

Land Transport Rule Dangerous Goods Amendment [2009]

Rule 45001/2

Overview

Land Transport Rules are produced for the Minister of Transport. They go through an extensive consultation process and are refined in response to consultation.

*This overview accompanies, and sets in context, the yellow (public consultation) draft of **Land Transport Rule: Dangerous Goods Amendment [2009]** (Rule 45001/2). The draft Rule proposes amendments to *Land Transport Rule: Dangerous Goods 2005*. The principal purpose of the changes is to maintain alignment of the Rule with the *United Nations Recommendations on the Transport of Dangerous Goods – Model Regulations (UNRTDG)* and with the *New Zealand requirements relating to hazardous substances and new organisms*.*

*If you wish to comment on this draft Rule, please see the page headed 'Making a submission'. The deadline for submissions is **9 April 2009**.*

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What are Land Transport Rules

The NZ Transport Agency (NZTA) is contracted to produce Land Transport Rules (Rules) for the Minister of Transport under an agreement for Rule development services with the Secretary for Transport. Rules are made in accordance with the *Land Transport Act 1998* and are signed into law by the Minister of Transport (the Minister). Rules are made in respect of a wide range of matters covered by the New Zealand Transport Strategy (NZTS). These include safeguarding and improving land transport safety and security, improving access and mobility, assisting economic development, protecting and promoting public health and helping to ensure environmental sustainability.

Land Transport Rules are drafted in plain language and aim to:

- **clarify**
- **consolidate and**
- **create**

land transport law.

What is the consultation process for this Rule?

The Government is committed to ensuring that legislation is sound and robust and that the consultation process takes account of the views of, and the impact on, people affected by changes proposed in Rules.

This publication, for your comment, has two parts:

- (a) an overview, which sets proposed Rule changes in context; and
- (b) the yellow draft of *Land Transport Rule: Dangerous Goods Amendment [2009]*(Rule 45001/2) (the proposed amendment Rule) for public comment.

This amendment Rule contains proposals that would change requirements in *Land Transport Rule: Dangerous Goods 2005* ('the Dangerous Goods Rule' or 'the Rule'). Please read the overview carefully and consider the effects that this amendment Rule would have on you or your organisation, particularly the benefits and costs that would result from its implementation.

You will notice the draft amendment Rule contains only the changes that are proposed to the Rule. If you do not have a copy of the Rule, please read the information about obtaining Land Transport Rules in *Publication and availability of Rules* (page 46). To assist in setting the proposed amendments in context, the amendment Rule is linked to the Dangerous Goods Rule on our website.

The issues that are raised in submissions on the yellow draft of the amendment Rule will be analysed and taken into account in redrafting the Rule.

Following completion of the public consultation phase, the draft amendment Rule will be submitted to the Ministry of Transport for government scrutiny. The final draft of the Rule will then go to Cabinet for noting and will be submitted for signature by the Minister.

How do I make a submission?

If you wish to make a submission on the proposed amendment Rule, please read the material headed *Making a submission* at the front of this document.

The deadline for submissions is **9 April 2009**.

When will the Rule come into force

Subject to government approval, it is proposed that the Rule will come into force in late 2009.

Why is this Rule being proposed?

This proposed Rule will amend the 2005 Dangerous Goods Rule, which sets out requirements for the safe transport of dangerous goods on land in New Zealand. The Rule covers the packaging, identification and documentation of dangerous goods, the segregation of incompatible goods, transport procedures and the training and responsibilities of those involved in the transport of dangerous goods.

The requirements for controlling the transport of dangerous goods on land are based on the *United Nations Recommendations on the Transport of Dangerous Goods – Model Regulations* (UNRTDG). These recommendations are modified, when necessary, to conform with other, related New Zealand legislation. The principal New Zealand legislation in this area is the *Hazardous Substances and New Organisms Act 1996* (HSNO) and the regulations made under that Act. These impose requirements for all phases of the life cycle of hazardous substances. Generally, regulations made under HSNO recognise compliance with the Rule as compliance with HSNO for land transport.

The objectives of this proposed amendment Rule are:

- to take account of the inclusion, in the UNRTDG, of criteria for substances that are toxic to the aquatic environment, resulting from the United Nations decision to promote a sustainable environment;
- to ensure that the Rule is consistent with current UNRTDG and HSNO requirements that have a bearing on transport of dangerous goods;
- to include provisions for dangerous goods in excepted quantities as introduced in the 15th revised edition of the UNRTDG;
- to clarify or modify existing provisions in the Rule for the purpose of aiding compliance with Rule requirements.

What changes are proposed?

Your comments are welcome on the proposed changes. A glossary of abbreviations used can be found in the Appendix (page 47).

Section 2

Amendment of Rule provisions

2.1 New Zealand Standard 5433:2007 (NZS 5433:2007)

Background

Currently, the Rule makes reference to NZS 5433:1999. The Rule, therefore, needs to be updated to refer to the current, 2007 standard.

Proposed Rule change 1

It is proposed to update the Rule by replacing references to NZS 5433:1999 with references to the latest version of the Standard, ie, NZS 5433:2007.

2.2 Interpretation of Rule provisions

Background

Subclause 1.5(2) of the Rule provides a dispensation from marking packages when the proper shipping name of the dangerous goods includes the words “Not Otherwise Specified” or “N.O.S.”. *Paragraph 1.5(2)(b)* allows the package to be marked with the technical name of the dangerous goods only, rather than the proper shipping name and the technical name. This was allowed under *New Zealand Standard 5433:1988*, and was included in the Rule as a transitional dispensation.

Proposed Rule change 2

For better alignment with the requirements of the UNRTDG and international maritime and aviation transport, it is proposed that the dispensation granted under *paragraph 1.5(2)(b)* be discontinued from the end of 2010. It is also proposed to substitute “N.O.S.” for “NOS” in *subclause 1.5(2)* of the Rule as the correct abbreviation for “not otherwise specified”.

2.3 Dangerous goods transported for hire or reward

The proposed changes to *clause 2.2* of the Rule are consequential to the proposal to include provisions for transport of excepted quantities of dangerous goods and excepted packages of radioactive material. These proposals are fully explained in amendment proposal 2.6 *Excepted quantities and excepted packages*.

2.4 Dangerous Goods in Limited Quantities (DGLQ) and Consumer Commodities

Clarifying which goods can be transported as Dangerous Goods in Limited Quantities

Background

Quantity limits for goods that may be transported as Dangerous Goods in Limited Quantities are listed in *Schedule 2*, with specific exclusions listed in *Schedule 2A*. There is also a list of general exclusions in *subclause 2.3(3)* of the Rule. This means that three separate tables or clauses must be examined to determine if a product may be transported as Dangerous Goods in Limited Quantities and what the quantity limit is. This could be simplified by combining all the information in one place in the Rule.

Proposed Rule change 3

It is proposed to amend *2.3(1)(a)(i)* and *2.3(3)*, and to combine *Schedule 2*, *Schedule 2A* and the list of general exclusions in *2.3(3)* into a new *Schedule 2*, to clarify which dangerous goods can, and cannot, be transported as Dangerous Goods in Limited Quantities. This is intended to make it easier to understand the requirements. (See *4.2 Schedule 2* also.)

Identification of Dangerous Goods in Limited Quantities and Consumer Commodities

Background

The UNRTDG now requires Dangerous Goods in Limited Quantities to be identified by marking packages with the UN number placed within a diamond-shaped border. This option is provided for in the Rule. However, to align with the UNRTDG, this should be the preferred method for identifying DGLQ.

Proposed Rule change 4

It is proposed to amend *clause 2.3* to require that, from 1 January 2011, all Dangerous Goods in Limited Quantities and Consumer Commodities must be marked with the UN number in a diamond-shaped border, unless they are labelled and marked with class labels, the UN number and the proper shipping name.

Until 31 December 2010, Dangerous Goods in Limited Quantities and Consumer Commodities would have the option of being marked in accordance with the existing requirements in the Rule, which includes the UN number in a diamond-shaped border.

2.5 Small packages of dangerous goods

Background

The packaging requirements for Small Packages of dangerous goods are stated in 2.4(1)(b). This provision refers to 3.2(2), for Small Packages that are Dangerous Goods in Limited Quantities, and to 3.2(3), for Small Packages of explosives. However, 3.2(2) refers to other clauses, including the packaging requirements of the relevant regulatory authority, which is the main requirement for Small Packages of explosives. The cross references in 2.4(1)(b), therefore, are circuitous and could be simplified by making direct references to the fundamental requirements of the Rule.

Subclause 3.2(2) also needs to be amended to clarify that the packaging dispensation for Dangerous Goods in Limited Quantities (from the requirement for packaging to be tested to UN performance standards) also applies to Small Packages of Dangerous Goods (see *subclause 2.7(2)* of the amendment Rule).

Proposed Rule change 5

It is proposed to amend the Rule to make packaging requirements for Small Packages of dangerous goods easier to follow.

2.6 Excepted quantities and excepted packages

Background

Excepted quantities of dangerous goods

The 15th revised edition of the UNRTDG includes provisions for dangerous goods in excepted quantities. These are very small quantities of low risk dangerous goods (for example, 30 ml of perfume).

International aviation transport codes have, for many years, made provision for excepted quantities of dangerous goods. *Subclause 1.4(1)* of the Rule recognises and allows for the transport of excepted quantities, as detailed in the International Civil Aviation Organisation and International Air Transport Association documents. However, now that they have been included in the UNRTDG and the 2008 edition of the *International Maritime Dangerous Goods Code* (IMDG), excepted quantities will be more widely recognised and the requirements for their transport on land in New Zealand need to be included in the Rule.

Excepted packages of radioactive material (Class 7)

Excepted packages of radioactive material are packages that have a limited radioactive content and present a minimal radiological hazard during transport. They include:

- empty packages that previously contained radioactive material;
- packages that contain radioactive material in limited quantities; and
- radioactive material in instruments or manufactured articles.

In accordance with *1.2(3)* of the Rule, the National Radiation Laboratory has declared that excepted packages of radioactive material that comply with the International Atomic Energy Agency (IAEA) requirements are not dangerous goods for transport on land in New Zealand. The dispensation from transport controls for excepted packages meeting IAEA requirements is also included in the UNRTDG, and so these provisions should be included in the Dangerous Goods Rule.

Proposed Rule change 6

It is proposed to amend the relevant sections of the Rule to include provisions for the transport of excepted quantities of dangerous goods, and of excepted packages of radioactive material.

The proposed changes include the insertion of a definition of these terms and a new Schedule listing quantity limits and packaging performance standards for excepted quantities of dangerous goods.

Although details of quantity limits and packaging performance requirements for excepted quantities can be found in documents incorporated in the Rule, their inclusion in a Schedule will provide sufficient information to enable industry to meet the conditions and, thereby, take advantage of the dispensations, without the need to refer to the incorporated documents.

2.7 Requirements relating to the nature and quantity of goods

This proposal includes a number of changes to the packaging requirements in *3.2* of the Rule as follows:

2.7(1) and the first two subclauses in *2.7(4)* (ie, proposed *subclauses 3.2(6)* and *3.2(7)*) are consequential to *Proposal 6* as explained in *2.6 Excepted quantities and excepted packages*.

2.7(2) - *Small packages of dangerous goods*, as explained in *2.5 Small packages of dangerous goods*.

2.7(3) - Packaging of Division 4.1 dangerous goods

Background

As in the case of Division 5.2, organic peroxides, the relevant regulatory authority may classify self-reactive substances of Division 4.1 that are not currently listed in any of the incorporated documents. The classification might include specific packaging requirements and so Division 4.1 should be listed with other dangerous goods that have to comply with packaging requirements of the relevant regulatory authority.

Proposed Rule change 7

It is proposed to amend 3.2(3)(a) by adding Division 4.1 dangerous goods.

2.7(4) (proposed subclause 3.2(8)) - UN packing instructions

Background

The UNRTDG contains packing instructions for each entry in the list of dangerous goods. The packing instructions describe the types of container and the maximum quantity for each container that is suitable for the particular dangerous goods. The international aviation and maritime codes require compliance with the packing instructions.

The Rule requires packaging to meet UN performance standards but does not specifically require compliance with the packing instructions because they were not included in the UNRTDG when the Rule was first drafted in the late 1990s. However, the general safety requirements in the Rule require packaging to be appropriate for the nature and quantity of the dangerous goods, not to contaminate or react with the dangerous goods and to be strong enough to contain the dangerous goods without leaking during normal conditions of transport (see 3.1(1)).

This is the essential purpose of the UN packing instructions. In the absence of other recognised standards for packaging dangerous goods, complying with the UN packing instructions is the only reasonable way to satisfy the Rule's general safety requirements for packaging.

Although HSNO also requires packaging to meet the UN performance standards and be able to retain the contents without leaking, taking into account the physical state and properties of the hazardous substance, HSNO does not prescribe compliance with the UN packing instructions. However, complying with the UN packing instructions would also satisfy HSNO requirements for packaging to retain the contents without leaking.

All imported, packaged dangerous goods (about 75% of packaged dangerous goods in New Zealand) must comply with the UN packing instructions as specified in the international maritime and aviation codes.

Proposed Rule change 8

It is proposed to insert a new subclause 3.2(8) to require compliance with the packing instructions in the UNRTDG, NZS 5433 or one of the international maritime or aviation codes incorporated in the Rule.

This proposal will contribute to safety and align with the other transport modes for the transport of dangerous goods, and will also promote alignment with HSNO by providing a means of compliance with the performance requirements of the HSNO packaging regulations.

As an alternative to the UN packing instructions, it is proposed to allow compliance with requirements of the relevant regulatory authority. This means that if a code of practice was approved under HSNO, compliance with that code would meet the requirements of the Rule, or if packing instructions were specified in an Environmental Risk Management Authority approval for a hazardous substance, then that would also meet the requirements of the Rule.

2.8 Dangerous goods transported for domestic or recreational purposes

Background

For better alignment with HSNO and other national legislation, 3.3(1)(a) of the Rule needs to refer to compliance with the requirements of the relevant regulatory authority.

Proposed Rule change 9

It is proposed to substitute an amended 3.3(1)(a).

2.9 Labelling and marking: general safety requirements

Clean and empty containers

Background

The Rule requires that misleading labels and markings be removed from dangerous goods. However, *clause 2.7* of the Rule allows clean and empty containers to be transported with labels and markings in certain circumstances.

Proposed Rule change 10

Subclause 4.1(7) is to be amended to make an exception for these containers to be transported with labels and markings.

*Unit load devices***Background**

Subclause 4.1(9) specifies requirements for identifying unit load devices that contain dangerous goods. New requirements to identify packages containing environmentally hazardous substances and for orientation arrows on liquid and other spillable dangerous goods also apply to unit load devices. (See *2.11 Marking according to the nature and quantity of the goods* for a full explanation of the new special marking requirements.)

Proposed Rule change 11

A new subclause *4.1(9)* is to be substituted to update the requirements for the display of labels and special marks on a unit load device.

2.10 Labelling according to the nature and quantity of the goods**Background**

The UN allows category B infectious substances that are packaged and marked in accordance with packing instruction P650 to be transported without other transport controls. This is similar to the requirements in the Rule for routine diagnostic specimens and low risk biological products. P650 specifies that packages be marked with the UN Number (UN 3373) in a diamond-shaped border and with the proper shipping name, but class labels are not required.

Proposed Rule change 12

It is proposed to allow additional flexibility by amending *4.2(4)* and *4.3(5)* to allow the marking in P650 as an option for identifying routine diagnostic specimens and low risk biological products.

Amendment provision *2.10(b)* is consequential to *Proposed Rule change 6* (see *2.6 Excepted quantities and excepted packages*).

2.11 Marking according to the nature and quantity of the goods

Amendment proposal *2.11* includes a number of changes to the marking requirements in *4.3* of the Rule as follows:

2.11(1) is consequential to *Proposed Rule change 6* (see *2.6 Excepted quantities and excepted packages*).

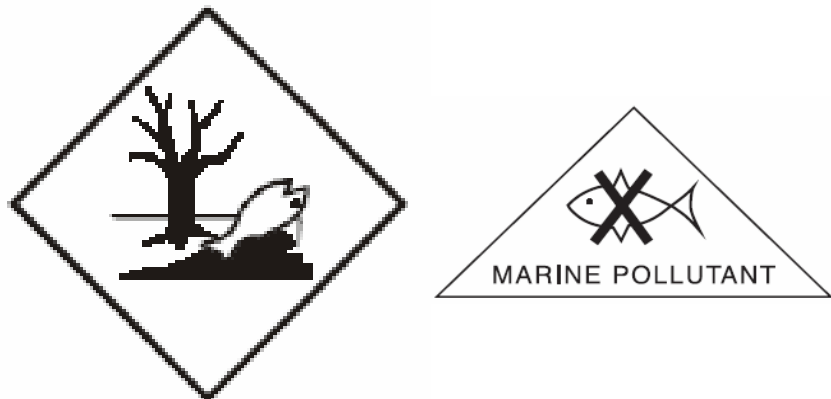
2.11(2) is part of *Proposed Rule change 12* (see 2.10 *Labelling according to the nature and quantity of the goods.*)

2.11(3) - *Identification of environmentally hazardous substances* (new requirements).

Background

In addition to the Class 9 transport label for substances that are toxic to the aquatic environment (UN 3077 and UN 3082), the UNRTDG specifies that containers be marked with the environmentally hazardous substance pictogram (ie, the symbols of a dead tree and a fish in a diamond) as shown below. It should be noted that the UN specifies this pictogram as being a mark, rather than a label, although it has many of the characteristics of a transport label.

This pictogram may also be used as a means of compliance with HSNO identification requirements. Amendment 34-08 of the IMDG also requires the use of this pictogram from the beginning of 2010 to identify marine pollutants. It will replace the current marine pollutant mark, which is a fish with a cross in a triangle, shown below.



Policy proposal

To maintain alignment with the UNRTDG and maritime transport in particular, it is necessary to require the environmentally hazardous substance pictogram for land transport in New Zealand.

Adopting the pictogram for land transport would also align the Rule with HSNO as a means of compliance with identification requirements for ecotoxic substances.

It is proposed to allow a reasonable transition period before the environmentally hazardous substance pictogram becomes mandatory in New Zealand. The proposed date is the end of 2010. This is a year longer than the implementation period for maritime transport, but it aligns with the UNRTDG requirements for the new Class 5.2 label. Having a single date for all the changes proposed for this amendment Rule is easier to remember and together with the longer transition period would help to reduce the cost of complying with new requirements.

Proposed Rule change 13

It is proposed:

- (a) to add the requirement for the use of the environmentally hazardous substance pictogram to *clause 4.3*;
- (b) to insert a new clause, *7.2(12)* (see amendment provision *2.20*) requiring tankwagons, portable tanks and freight containers to be marked with the environmentally hazardous substance pictogram;
- (c) to insert a new definition, ‘special mark’ in the Rule to reflect the designation by the UN of the environmentally hazardous substance pictogram as a mark, rather than a label.

2.11(4) inserts seven new subclauses relating to marking dangerous goods as follows:

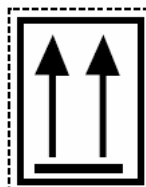
Proposed *subclauses 4.3(7) and 4.3(8)* are consequential to *Proposed Rule change 6* (see *2.6 Excepted quantities and excepted packages*.)

Proposed *subclauses 4.3(9), 4.3(10) and 4.3(13)* are explained in amendment *2.11(3)* above.

Proposed subclauses 4.3(11), 4.3(12) and 4.3(13) - Orientation arrows (new requirement)

Background

The UNRTDG has introduced a requirement to mark packages containing dangerous goods that need to be kept upright with orientation arrows, as shown below. This has long been a requirement for air transport and has also been required for sea transport since 2006.



This requirement applies to outer packaging that contains inner packages of liquid dangerous goods, sole packagings fitted with vents and open cryogenic receptacles for transporting refrigerated, liquefied gases. The UNRTDG does not require orientation arrows on:

- pressure receptacles (other than cryogenic receptacles for transporting refrigerated, liquefied gases);
- dangerous goods in inner packagings of not more than 120 ml that are prepared with sufficient absorbent material between the inner and outer packagings to completely absorb the liquid contents;
- Division 6.2 infectious substances in primary receptacles of not more than 50 ml;
- Class 7 radioactive material in Type IP-2, IP-3, A, B(U), B(M) or C packages;
- articles that are leak-tight in all orientations (eg, alcohol or mercury in thermometers, aerosols, etc.).

As with the environmentally hazardous substance pictogram, orientation arrows are regarded by the UN as being a mark rather than a label.

Policy proposal

It is necessary to adopt in the Rule the UNRTDG requirement for orientation arrows to maintain alignment with the UNRTDG and other modes of transport. A reasonable transition period (until the end of 2010) is proposed.

Proposed Rule change 14

It is proposed:

- (a) to add a requirement for orientation arrows to *clause 4.3*;
- (b) to include orientation arrows in the proposed definition of 'special mark' to recognise that they are designated by the UN as a mark, rather than a label.

2.12 Marking or labelling dangerous goods transported for domestic or recreational purposes or for use as tools-of-trade

The proposed amendment to *subparagraph 4.4(1)(a)(i)* of the Rule is consequential to the proposals to require containers to be marked with the environmentally hazardous substance mark and orientation arrows (ie, special marks). These proposals are fully explained in *2.11 Marking according to the nature and quantity of the goods*.

2.13 Types of documentation

Quantity details on Dangerous Goods Declaration

Background

Paragraph 5.2(2)(b) of the Rule requires information about the quantity of dangerous goods in a consignment to be recorded on the Dangerous Goods Declaration. The description must include the number and type of packages and the total quantity in the consignment.

Typically, this information is expressed as the number of outer packages, drums, cylinders, Intermediate Bulk Containers¹, etc. depending on the size and type of the load. For larger consignments, it is also common practice to describe the quantity by the number of unit load devices, such as pallets or crates. Provided all the dangerous goods on the pallet are the same product, with the same UN number and packing group, there is no apparent reason why this practice should not be permitted.

The definition of packaging in the Rule specifically excludes pallets and other unit load devices. Specifying the number of pallet loads in a consignment of dangerous goods, therefore, does not comply with the requirement to document the number and type of packages. Incorporated technical documents (such as the UNRTDG and the IMDG) do not exclude pallets from the definition of packaging, and so describing the number and type of packages in a consignment by stating the number of pallets appears to be acceptable international practice.

Policy proposal

Describing quantity by the number of pallets, plus the volume or mass of dangerous goods in the consignment, is in accordance with international practice. This practice has no detrimental effect on the main purpose of the Dangerous Goods Declaration, which is to ensure an accurate description of the load for handling, tracking and emergency response. The New Zealand Fire Service has indicated its agreement with this practice, except for consignments of gas cylinders.

Proposed Rule change 15

The definition of packaging excludes pallets for reasons relating to the performance standards for packaging and for determining quantity limits for Dangerous Goods in Limited Quantities, Small Packages and tools-of-trade. It is, therefore, not practical to amend this definition.

¹ See relevant definition in *Part 2 Definitions* of the Rule.

It is proposed instead to amend *paragraph 5.2(2)(b)* to allow the quantity of dangerous goods, except gases in gas cylinders, to be described by the number of packages or containers, plus the total mass or volume in the consignment as appropriate. The definition of container includes pallets and other unit load devices. To satisfy the safety concerns of the Fire Service, gases in cylinders would have to be described by the number of gas cylinders being transported, not by the number of pallets on which they are loaded.

It is also proposed to delete the reference to “31 December 2005” in *paragraph 5.2(2)(d)* of the Rule. This is no longer required as the transition period has ended.

2.14 Documents not required

The proposed amendment to *subclause 5.3(1)* of the Rule is consequential to *Proposed Rule change 6* as explained in *2.6 Excepted quantities and excepted packages*.

2.15 Segregation according to the nature, quantity and use of goods

The proposed amendment to *clause 6.2* of the Rule is consequential to *Proposed Rule change 6* (see *2.6 Excepted quantities and excepted packages*.)

2.16 Segregation by class or division

Background

Paragraph 6.3(1)(d) has sometimes been misinterpreted as meaning that if segregation devices are used, then segregation by distance in accordance with *6.3(1)(c)* is not permitted on the same vehicle.

Proposed Rule change 16

It is proposed to insert a revised *paragraph 6.3(1)(d)* in the Rule to clarify the requirements for the segregation of dangerous goods when segregation devices are used.

2.17 Use of segregation devices

Background

The use of segregation devices is complicated, and there is still some misunderstanding about using them with dangerous goods of packing group I. Some people mistakenly believe segregation devices can be used, provided that packing group I products are not placed in the segregation device. On the other hand, *6.4(3)(a)* has been misinterpreted to mean that carrying any packing group I products on the same vehicle with segregation devices is prohibited, even if a safe separation distance can be achieved in accordance with *6.3(1)(c)*.

Proposed Rule change 17

It is proposed to replace *paragraph 6.4(3)(a)* to clarify the prohibition on the use of segregation devices to separate dangerous goods of packing group I from incompatible goods and food items.

2.18 Additional requirements for large quantities of Division 2.1 or Class 3 dangerous goods

The proposed amendment to *clause 6.5* of the Rule is consequential to the proposal to classify diesel as a Class 9 environmentally hazardous substance. For further details see *Proposed Rule change 27* under the heading of *Classification by the relevant regulatory authority in 3.4 Amendment of Table A*.

2.19 Placarding - General safety requirements

The proposed amendment to *paragraph 7.1(4)(b)* of the Rule is consequential to *Proposed Rule change 18* (see *2.20 Placarding according to the nature and quantity of goods*).

2.20 Placarding according to the nature and quantity of goods

The proposed amendment to *paragraph 7.2(2)(d)* of the Rule is consequential to *Proposed Rule change 6* as described in *2.6 Excepted quantities and excepted packages*.

Placards on tank wagons and spray wagons carrying bitumen emulsions**Background**

Tankwagons that carry bitumen used in the road-making industry transport a range of bitumen products including cutbacks, hot bitumen and bitumen emulsions. Cutback bitumen that is transported at temperatures above its flashpoint and bitumen transported at temperatures over 100°C are classified as dangerous goods for transport. Tankwagons and spray wagons are appropriately placarded as required in the Rule.

The Rule currently requires all containers, including tankwagons, which have contained dangerous goods, but have not been cleaned, to remain labelled or placarded to identify the dangers presented by the residue of the product in the container. Bitumen emulsions are not classified as dangerous goods for transport, but because there is no cleaning procedure approved by the relevant regulatory authority, tankwagons that have previously carried flammable cutbacks or hot bitumen must remain placarded when carrying emulsions. This creates a risk that inappropriate emergency response action might be taken if the tankwagon was involved in a crash. Roding New Zealand has asked for an amendment to the Rule to allow tankwagons carrying bitumen emulsions to cover or remove dangerous goods placards.

The NZTA and the Environmental Risk Management Authority agree that bitumen emulsions are not classified as dangerous goods for transport, and so the load should not be placarded as dangerous goods. Although it is possible that there could be residual flammable vapours in a tankwagon carrying bitumen emulsions, this risk is extremely small. Further, the risk of environmental contamination as a result of an inappropriate emergency response based on placards remaining on a tankwagon is likely to be higher than the risk posed by any residue of flammable vapours present in bitumen emulsions.

Proposed Rule change 18

It is proposed to allow dangerous goods placards on tankwagons and spray wagons carrying bitumen emulsions to be removed or covered and for the vehicle to display a sign that identifies its load as being bitumen emulsions. The preferred wording for the sign is “BITUMEN EMULSIONS contain spillage”.

Please note that the plural “bitumen *emulsions*” should be used on the sign because the New Zealand Fire Service database for hazardous substances emergencies has an entry in the index for “bitumen emulsions”, but the singular “bitumen emulsion” is not listed. To ensure a rapid and appropriate emergency response, the sign should conform to the preferred wording in the Rule.

Placarding of LPG tankwagons transporting butane or propane (new provisions)

Background

LPG tankwagons sometimes transport pure butane or propane, rather than LPG. Butane (UN 1011), Propane (UN 1978) and LPG (UN 1075) are each listed separately in the UNRTDG list of dangerous goods and so have different UN numbers and proper shipping names. Some of these tankwagons have “Liquid Petroleum Gas” written on the side and other identifiers for LPG on the Emergency Information Panel.

Proposed policy

Technically, the UN number and proper shipping name on a tankwagon carrying LPG, butane or propane should be changed to correctly identify the current load. However, the properties, the Hazchem code (2YE) and the emergency response are essentially the same for all of these products. It is also recognised that there are difficulties and potential risks associated with changing placards on tankwagons, so it would be reasonable to allow a placarding dispensation for LPG tankwagons as is the case with petrol and bitumen tankwagons.

Proposed Rule change 19

It is proposed to insert a new subclause 7.2(11) to allow a dispensation from changing the UN number and proper shipping name for LPG tankwagons carrying LPG, butane or propane.

For details of the proposed new *subclause 7.2(12)*, see 2.11.

2.21 Placement of placards

Background

Paragraph 7.3(1)(c) prescribes the placement of placards on a tankwagon, including the location of class placards and emergency information panels. In addition, *subclause 7.2(5)* explains what information must be displayed on a tankwagon. It requires the proper shipping name, class placards and emergency information panels and, for flammable substances, a no smoking warning. The proper shipping name and no smoking warning are usually included in the emergency information panel or the class placard, but the requirement to display all the information in *subclause 7.2(5)* at the rear and on both sides of a tankwagon needs to be clarified.

Proposed Rule change 20

It is proposed to amend *subparagraph 7.3(1)(c)(ii)* to clarify the requirement to display all the information specified in *subclause 7.2(5)* at the rear and on both sides of a tankwagon.

2.22 Certain vehicles to stop at railway level crossings

Background

Vehicles transporting explosives or large quantities of flammable gas or flammable liquid are required to stop at railway level crossings, unless the crossing is controlled by police, a railway-crossing keeper, barrier arms or an 'Exempt' sign has been installed by the road controlling authority.

Land Transport (Road User) Rule 2004 (the Road User Rule) includes a similar requirement for buses. Concerns have been expressed about the safety of stopping at level crossings controlled by traffic lights, as many motorists do not expect a bus or a truck carrying dangerous goods to stop when the lights are not flashing. This poses a significant risk of rear-end crashes or dangerous manoeuvres to avoid the stopped vehicle.

The reliability of traffic lights at railway level crossings is extremely high and consequently the recent consultation draft of the Road User Amendment Rule proposed to exempt buses from stopping at level crossings controlled by traffic lights.

Proposed Rule change 21

It is proposed to amend *subclause 8.4(2)* to exempt vehicles carrying dangerous goods from stopping at railway level crossings controlled by traffic lights when the lights are not flashing, subject to the adoption of the proposal in the Road User Rule.

2.23 Driver training

Passenger with D endorsement accompanying driver

Background

The consultation draft of the 2005 revision of the Rule proposed that a driver without a D endorsement could drive a vehicle transporting dangerous goods if accompanied by a passenger who has a D endorsement. This proposal was rejected on the advice of the Police, who considered it would create enforcement difficulties. The Police have since indicated that enforcement is manageable and they see benefits in allowing it.

The person driving the vehicle would be responsible for all the legal duties of the driver, including the responsibilities in *clause 10.4* of the Rule, regardless of not having a D endorsement. This is similar to other situations in which a driver who does not hold a full licence is permitted to drive under the supervision of a fully qualified driver. For transporting dangerous goods, the driver's responsibilities include placarding the vehicle, stopping at railway crossings, and carrying dangerous goods documents in the document holder in the vehicle.

The safe transport of dangerous goods relies on all people complying with their responsibilities. For a driver without a D endorsement, it is essential that the driver's responsibilities be supervised by a passenger with a D endorsement. To emphasise the importance of this, two new responsibilities are proposed for the Rule. One requires the driver to ensure that the supervising passenger has a D endorsement and the second new responsibility requires the supervisor to ensure that the driver complies with the Rule.

Policy proposal

The proposal put forward in the 2005 amendment Rule is being consulted on again.

Proposed Rule change 22

It is proposed:

- (a) to amend *clause 9.2* of the Rule to allow a driver without a D endorsement to drive a vehicle transporting dangerous goods, if they are accompanied by a passenger with a D endorsement;
- (b) to add a new responsibility (*subclause 10.4(da)*) for the driver to ensure that the supervisor has a D endorsement; and
- (c) to add a new responsibility (*clause 10.7*) for the supervisor to hold a D endorsement and to ensure the driver complies with the Rule.

See also the discussion under the heading *Penalties and offences* on page 44.

2.24 Responsibilities for general safety requirements

The proposed amendment to *paragraph 10.1(3)(a)* of the Rule is consequential to *Proposed Rule change 6 (2.6 Excepted quantities and excepted packages)*.

2.25 Responsibilities of the driver of a road vehicle

The proposed new *subclause 10.4(da)* is explained in *Proposed Rule change 22* (see *2.23 Driver training*).

2.26 Responsibilities of the supervisor for driver training

For details of the proposed new *clause 10.7*, see *2.23 Driver training*.

Section 3 Amendments to Part 2, Definitions

These proposed changes are set out in *Section 3* of the amendment Rule.

3.1 Insertion of definitions

Background

Definitions need to be included in the Rule for terms used in the proposed requirements that will align the Rule with the UNRTDG requirements relating to substances that are toxic to the aquatic environment and to the marking of packages containing liquids, as well as the new requirements relating to excepted quantities of dangerous goods and excepted packages of radioactive material.

Proposed Rule change 23

It is proposed to insert definitions of the following terms: ‘dangerous goods in excepted quantities’, ‘environmentally hazardous substance mark’, ‘excepted packages of radioactive material’, ‘orientation arrows’, and ‘special mark’.

3.2 Replacement of definitions

Background

The definitions of ‘cultures’ and ‘diagnostic specimen’ used in the Rule require updating to align with the most recent amendments to the UNRTDG.

Proposed Rule change 24

It is proposed to substitute new definitions of ‘cultures’ and ‘diagnostic specimen’.

3.3 Amendment of definitions

Background

The proposed amendment to the definition of ‘Dangerous Goods in Limited Quantities’ is consequential to the proposal to combine *Schedules 2 and 2A* (see 2.4 and 4.2).

The definition of ‘emergency services personnel’ includes a reference to a New Zealand standard, *NZS 8156*. This standard has been updated and the name changed to reflect new content. It is, therefore, necessary to amend the definition in the Rule.

The definition of ‘proper shipping name’ requires amendment to ensure that the correct abbreviation for ‘not otherwise specified’ and references to special provisions in the UNRTDG are included in the definition in the Rule.

Proposed Rule change 25

It is proposed to amend the definitions of ‘Dangerous Goods in Limited Quantities’, ‘emergency services personnel’ and ‘proper shipping name’.

3.4 Amendment of Table A “Properties and classification of dangerous goods for land transport”

Changes in UNRTDG and additional detail on self-reactive substances and organic peroxides

Background

Minor amendments are required to *Table A* to include recent changes in the UNRTDG and to provide some additional detail on the classification of self-reactive substances in Division 4.1 and organic peroxides, Division 5.2.

Proposed Rule change 26

Changes, as set out in *paragraphs 3.4(1)(a), (b) and (c)* of the draft amendment Rule, are proposed to *Table A*.

Classification by the relevant regulatory authority

Background

Recent changes in the UNRTDG to include classification criteria for substances that are toxic to the aquatic environment have highlighted an anomaly in the Rule in relation to classification of dangerous goods. The anomaly arises as a result of the timing of amendments to the various documents incorporated in the Rule, which contain detailed classification criteria for goods that are dangerous for transport.

In particular, the UNRTDG includes criteria for products that are toxic to the aquatic environment and assigns them to Class 9. On the other hand, although the 2008 edition of the IMDG includes the same classification criteria for Class 9 as the UNRTDG, the application date is not until 2010. This creates uncertainty for transport on land in New Zealand because the Dangerous Goods Rule recognises the classification criteria in any of the incorporated documents. The result is that the classification of some products depends on which document is used as a reference.

This has particular significance in New Zealand for substances that are toxic to the aquatic environment, because of the large number of rivers that our roads cross and the proximity of many roads to lakes and the sea.

The difference in classification criteria also brings the requirements of the Dangerous Goods Rule into conflict with HSNO requirements for the transport of substances that have been assigned to HSNO categories and that are also dangerous for transport.

The most notable product affected in this way is diesel, which is classified as 9.1B under HSNO. This classification is equivalent to Class 9 packing group III for transport. However, as discussed above, not all the documents incorporated in the Rule for classification details include the new criteria for ecotoxicity. For example, diesel is not currently classified as dangerous goods for transport on land according to the classification criteria in the IMDG.

Please note that the classification of diesel as an environmentally hazardous substance, UN 3082, Class 9 applies to diesel that has a flash point over 60°C. Diesel with a flash point of 60°C or lower (ie low flash point diesel) will continue to be classified as UN 1202, Class 3.

Proposed Rule change 27

To overcome this anomaly, two amendments are proposed in relation to Class 9 substances in *Table A*. They are:

- (a) to insert specific reference to 'diesel' as a substance that is pollutant to the aquatic environment. It is proposed to allow until 1 January 2011 before the new classification of diesel comes into effect (see *paragraph 3.4(1)(d)* in the amendment Rule);
- (b) to stipulate in the footnote to *Table A* that classification of dangerous goods in the incorporated documents is subject to classification by the relevant regulatory authority (see *paragraph 3.4(1)(e)*). (This is to make it clear that national legislation prevails over the incorporated documents for classification of dangerous goods for transport on land in New Zealand.)

As a consequence of specifying that diesel is a Class 9 environmentally hazardous substance, it is proposed to amend *clause 6.5* to allow diesel (Class 9) to be transported on the same vehicle as Class 3 dangerous goods in bulk. This change is required to allow tankwagons to continue to carry petrol and diesel in separate compartments of the same tankwagon (see *2.18 Additional requirements for large quantities of Division 2.1 or Class 3 dangerous goods*).

Section 4 Amendments to Part 3, Schedules

4.1 Schedule 1

Amendment 4.1 makes changes to *Schedule 1* of the Rule as follows:

4.1(a) and 4.1(e) - Quantity of dangerous goods for tools of trade

Background

It is not absolutely clear how to measure quantity limits for dangerous goods transported as tools-of-trade, when the goods are in partially full containers or there are empty containers in the load.

The Dangerous Goods Rule applies to empty receptacles that have contained dangerous goods, but have not been cleaned. Empty containers, therefore, must still be treated as being dangerous goods, but the Rule does not specify that an empty container is the same as a full container.

The Police are of the view that an empty container must be treated as a full container. This has little impact on most commercial transport operators, but it affects the quantity of dangerous goods that tools-of-trade operators are allowed to carry.

All the sections in the Rule that specify requirements for tools-of-trade operators refer to the quantity limits in *Schedule 1*. *Schedule 1* lists quantities in kilograms for solids, litres for liquids and litres water capacity for gases. There is no limit to the number or size of containers or packages. So, in contrast to the Police's view, it is more accurate to interpret the tools-of-trade quantities as the actual quantity of dangerous goods that remains in a container, regardless of whether it is empty, full or only partially full.

Proposed policy

Schedule 1 of the Rule sets out the quantity limits for tools-of-trade and expresses the quantity in litres or kilograms, as appropriate. Generally, it does not specify the size or number of the containers, and the NZTA believes that the quantity limit should be determined by the actual quantity of dangerous goods, not by the size of the container.

The only class for which an empty container should be regarded as a full container for measuring quantity is Class 2, gases. This is due to the difficulty of measuring the quantity remaining in a gas cylinder. Gas cylinders should be treated as full even when they are essentially empty, except for liquid nitrogen and other cryogenic liquids where the actual quantity remaining in the container can easily be ascertained by use of a dipstick or similar method of measurement.

Proposed Rule change 28

It is proposed to amend *Schedule 1* of the Rule to clarify, for the Police and tools-of-trade operators, the quantities of dangerous goods that can be transported, whether in full, empty or partially empty containers.

4.1(b) - Amendment to Class 4.3 substances**Background**

There is an anomaly between the controls imposed under HSNO for Class 4.3 dangerous goods of packing group I and those set out in *Schedule 1* of the Rule, in relation to two products used as pesticides. The products are UN 1397, aluminium phosphide and UN 2011, magnesium phosphide. HSNO allows a person without an approved handler test certificate or a controlled substances licence (CSL) to have up to 3 kg of each of these products. The Department of Conservation has requested that the Rule be amended to allow a small quantity of these products to be transported as tools-of-trade.

The risk to transport safety of allowing the transport of small quantities of these two products without an approved handler test certificate or a D endorsement is very small. The limit in *Schedule 1* for most products of packing group I is 5 kg (including the weight of the packaging), and this is the appropriate limit for these products. Although this appears less restrictive than the HSNO limit, the quantity that HSNO allows without an approved handler test certificate or CSL is the 'net' quantity. Furthermore, HSNO allows 3 kg of each of these products without an approved handler test certificate, so the transport limit is potentially more restrictive in the rare situations where both products are carried.

Comments on whether or not this quantity will meet the needs of the pest control industry are welcome.

Proposed Rule change 29

It is proposed to amend *Schedule 1* to allow 5 kg of UN 1397, aluminium phosphide and UN 2011, magnesium phosphide to be transported as tools-of-trade.

4.1(c), 4.1(d) and 4.1(f) - Environmentally hazardous substances

Background

The UNRTDG now includes criteria for substances that are toxic to the aquatic environment (also known as environmentally hazardous or ecotoxic substances). The new criteria are adopted from the globally-harmonised system of classification and labelling of chemicals and are equivalent to HSNO classifications 9.1A and 9.1B. Any substance that has a HSNO classification of 9.1A or 9.1B, and does not meet the criteria for any other class of dangerous goods for transport, is a *Class 9, Miscellaneous dangerous substance* for transport.

Environmentally hazardous substances are assigned to packing group III. Diesel fuel and many agricultural products fit into this category.

Please note that this classification applies to diesel that has a flash point over 60°C. Diesel with a flash point of 60°C or lower (ie, low flash point diesel) will continue to be classified as UN 1202, Class 3.

Diesel and some agricultural products that are toxic to the aquatic environment have not previously been classified as dangerous goods for transport. There is no history of transport-related problems that has led to a deliberate decision to impose transport controls on these products. However, the United Nations decision to promote a sustainable environment has resulted in transport controls for substances that were not previously regarded as dangerous for transport. To this end, HSNO imposes controls for the entire life cycle of substances that are toxic to the aquatic environment.

In general, transport controls under the Dangerous Goods Rule are similar to HSNO controls, and HSNO recognises compliance with transport Rules as compliance with HSNO requirements, during the transport phase of the life cycle. Similarly, HSNO packaging standards (and for domestic or tools-of-trade use, HSNO identification requirements) are recognised as compliance with the Dangerous Goods Rule.

Difference between HSNO and transport controls for Class 9 substances

The significant difference between HSNO and the Dangerous Goods Rule for Class 9 substances is the requirement for the person in charge to be qualified. HSNO requires the person in charge of a Class 9.1A substance to be an approved handler, but there is no requirement to be an approved handler for any quantity of Class 9.1B. Furthermore, HSNO regulations make an exception from the requirement to be an approved handler if the Class 9 substances are in sealed containers. This exception applies during transport.

The Rule requires the driver to have a D endorsement on their driver licence for any quantity of Class 9 substances transported for hire or reward (other than Small Packages) and quantities over 250 litres for Class 9, packing group III substances transported as tools-of-trade. This requirement will have a significant effect on many industries that transport diesel, in particular, as tools-of-trade. Licensed transport operators, who will generally already have a D endorsement on their driver licence for transporting other dangerous goods, will be affected only in a minor way.

Policy proposal

It is proposed to increase the tools-of-trade quantity limit for Class 9, packing group III substances that are toxic to the aquatic environment. The proposed limit for diesel is 2000 litres. This aligns with the limit for small tankwagons under the HSNO legislation, and is about the maximum quantity that can be carried in a tankwagon trailer that is not a heavy vehicle. To allow industry, especially tools-of-trade operators, time to make any changes necessary to comply with the Rule, the commencement date for transport controls under the Dangerous Goods Rule for diesel is proposed as 1 January 2011.

The proposed quantity limit for other Class 9 products that are toxic to the aquatic environment (UN 3077 and UN 3082) is 500 kg or 500 litres. It is intended that these quantities be large enough for the majority of tools-of-trade operators to be able to conduct their business without needing a D endorsement on their driver licence.

These quantities would be in addition to the current mixed-load quantity limit for tools-of-trade. However, with quantities greater than the proposed limits, more controls are necessary to manage the risk to the public and the environment. This includes a requirement for the person in charge of the load to have a D endorsement to confirm that they have been trained for the safe transport of large quantities of dangerous goods.

Proposed Rule change 30

It is proposed to amend *Schedule 1* in accordance with the policy proposal, as indicated above.

4.2 Schedule 2

Combining information in Schedules 2 and 2A

As explained in 2.4, it is proposed to combine the information in *subclause 2.3(3)*, *Schedule 2* and *Schedule 2A* of the Rule into a new *Schedule 2*. The new Schedule will list the quantity limits for dangerous goods by class or division and packing group. It will also list individual products if the quantity varies from the standard quantity for the class, division and packing group or if that product must not be transported as Dangerous Goods in Limited Quantities.

The proposed new Schedule will also include changes to update the quantities in accordance with recent changes to the UNRTDG.

The effect of Special Provisions on products listed in Schedule 2

Background

Some products listed in *Schedule 2* are subject to Special Provisions that modify requirements for transport. For example, UN 3065, Alcoholic Beverages packing group III is subject to Special Provision (SP) 145. SP 145 exempts alcohol in containers of 250 litres or less from transport controls for land and sea. The Rule includes UN 3065 packing group III in *Schedule 2*, with a Dangerous Goods in Limited Quantities limit of 5 litres. This has created some confusion as its inclusion in *Schedule 2* indicates that it is subject to transport controls, albeit the relaxed controls for Dangerous Goods in Limited Quantities.

Similarly, UN 3065 packing group II is exempt from transport controls in containers of 5 litres or less (SP 146). The limit in *Schedule 2*, therefore, is also confusing for packing group II alcoholic beverages.

In addition to UN 3065, there are many other entries in *Schedule 2* and *Schedule 2A* that are subject to Special Provisions and may be excluded from transport controls in some circumstances (eg, UN 2800, Batteries, wet, non-spillable, Class 8 (SP 238); UN 1350, Sulphur, Class 4.1 (SP 242); UN 2857, Refrigerating machines, Class 2.2 (SP 119); and UN 3316, First aid kit, Class 9 (SP 251)).

Proposed policy

One option would be to remove these entries from the Schedule, but not all of them are exempt from transport controls in all circumstances. It is proposed, therefore, to include these products in the Schedule and add a note that special provisions may alter transport controls. It is also proposed to identify products that are not subject to controls for transport on land in any circumstances or when packed in specified quantities.

Proposed Rule change 31

It is proposed to add a note to *Schedule 2* to explain that some entries are subject to Special Provisions that modify the requirements for transport. In some cases the Special Provision may specify additional controls or exclude the dangerous goods from transport controls.

4.3 Schedule 2A revoked

The proposal to revoke *Schedule 2A* of the Rule is consequential to the proposal to combine *Schedule 2* and *Schedule 2A*, as explained in 2.4 and 4.2.

4.4 New Schedule 4

The proposal to insert *Schedule 4* is consequential to the proposal to include provisions for transport of excepted quantities of dangerous goods. This proposal is fully explained in 2.6 *Excepted quantities and excepted packages*.

Changes not requiring a Rule amendment

New Class 5.2 label

The UNRTDG 14th edition introduced a new Division 5.2, Organic Peroxides label. The old label, however, can still be used until the end of 2010. The introduction of the new label does not require an amendment to the Rule because the specifications (design, colour etc.) for labels are set out in the technical documents incorporated in the Rule. The UNRTDG allows a transition period, as do all the other incorporated technical documents including NZS 5433: 2007.



Current Class 5.2 label



New Class 5.2 labels

The Rule requires dangerous goods to be identified with primary and subsidiary risk labels, which must comply with the design, colour, size and durability specifications in the incorporated technical documents (see 4.2(2)). As a transition period for the new Division 5.2 label is specified in the incorporated documents, this period automatically applies for land transport in New Zealand.

Use of the new label will be mandatory from 1 January 2011.

Issues under consideration

Dangerous Goods in Limited Quantities

Background

Dangerous Goods in Limited Quantities are goods of low-to-moderate danger, packaged for transport in small inner packagings and strong outer packagings. Due to the nature and quantity of the products and the way they are packaged, DGLQ are considered to be of low risk during transport and are, therefore, allowed some dispensation from transport controls.

UN proposed changes

The report of the July 2008 meeting of the UN Sub-Committee of Experts on the Transport of Dangerous Goods contains draft changes to the UNRTDG for transport of DGLQ. The changes are intended to promote better global and multimodal harmonisation.

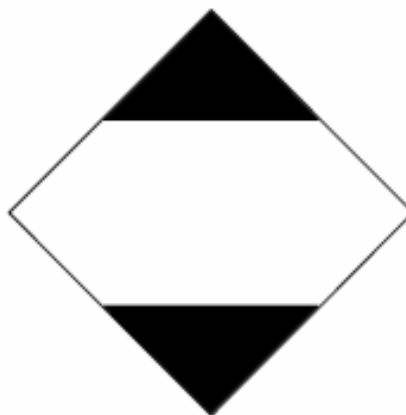
As the changes have not yet been confirmed, it is too early to propose they be included in the Rule. Further, assuming the changes are included in the 2009 edition of the UNRTDG, it is likely to be 2011 or later before they are adopted into the international aviation or maritime transport codes.

However, the draft changes signal the UN Sub-Committee of Experts' opinion that only minimal controls are necessary for transport of DGLQ. The fundamental controls are packaging standards, identification and inner and outer packaging quantity limits according to the degree of danger of each product.

Proposed new DGLQ mark

The draft changes include a new identification mark (see below) and dispense with the requirement for a transport document for land transport of DGLQ. One example of the way in which the UN anticipates the draft changes will promote multimodal harmonisation is by allowing consumer commodities prepared for air transport to be transported on land and sea. Consumer commodities for air transport are consigned as ID 8000, instead of under individual UN numbers. Aviation consumer commodities may be transported under the Small Packages provisions of the Rule, but are not currently recognised for sea transport.

The UN intends that the new DGLQ mark, with “ID 8000” written in the white space, would facilitate the multimodal transport of aviation consumer commodities. On the other hand, despite the UN’s indication that they will dispense with the requirement for a document for land transport, it is likely that a document will still be required for air and sea transport of DGLQ. It is not clear how this will satisfy the UN’s intended goal of better multimodal harmonisation.



Draft identification mark for DGLQ

1000 kg limit

One foreseeable problem that would arise, if there was no requirement for documents for transporting DGLQ on land in New Zealand, would be how transport operators would know when they had reached the 1000 kg limit on a vehicle or vehicle combination. Most other jurisdictions, including Australia, the UNRTDG and the international aviation and maritime codes for transport of dangerous goods, do not apply a limit per vehicle or transport unit for DGLQ. There is no history of problems associated with transporting DGLQ on land in New Zealand and removal of the 1000 kg limit would align better with international practice.

Because the risks associated with transporting DGLQ are managed by the package quantity limits, packaging standards and identification of packages, the draft changes to the UNRTDG are not expected to have any significant safety implications for land transport. The removal of the 1000 kg limit and the requirement for a Dangerous Goods Declaration document would be expected to generate some savings in the costs of transporting these products.

Comments invited

Comments are invited on potential problems or advantages of removing the 1000 kg limit and of proceeding with the draft UN changes for transporting DGLQ, assuming they are incorporated into the international aviation and maritime dangerous goods transport codes.

Christmas crackers

Background

Christmas crackers (also known as Christmas bon bons) contain a small quantity of explosives, which is intended to create a pyrotechnic effect when the cracker is opened. They are classified as UN 0337, Fireworks, Division 1.4S.

Fireworks of this classification present a very low risk for transport and may be transported as Small Packages of explosives without dangerous goods documents, segregation, placards or the driver having a D endorsement. The dispensation from transport controls under the Rule applies up to 50 kg, but any quantity of Christmas crackers and similar fireworks are excluded from the additional transport controls for explosives in HSNO.

Prior to the introduction of HSNO, Christmas crackers were controlled under the *Explosives Act 1957* and regulations made under that Act. Under the powers in that legislation, the Chief Inspector of Explosives had declared that Christmas crackers packaged for retail sale were not explosive articles for the purpose of transport. However, that transport dispensation, which also applied to the Dangerous Goods Rule, was not continued after explosives were transferred to HSNO.

To restore the previous transport dispensation and to align better with HSNO, the NZTA is considering removing the quantity limit for Christmas crackers transported under the Small Packages of explosives provisions of the Rule. This would effectively remove all transport controls other than packaging, identification and carrying emergency response information. The packaging and identification requirements of HSNO are sufficient to comply with the Small Packages provisions of the Dangerous Goods Rule, so this would greatly simplify the transport of these products.

In addition to Christmas crackers, there are a number of other novelty explosive articles that are excluded from the transport controls in HSNO. These are listed in *regulation 4(2)* of the *Hazardous Substances (Fireworks) Regulations 2001*. They include amorces (caps for toy guns), party poppers and streamer bombs. Generally, these contain a greater quantity of explosives per article than Christmas crackers and due to the way they are packaged, the initiation of one article is much more likely to communicate to other articles in adjacent packagings. Therefore, they represent a much greater danger during transport than Christmas crackers. Up to 50 kg of these articles may be transported as Small Packages of explosives, but they are not being considered for further dispensation from transport controls under the Dangerous Goods Rule.

Comments invited

Your comments are invited on the appropriate transport controls and whether there should be a quantity limit for Christmas crackers transported as Small Packages of explosives.

Matters to be taken into account

The *Land Transport Act 1998* (the Act) provides the legal framework for making Land Transport Rules. *Section 161* of the Act states the procedures by which the Minister makes ‘ordinary rules’. These include the obligation to consult, which has been developed into a series of formal and informal discussion procedures.

Section 164 of the Act states the matters to be taken into account in making Rules. In making ordinary rules, the Minister is required to give such weight as he or she considers appropriate in each case to the matters discussed below. The *Land Transport Amendment Act 2004* amended the matters that the Minister must take into account when making Rules, to reflect the overarching importance for transport of the NZTS. The NZTS envisages that New Zealand will have an affordable, integrated, safe, responsive and sustainable transport system.

Application of Rule-making criteria

Proposed activity or service

Section 164(2)(b) of the Act requires that appropriate weight be given to the nature of the proposed activity or service for which the Rule is being established. The ‘proposed activity or service’ that is covered by this Rule is the transport of dangerous goods on land in New Zealand.

Risk to safety and personal security

Section 164(2)(a), (c) and (d) requires the Minister to take into account, respectively, the level of risk to land transport safety in each proposed activity or service; the level of risk existing to land transport safety in general in New Zealand; and the need to maintain and promote land transport safety and security, including personal security.

The proposed amendment Rule addresses the risk to land transport safety that would arise by ignoring changes to international recommendations and local legislation relating to dangerous goods and their transport on land. The risk is managed by applying appropriate controls for the transport of dangerous goods to maintain alignment with international and national requirements.

Assisting achievement of strategic objectives

Section 164(2)(e) of the Act requires the Minister to take into account whether the proposed Rule: (i) assists economic development; (ii) improves access and mobility; (iii) protects and promotes public health; (iv) ensures environmental sustainability.

The proposals in the Rule are intended to amend existing legislation. They are not expected to benefit economic development or improve access and mobility. They will, however, help to protect public health by reducing the risk that could arise from a serious incident involving the spillage or combustion of toxic or other dangerous goods being transported on land.

The inclusion in the Rule of requirements based on the new UN criteria for substances that are toxic to the aquatic environment, and the inclusion of diesel and agrichemical products in this category, should make a positive contribution towards ensuring environmental sustainability.

Costs of proposed changes

Section 164(2)(ea) of the Act requires that appropriate weight be given to the costs of implementing the measures for which the Rule is being proposed.

The proposed changes to the Rule are mainly of a technical nature and do not involve any changes to the policy for regulating the transport of dangerous goods on land. Many of the changes proposed would clarify the meaning of existing provisions in the Rule and some are at the request of industry to suit their particular needs. The NZTA believes that most of the changes proposed in the amendment Rule would not impose any costs on industries involved in the transport of dangerous goods. Costs may, in fact, reduce as a result of clarifying requirements and making other minor amendments to the Rule.

There are, however, two proposals that may impose some costs on industry, although those costs are expected to be small. One is the clarification that the new environmentally hazardous substances classification criteria, which includes diesel and other substances toxic to the aquatic environment, applies to transport on land in New Zealand. The other change that will impose some cost is the requirement to attach package orientation marks to dangerous goods that must be kept upright to avoid spillage.

Costs associated with environmentally hazardous substances

The main costs incurred for environmentally hazardous substances would be those for preparing dangerous goods for transport. Those are the costs of packaging, identifying (labelling and marking) and documenting the goods. The costs associated with packaging and identifying environmentally hazardous substances are not, strictly speaking, new transport costs because these substances are already required to comply with HSNO requirements.

The packaging requirements under HSNO are the same as for transport and when transported for domestic or tools-of-trade purposes, HSNO identification is also accepted for transport. For commercial transport, the Rule's identification requirements are recognised as compliance with HSNO (*regulations 16, 29 and 30 of the Hazardous Substances (Identification) Regulations 2001*). The costs imposed by this change for packaging and identifying environmentally hazardous substances, therefore, will be small.

The cost of providing documents for transport is also not a new cost because HSNO requires documents for identification and emergency management of environmentally hazardous substances. This requirement applies throughout the life cycle of these products, including during transport. However, the details required on a transport document to comply with the Dangerous Goods Rule are based on UNRTDG requirements and are slightly different from the details on HSNO documents. This means that a HSNO document cannot be used to comply with the Rule, so there will be a cost to produce a document for transport of environmentally hazardous substances.

However, there will be a saving too, because a transport document will also satisfy HSNO documentation and emergency management requirements during transport on land (*regulation 49 of the Hazardous Substances (Identification) Regulations 2001*). Only one document, therefore, is required during transport. Transport documents are not required for domestic or tools-of-trade transport and this will keep costs to a minimum. Although it has not been quantified, the NZTA considers that the cost of providing transport documents for commercial transport is a minor part of the total transport cost.

Another cost associated with transport of environmentally hazardous substances would be incurred if tools-of-trade operators were required to obtain a D endorsement on their driver licence. This would be a likely effect of classifying diesel as an environmentally hazardous substance because many industries transport diesel as tools-of-trade to power their plant and equipment.

To avoid this cost, it is proposed to increase the quantity of environmentally hazardous substances that can be transported as tools-of-trade without a D endorsement. The quantities are appropriate for the risks associated with transporting these substances and are in accordance with controls under HSNO.

By increasing the tools-of-trade quantity limits, the NZTA believes the costs associated with transport controls for environmentally hazardous substances will be minor and are necessary to maintain alignment with international and national requirements for managing the environment.

Costs of requiring the marking of orientation arrows

The proposal to require orientation arrows to be marked on packages that must be kept upright will also impose some costs. As this is already required for international aviation and maritime transport and because most dangerous goods are imported into New Zealand, most will already comply. Dangerous goods packaged in New Zealand must also currently comply with the requirement for orientation arrows if they are exported, or if they are transported by air or sea within New Zealand. However, there will be some dangerous goods packaged in New Zealand for transport on land only, which will be affected by this proposal, but the cost will be small.

It is also anticipated that the package marking cost will be off-set by a reduction in spillage and handling errors with consequential savings due to fewer injuries and less property or environmental damage.

Comments invited

The NZTA invites comments on the analysis of the cost of complying with proposed amendments to this Rule, especially if you can provide information to assist with quantifying the costs or savings.

International considerations

Sections 164(1) and 164(2)(f) of the Act respectively require that Rules may not be inconsistent with New Zealand's international obligations concerning land transport safety, and that international circumstances in respect of land transport safety be taken into account in making a Rule.

The UNRTDG and international codes of practice for sea and air transport of dangerous goods, on which the Rule is based, provide an internationally recognised safety regime for the transport of dangerous goods. Requirements relating to transport of substances that are toxic to the aquatic environment and marking packages that must be kept upright have been updated to align more closely with the UNRTDG. The proposed introduction of transport dispensations for dangerous goods in excepted quantities also maintains alignment with the UNRTDG and international aviation and maritime transport of dangerous goods.

How the proposed amendment Rule fits with other legislation

Authority for making the Rule

Section 156 of the Act authorises the Minister of Transport to make ordinary rules that set out requirements and provisions concerning the packing, loading, consignment and carriage of dangerous goods within the land transport system.

Hazardous Substances and New Organisms Act 1996

The proposed amendment Rule would ensure that the Rule maintains a close alignment with regulations made under HSNO that relate to the transport of dangerous goods.

Penalties and offences

New responsibilities are proposed in *clauses 10.4* and *10.7* relating to the proposed change to *clause 9.2* that would allow a person without a current dangerous goods endorsement to drive a vehicle or vehicle combination that is transporting dangerous goods. These responsibilities are intended to ensure that a driver without a D endorsement, and a passenger with a D endorsement who supervises the driver, are both responsible for complying with the Rule (see *2.23 Driver training*).

Offences and appropriate penalties for failing to comply with the new responsibilities will be added to the *Land Transport (Offences and Penalties) Regulations 1999*.

The proposed penalty for a driver, for failing to ensure that the supervisor has a D endorsement, is the same as the current penalty for a driver not having a D endorsement. The same penalty is also proposed for a supervisor who does not have a D endorsement. The proposed penalty for a supervisor, for failing to ensure that the driver complies with the Rule, is the same as the penalty for failing to comply with the responsibilities in *subclauses 10.1(1)* and *10.1(2)* of the Rule. Those responsibilities require all people involved in transporting dangerous goods to comply with the Rule. The proposed offences and penalties are set out in the table on the next page.

Proposed changes to clauses 10.4 and 10.7:

Offences and penalties

Provision	Brief description	Maximum penalty on summary conviction for individual (\$)	Maximum penalty on summary conviction for body corporate (\$)	Infringement fee for individual (\$)	Infringement fee for body corporate (\$)
10.4(da)	Driver or operator of road vehicle transporting dangerous goods must ensure driver is supervised by a person who holds a current dangerous goods endorsement on their driver licence.	1000	1000	400	400
10.7(a)	Supervisor must hold a current dangerous goods endorsement on their driver licence	1000	1000	400	400
10.7(b)	Supervisor must ensure driver complies with responsibilities	2500	10,000	500	1000

Publication and availability of Rules

Copies of this document may be obtained by telephoning the NZ Transport Agency Contact Centre on 0800 699 000. It is also available on the website at:

www.nzta.govt.nz/consultation/dangerous-goods-amendment/index.html.

If you have not registered your interest to receive drafts of this proposed Rule (or other draft Rules in the Rules programme), you can do so by contacting the NZTA at the addresses shown in the *Making a submission* section at the front of this publication, or on the website at: www.landtransport.govt.nz/rules/reg-interest-rules.html

Information about the Rules programme and process can be found at: www.landtransport.govt.nz/legislation.

An on-line form is provided for registering an interest in Rules.

Final published Land Transport Rules can be purchased from selected bookshops throughout New Zealand that sell legislation. Queries about the availability and price of Rules can be made to the Rule printers and distributors, Wickliffe Ltd, telephone (06) 358 8231.

Final Rules are also available on the website at: www.landtransport.govt.nz/rules.

APPENDIX

Glossary of abbreviations

CSL	Controlled Substances Licence
DGLQ	Dangerous Goods in Limited Quantities
ERMA	Environmental Risk Management Authority of New Zealand
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
HSNO	Hazardous Substances and New Organisms Act, 1996
IAEA	International Atomic Energy Agency
IATA	International Air Transport Association
ICAO	International Civil Aviation Organisation
IMDG	International Maritime Dangerous Goods Code
N.O.S.	Not otherwise specified
NZS	New Zealand Standard
NZTA	New Zealand Transport Agency
NZTS	New Zealand Transport Strategy
UN	United Nations
UNRTDG	United Nations Recommendations on the Transport of Dangerous Goods – Model Regulations