>Excepted quantities</i> is a packaging method used for many years to transport dangerous goods by air. The inclusion of a new chapter 3.5 in the ADG Code now makes it a legal way to package dangerous goods for road and rail. It is a very safe and conservative method of packaging, superior in safety (but not in cost and efficiency) to current ADG Code methods.</p> <p>The inclusion of chapter 3.5 necessitated the inclusion of a new column 7b in Table 3.2.3 – Dangerous Goods List (see below), indicating the maximum allowable quantities for inner and outer packaging of dangerous goods. Many dangerous goods are not permitted as <i>excepted quantity</i> (denoted as “0”) and others have maximum quantities of for the inner and outer packaging depending on the E code.</p> <p>There are five E codes. As an example, E1 and E5 are explained below:</p> <ul style="list-style-type: none"> • E1 allows for the <i>largest</i> quantities of a max. 30 g/ml and 1000 g/ml for the inner and outer packaging respectively • E5 allows for the <i>smallest</i> quantities of a max. 1 g/ml and 300 g/ml for the inner and outer packaging respectively. 																																																																																																								
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Table B Significant Australian-specific changes

Reference in the ADG Code	Description
1.1.1.2 (4)	<p>This clause notes that regulation 1.1.6(3) of the model subordinate instrument (MSI) provides a total exemption from the Regulations and the ADG Code for the transport of dangerous goods by a mobile processing unit (MPU). This exemption does not extend to a trailer being towed by a MPU.</p> <p>For this note to have any legal effect, each jurisdiction will need to provide an exemption in their own regulations before it can apply in their jurisdiction.</p> <p>The Regulations gave effect to this exemption in July 2017 (see r. 13A), even before the exemption provision was provided by the MSI. This is because of the large numbers of MPUs and the importance of the mining industry to WA.</p> <p>The WA exemption is designed to suit the regulatory landscape of Western Australia and requires MPUs to comply with:</p> <ul style="list-style-type: none"> (a) Regulations regarding all non-ADG Code issues, including the licensing of drivers, emergency procedures, incident reporting, insurance and dangerous goods classification requirements, <i>and</i> (b) Australian Explosives Industry Safety Group (AEISG) Code of Practice on MPUs (instead of the ADG Code).
<p>New section 3.4.11 introducing a new packaging method for certain types of low risk dangerous goods packaged in limited quantities</p>	<p><i>Mixed Packet (Lower Risk) Dangerous Goods</i> are limited quantity dangerous goods household cleaners, which are not aerosols, pool or spa cleaners, or Division 2.3 dangerous goods.</p> <p>They must be contained in an outer package that weighs no more than 10 kg, contains at least 50 % non-dangerous goods by volume, and does not contain food.</p> <p>The packages must be labelled as follows:</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p style="text-align: center;">MIXED PACKET (LOWER RISK) DANGEROUS GOODS Road and Rail Transport only 10kg maximum, at least 50% non-dangerous goods (by volume) Warning – household cleaners – take care in event of leakage</p> </div> <p>These packages need to comply with the normal LQ packaging (section 3.4.2) and segregation (section 3.4.3.1) requirements.</p> <p>However, they are not subject to any other provisions of the ADG Code, such as documentation or placarding requirements, or any of the normal duties that apply above placard load quantities.</p> <p><i>Note: The segregation requirement at section 3.4.3.1 allows different dangerous goods in the same outer packaging provided they will not interact dangerously in the event of leakage.</i></p>
<p>New section 3.4.12 introducing a new packaging method for certain types of low risk dangerous goods packaged in limited quantities</p>	<p><i>Personal Care Products in Consumer Packaging</i> are limited quantity dangerous goods substances intended for placement in contact with any external part of the human body (including the mucous membranes of the oral cavity and the teeth), such as cosmetics, personal hygiene products, sunscreens, etc.</p> <p>These products need only comply with the normal LQ packaging requirement at section 3.4.2 of the ADG Code. They do not need to comply with any other requirements (e.g. documentation, placarding).</p>

Reference in the ADG Code	Description
8.1.3.5	This amendment allows “bundles of cylinders” to be exempt from requiring rigid sides or gates if they are restrained in accordance with the Load Restraint Guide.