

Summary of Amendment 6 to the TDG Regulations (Part by Part)

Amendment 6 was finally published in the Canada Gazette in February 2008 and came into force immediately! There were a large number of changes to the Regulations, affecting many different users. This summary, while not exhaustive, is designed to provide a detailed overlook of the Amendment. Details can be found at the on-line Canada Gazette, <http://canadagazette.gc.ca/partII/2008/20080220/html/sor34-e.html>, or from the revised TDG Regulations, Clear Language Edition, available from YOW Canada.

Part 1: Coming into Force, Repeal, Interpretation, General Provisions

Section 1.3(2):

Now requires the addition of SOLUTION or MIXTURE after shipping names where appropriate, and allows the concentration to be included as well, for example ACETONE 75% SOLUTION.

When “number of explosive articles” must be converted to “net explosives quantity”, 100 articles = 1 kilogram.

Section 1.4:

There have been significant changes made to definitions:

- The “biological product” definition has been expanded to include vaccines.
- The definition of “49 CFR” excludes the security requirements in 172.800-804.
- “Consignment” has been redefined to refer to shipment of one or more means of containment – previously, each package was a consignment.
- The definition of “gross mass” has been clarified: The mass of the *minimum* required means of containment *and* the dangerous goods.
- The definition of “infectious substances” has been amended to include category A & B.
- A “person” is defined as in Section 2 of the Criminal Code, as an individual or corporate entity.
- The “UN Recommendations” has been updated to the 14th Edition.
- A number of new definitions have been added, including “Category A”, “Category B”, “drum”, “farmer” and references to Type 1A, 1B and 1C means of containment.

Part 1: Special Cases

A number of changes to these exemptions will impact small and medium shippers and contractors by reducing the number of times that the goods they are transporting fall under the TDG Regulations. In most exemptions, the wording has been changed from “If you meet these requirements, the regulations do not apply” (which essentially deregulates the material) to “If you meet these requirements, the following *parts* of the regulations do not apply, such as packaging, documentation, etc.”

Section 1.15, The 150 kg Gross Mass Exemption:

In 1.15, the exemption has been expanded from “personal use” to any transportation of goods meeting the restrictions that do not exceed 150 kg gross. For the allowed dangerous goods, Part 3 (Documentation), Part 4 (Safety Marks), Part 5 (Means of Containment), Part 6 (Training) and Part 8 (Accidental Releases) do not apply. The restrictions on this exemption have been expanded as well.

Section 1.16, The 500 kg Gross Mass Exemption:

In 1.16, the 500 Kg Gross Exemption, Part 3 (Documentation), Part 4 (Safety Marks) and Part 5 (Means of Containment) do not apply. But Part 6 (Training) now applies to everyone and the restrictions on this exemption have been expanded. This exemption is also now permitted for domestic water transport, such as ferries.

Section 1.17, The Limited Quantities Exemption:

For Limited Quantities, 1.17, Part 3 (Documentation), Part 4 (Safety Marks), Part 5 (Means of Containment), Part 6 (Training) and Part 8 (Accidental Releases) do not apply. The package may be marked either “Limited Quantity”, “Ltd. Qty.”, “Consumer Commodity” or with the UN number in a diamond-shaped mark, each side of the marking being at least 50 mm long and 2 mm wide. The UN number, if used, must be at least 6 mm high. Even though Limited Quantities are exempted from Part 8, if the gross mass of a shipment of ‘limited quantities’ from one shipper to one location is over 500 kg, the reporting requirements in Part 8 must be complied with.

Section 1.19, The Samples Exemption:

There are three parts to this exemption now:

1. Section 1.19 deals just with samples for inspectors or government investigators.
2. Section 1.19.1 is for samples for *classifying, analyzing or testing*. They are exempted from Part 2 (Classification), Part 3 (Documentation), Part 4 (Safety Marks), Part 5 (Means of Containment), Part 6 (Training) and Part 7 (ERAPs) if they are in safe means of containment 10 kg or smaller, marked “test samples” and with a document that says “test samples”.
3. Section 1.19.2 exempts samples for *demonstration* purposes, carried by an agent of the manufacturer or distributor, and not for sale, from Part 3 (Documentation) and Part 4 (Safety Marks) if they are in safe means of containment 10 kg or smaller, and marked “demonstration samples”.

Section 1.21, Agriculture: 1,500 Kg Gross Mass Farm Vehicle Exemption:

This section exempts agricultural dangerous goods from Part 3 (Documentation), Part 4 (Safety Marks), Part 5 (Means of Containment) and Part 6 (Training) for transport on public roads less than or equal to 100 km in distance and clarifies “for agricultural use”.

Section 1.22, Agriculture: 3,000 Kg Gross Mass Farm Retail Exemption:

The exemption for 3,000 kg Gross Mass Farm Retail Exemption clarifies that the goods are only exempted from Part 3 (Documentation), Part 4 (Safety Marks) and Part 5 (Means of Containment). The farmer or other carrier would have to be TDG trained.

Section 1.24, Agriculture: Anhydrous Ammonia Exemption:

The exemption for the transportation of Anhydrous Ammonia is for Part 3 (Documentation) and Part 7 (ERAP) and has been restricted to no more than 100 km by public road.

Section 1.27, Operations of a Means of Transport Exemption:

This exemption has been expanded. It specifically extends the exemption to safety devices such as flares or shock absorbers, as well as air conditioners/refrigeration units, but excludes ammunition. It also clarifies that fuel tanks cannot be exempted under this section if the fuel is intended for delivery, but some is drawn off as fuel for the vehicle during the trip.

Section 1.28, Transport Between Two Properties:

Section 1.28 requires that the local police be advised in writing each year, rather than directly contacted for each trip, for transport of dangerous goods of 3 km or less.

Section 1.29, Dangerous Goods in Instruments or in Equipment Exemption:

There are changes to the permitted amount of explosives, based on the new Special Provisions 85 and 86.

Section 1.31, Class 1, Explosives, Exemption:

Incorporates the new special provisions 85 and 86 and exempts explosives from Part 3 (Documentation), Part 4 (Safety Marks), Part 5 (Means of Containment), Part 6 (Training), Part 9 (Road) and Part 10 (Rail) requirements. Placarding will still be required for explosives under this exemption if the quantity exceeds 10 kg net explosives quantity, or (for explosives subject to SP 85 or 86) 1000 articles.

Section 1.32.1, Class 2, Gases, That May Be Identified as UN1075, LIQUEFIED PETROLEUM GAS:

This is a new exemption for gases that may be identified as UN1075, LIQUEFIED PETROLEUM GAS. It lists the six UN numbers covered, and indicates that the “real” shipping name of the gas (e.g. BUTYLENE or ISOBUTANE) *may* be added to the shipping document, in parentheses, following the shipping name, but this *must* be done if the shipping name is PROPYLENE or PROPANE, and the goods are transported on a road or rail vehicle on board a ship.

Section 1.32.2, Gases, Absolute Pressure between 101.3 kPa and 280 kPa:

1.32.2 clarifies Division 2.2 gases carried by road, rail or domestic ship may be carried as Division 2.2 dangerous goods even if the pressure is lower than that normally required for classification as Division 2.2 (such as return of used cylinders).

Section 1.32.3, Class 2, Gases, in Small Means of Containment Exemption:

Special Provision 42, widely known as the ‘welding exemption’ has been repealed. In its place Section 1.32.3 states that Part 3 (Documentation) and Part 6 (Training) do not apply to five or fewer cylinders of the gases listed in the exemption, in open vehicles, if the labels are visible from outside the vehicles, and the gross weight does not exceed 500 kg.

Section 1.33, Class 3, Flammable Liquids: General Exemption:

Section 1.33 covers Class 3 materials in non-bulk packaging, if the flash point exceeds 37.8°C. They are exempted from Part 3 (Documentation), Part 4 (Safety Marks), Part 5 (Means of Containment), Part 6 (Training), Part 7 (ERAPs), Part 9 (Road) and Part 10 (Rail).

Section 1.34, Class 3, Flammable Liquids, Flash Point Greater than 60°C but less than 93°C:

This section allows liquids with a flash point between 60° and 93°C to be shipped as Class 3, even though they exceed the flash point cutoff for that class.

Section 1.34.1, UN1203 GASOLINE, to Operate an Instrument or Equipment Exemption:

Section 1.34.1 allows road or rail vehicles, including those transported by domestic ship, to have fuel tanks of gasoline up to 200 L permanently attached to a machine. These shipments are exempted from Part 3 (Documentation), Part 4 (Safety Marks), Part 5 (Means of Containment) and Part 6 (Training).

Section 1.36, Class 3, Flammable Liquids, Alcoholic Beverage and Aqueous Solution of Alcohol Exemption:

The exemption for beverage alcohols has been expanded to apply equally to other solutions of alcohol.

Section 1.38, Polyester Resin Kit Exception:

A revision to section 1.38 no longer allows organic peroxides in Type C to be shipped under the exemption for polyester resin kits.

Section 1.39, Infectious Substances, Category B Exemption:

The introduction of the new category classification system necessitated a rewriting of the exemption. Section 1.39 exempts Category B substances from Part 3 (Documentation) and Part 7 (ERAPs), if the package displays the shipping name “BIOLOGICAL SUBSTANCES, CATEGORY B”, the UN3373/Diamond marking, and the 24-hour telephone number next to the shipping name. Part 6 (Training) still applies.

Section 1.41, Biological Products Exemption:

This exempts items such as vaccines from Part 3 (Documentation), Part 4 (Safety Marks), Part 5 (Means of Containment), Part 6 (Training), Part 7 (ERAPs) and Part 8 (Accidental Releases) if they meet certain requirements, such as Type 1B packaging.

Section 1.42, Human or Animal Specimens Believed not to Contain Infectious Substances Exemption:

This allows specimens, if they are in Type 1B or otherwise safe packaging, and marked with the words “Exempt Human Specimen” or “Exempt Animal Specimen”, to be exempt from Part 3 (Documentation), Part 4 (Safety Marks), Part 5 (Means of Containment), Part 6 (Training), Part 7 (ERAPs) and Part 8 (Accidental Releases).

Section 1.42.1, Tissues or Organs for Transplant:

This section allows transport of organs for transplantation.

Section 1.42.2, Blood or Blood Components Exemption:

Section 1.42.2 exempts blood or blood components for transfusion or related purposes from Part 3 (Documentation), Part 4 (Safety Marks), Part 5 (Means of Containment), Part 6 (Training), Part 7 (ERAPs) and Part 8 (Accidental Releases), if in 1B or otherwise safe packaging.

Section 1.43, Radioactive Materials Exemption:

Section 1.43 exempts shipments of radioactive materials from Part 3 (Documentation), Part 4 (Safety Marks), Part 5 (Means of Containment), Part 6 (Training), Part 7 (ERAPs), Part 9 (Road), Part 10 (Rail), Part 11 (Marine) and Part 12 (Air) if accompanied by a shipping document that includes the shipping name and UN number of the materials and the dangerous goods are in an “excepted package”.

Section 1.44, Dangerous Goods in a Drum Exemption:

The wording for the exemption for residue in drums documentation has been specified to be “number of drums X Class (primary class) Residue drum”, if the class is known, or “Number of Drums X Residue Drums – Contents Unknown”.

Section 1.45.1, Marine Pollutants Exemption:

A new section, 1.45.1, has been added to cover Marine Pollutants. Part 3 (Documentation) and Part 4 (Dangerous Goods Safety Marks) do not apply to substances that are classified as marine pollutants in accordance with section 2.43 of Part 2 (Classification) if they are in transport solely on land by road vehicle or railway vehicle. However, substances *may* be identified as marine pollutants on a shipping document and the required dangerous goods safety marks *may* be displayed when they are in transport by road or railway vehicle.

Section 1.44, UN1044, FIRE EXTINGUISHERS, Exemption:

Fire extinguishers are exempted from the standards for packaging of compressed gases, if they are 18 L or less in volume, contain no gases in Class 2.3, 6.1 or 8, and not pressurized over 1,650 kPa, and are tested and marked in accordance with ULC standards.

Section 1.48, Air Ambulance Exemption:

A new section 1.48, exempts dangerous goods for patient care aboard air ambulances.

Part 2, Classification

A new section, 2.5.1, mandates that the descriptive text must be considered in selecting a proper shipping name.

A revision to 2.18 lowers the maximum closed cup flash point for classifying a flammable liquid to 60°C from 60.5°C, in accordance with UN and GHS principles.

Revisions to 2.28 adjust the cut-off LD50s and LC50s for Division 6.1 substances, in accordance with UN and GHS principles.

Revisions to 2.29 adjust the packing group criteria for Division 6.1 substances, in accordance with UN principles.

Sections 2.36 and 2.37 have been replaced to introduce the Category classification system now in the UN Recommendations.

Section 2.36(2) allows Category A materials in forms other than a culture to be shipped as Category B, under the exemption in 1.39. However, certain organisms listed in 2.36(3) may not use this exemption, even if they are not in a culture.

Definitions of Category A and B are given now in section 1.4.

In section 2.37, radioactive classification is now based solely on the classification scheme given in the Packaging and Transport of Nuclear Substances Regulations.

The Class 9 classification scheme in section 2.43 has been modified.

The Appendices have been reorganized as follows:

Appendix 1, Marine Pollutants

Appendix 2, Description of Compatibility Groups, Class 1, Explosives

Appendix 3, Guide to Category A and Category B Assignment (Infectious Substances)

Appendix 4 (Leachate Toxic Waste) and Appendix 5 (Environmentally Hazardous Substances Intended for Disposal) have been removed essentially eliminating the classification of wastes as different from other types of dangerous goods.

Part 3, Shipping Documents

Section 3.5(1) has been rewritten to clarify that the subsidiary hazards or packaging groups may be listed on a shipping paper using columns with the appropriate headings.

Section 3.5(1)(d) has been rewritten to indicate that derivatives of SI units (such as kilograms or milliliters) may be used, and that explosives subject to special provisions 85 or 86 must be indicated by either net explosives quantity or number of articles.

A revision to section 3.5(1)(e) now requires the number of packages to be indicated for Class 1 explosives as well as other classes.

Section 3.6(3)(a) (the requirement to add flash point and marine pollutant designations where applicable) is now applicable to all transport by ship, not just domestic.

Part 4, Dangerous Goods Safety Marks

Section 4.5, Carrier Responsibilities:

This section has been replaced with:

The carrier of dangerous goods must:

1. ensure that the required dangerous goods safety marks remain displayed on the small means of containment while the dangerous goods are in transport;
2. display the required dangerous goods safety marks on the large means of containment, unless they are already displayed on it, and ensure that they remain displayed while the dangerous goods are in transport; and
3. provide and display, or remove, the dangerous goods safety marks if the requirements for dangerous goods safety marks change while the dangerous goods are in transport.

Section 4.8(2), regarding the display of UN numbers on or beside placards, now mandates that the numbers be not less than 65 mm high.

Section 4.9 now requires, in paragraph (1) that the person in charge of the means of containment determine if the safety marks must change or be removed, as a result of any change in the contents. Paragraph (2) indicates that if a DANGER placard is the DGSM in question, it may continue to be displayed as long as placards are required (instead of having to change to a class placard if only one class of dangerous goods remains).

A new paragraph (d) is added to section 4.10, indicating that a vehicle with gas cylinders interconnected through a piping system and permanently mounted on a structural frame, over 450 liters, may be placarded as one large means of containment.

For radioactive materials, safety marking in section 4.14 now refers back specifically to the marking, labeling or placarding required by the “Packaging and Transport of Nuclear Substances Regulations”. It also requires that the primary class label must display the name or symbol of the radionuclide(s) inside, and the activity and transport index of the radioactive material.

Section 4.15, Dangerous Goods Safety Marks on a Large Means of Containment: Placards and UN Numbers:

Explosives in any division, except 1.4, that are not subject to special provision 85 or 86, have been moved to the “placard for any quantity” column.

If explosives are subject to SP 85 or 86, they must be placarded if the number of articles exceeds 1,000.

In the Placards and UN Numbers Table, item #1 (dangerous goods with same UN number and no ERAP) UN Numbers *must* be displayed for liquids and gases in direct contact with a large means of containment, and *may* be displayed if the total quantity of any other dangerous goods exceeds 4,000 kg from one consignor.

In the Placards and UN Numbers Table, item #3 (dangerous goods with different UN numbers and no ERAP) now requires that Class 1 explosives, and Class 7 radioactive materials be

placarded individually. The rest of the load must then be placarded with either class placards for all primary hazards, or a DANGER placard, if more than one class placard would be required. DANGER placards can no longer be used for a load where all dangerous goods are in the same class.

In the Placards and UN Numbers Table, item #4 (dangerous goods with different UN numbers and an ERAP is required for at least one of them) now requires that goods with an ERAP requirement as well as any Class 1 explosives, and Class 7 radioactive materials be placarded individually. The rest of the load must then be placarded with either class placards for all primary hazards, or the DANGER placards, if more than one class placard would be required. DANGER placards can no longer be used for a load where all dangerous goods are in the same class.

For totes and other placarded large means of containment shipped inside a larger means of containment, such as a vehicle or rail car, under Section 4.15(2) DANGER placards may no longer be used. Instead, all primary class placards, and all UN numbers must be displayed on the outer large means of containment, as well as the large means of containment inside.

Section 4.15(3) is replaced by guidance on how to attach placards, such as by permanent frames. The front of a truck, rather than the front of the attached trailer is now authorized.

Section 4.15(4) no longer requires the removal of the class number from subsidiary placards.

Section 4.17(1) removes UN0301 (AMMUNITION, TEAR-PRODUCT) from the Class 1.4 materials that do not require placards until they exceed 1,000 kg net explosives quantity, since it has an ERAP index of 75 kg.

In section 4.18, a new subsection (4.18(5)) has been added, covering placarding for large means of containment for UN1005, ANHYDROUS AMMONIA. As of August 31, 2008, Class 2.2 placards must not be used for UN1005. Instead, Amendment 6 authorizes either Class 2.3 placards, or with a black and white placard showing a black cylinder with “1005” in the centre. Also, on at least two sides of the means of containment, the words “Anhydrous Ammonia, Inhalation Hazard” must be displayed if the black cylinder placard is used. The new placard reconciles the apparent contradiction of applying a Class 2.3 Toxic gas to a farmer’s field as a fertilizer.

Section 4.22(3) now clarifies that if marine pollutant marks are not required on packages due to subsection 4.22(2), they are not required as markings for the large means of containment either.

A new section, 4.22.1, requires the use of the Category B mark and shipping name, (BIOLOGICAL SUBSTANCE, CATEGORY B) for small means of containment using that description.

In the appendix, the safety marks for UN1005, AMMONIA, ANHYDROUS; UN3383, BIOLOGICAL SUBSTANCE, CATEGORY B, and Fissile Radioactive Materials are illustrated.

Part 5, Means of Containment

The amendments to Part 5 eliminate the definitions for “diagnostic specimen” and “risk group”, and add definitions for Category A, Category B, culture, Type 1A means of containment, Type 1B means of containment and Type 1C means of containment.

Section 5.5 has been reworded for clarity. When filling a packaging, the user must not exceed the maximum limit set out by the packaging manufacturer or the applicable safety standard, whichever is smaller.

Class 1, Explosives:

The table for segregating explosives by compatibility group in section 5.7(1) now permits Group B and Group S to be loaded together. Additional provisions under this section now include:

For a mixed load of different explosives in compatibility groups C, D, E, N or S, the compatibility group of the mixed load is the first of E, D, C, N or S present in the load.

Detonators may be loaded or transported by road along with explosives in compatibility group D or N, with the mixed load classified as D.

Explosives in compatibility group G (except for UN0033, UN0335 or UN0336) maybe shipped by road with articles included in compatibility group C, D or E, and the compatibility group of the mixed load is E.

For a mixed load of two explosives, one being in compatibility group S, the load takes the compatibility group other than S.

The restriction on total load of explosives as per Schedule 1 or 2 in section 5.9 has been repealed.

Class 2, Gases:

In section 5.10, regarding packaging for gases:

The grandfather exemption for cylinders in use before 1993 in paragraph (2)(b) is removed.

Subsection 5.10(3) is rewritten to ban cylinders not covered in previous sections that are manufactured in other countries, except for export or movement within a port.

Subsection 5.10(6) is rewritten to indicate that tanks selected according to CSA B622 must be manufactured in accordance with CSA B620 if made on or after August 31, 2008, and tested in accordance with CSA B620.

Class 3, 4, 5, 6.1, 8, and 9 Dangerous Goods:

Section 5.14 has been divided into subsections, with (1) being the original section.

Subsection (2) requires that shippers offering for transport dangerous goods in Classes 3, 4, 5, 6.1, 8 or 9 use a tank that was manufactured according to CSA B620, if it was manufactured in Canada on or after August 31, 2008. The tank’s most recent periodic retest must be according to CSA B620, if it occurred on or after August 31, 2008.

Whenever Class 2.1.6 of CGSB-43.147 (standards for railway packaging) refers to Association of American Railroads publication M-1002-2000, “Specification for Tank Cars”, it must be read as the updated version M1002-2003, as published by the AAR in 2003.

The requirements of clause 30.8.2 of CGSB-43.147 do not apply to molten sulfur or elevated temperature materials (UN2448, UN3257 and UN3258).

In section 5.14, where references to reciprocity for IM tanks mentioned 49 CFR section 173.32(c), this has been expanded to cover all of section 173.32.

Section 5.15, Transitional Packaging for Large Means of Containment, has been repealed, removing those transitional provisions.

Section 5.16, Class 6.2, Infectious Substances:

The means of containment for Class 6.2 has been revised to reflect the change to Categories instead of risk groups. The Means of Containment for Infectious Substances Table indicates packaging requirements for cultures, other biological substances excluding cultures, and infectious substances intended for disposal.

In general, Category A substances require Type 1A (UN Class 6.2) packaging.

In general, Category B substances require Type 1B packaging, except for 19 special organisms, listed specifically, that require 1A.

In general, infectious wastes require Type 1C packaging, except for 19 special organisms, listed specifically, that require 1A.

Type 1A packaging is authorized for use whenever a Type 1B or 1C packaging is required.

Section 5.16.1 adds extra requirements to Type 1B packaging, in addition to what can be found in CGSB 43.125. Such packages must:

- be capable of passing an internal pressure test of at least 95 kPa, if intended to contain liquids;
- be capable of passing a drop test of at least 1.2 m;
- have absorbent material enough to soak up all liquid contents of inner receptacles, and have each inner receptacle cushioned when there is more than one;
- meet the requirements for packaging that is refrigerated or frozen set out for Category A packaging.

Part 7, Emergency Response Assistance Plans

Section 7.1, Requirement for an ERAP:

Section 7.1(1) says that if a means of containment exceeds the ERAP limit, an ERAP is required. (This is similar to the prior requirements.)

Section 7.1(2) says that the person who transports or imports an accumulation of means of containment of one product with one UN number must obtain an ERAP if the total of all containers with a capacity greater than 10% of the ERAP limit, exceeds that limit in total. For example, if the ERAP limit were 1000 L, five 205 L drums would require an ERAP, since each drum is greater than 10% of 1000 L (100 L).

If the goods are in Class 3 (with a subsidiary of 6.1), Class 4, Class 5.2 (Type B or C organic peroxides) or 6.1 in Packing Group 1, an ERAP is required if the total of all means of containment of all sizes exceeds the ERAP limit.

For Class 1 materials, an ERAP is required if the total of all means of containment exceeds the ERAP limit. If the ERAP limit is expressed as number of articles, one kilogram net explosives quantity must be counted as 100 articles; conversely, 100 articles is to be counted as 1 kg when the ERAP is expressed by net explosives quantity.

Section 7.1(4) clarifies that an ERAP is required if:

- a solid exceeds the ERAP limit (assumed to be in kilograms),
- a liquid exceeds the ERAP limit (assumed to be in liters),
- a gas exceeds the ERAP limit as follows: If the ERAP index is 100 or less, the means of containment in liters exceeds that limit, or if the ERAP index is greater than 100, at least one of the means of containment has a capacity greater than 100 L and the total capacity of all means of containment is greater than the ERAP index;
- for an explosive, if not subject to special provision 86, the net explosives quantity exceeds the ERAP index in kilograms, or if subject to special provision 86, the total number of articles exceeds the ERAP index, given as number of articles.
- anyone who offers for transport or imports the 16 Class 6.2, Infectious Substances, special organisms listed, such as Ebola virus, must have an ERAP for any quantity.

Section 7.1(8) has been added to indicate that if the shipper or importer is using another person's ERAP, they remain responsible for ensuring that emergency assistance is provided when necessary.

Section 7.1(9) indicates that if a classification from ICAO, IMDG or UN Recommendations is used, the ERAP requirement shall be assigned as if the substance were classified under TDG Part 2.

Part 8, Accidental Releases

The immediate reporting table in Part 8.1 has been amended:

Spills of Class 1 explosives must be reported if:

- in any quantity that could pose a danger to public safety; or is in amounts exceeding 50 kg;
- for explosives in Class 1.1, 1.2, 1.3, and 1.5 (but not 1.4) and not subject to special provision 85 or 86, amounts exceeding 10 kg net explosives quantity;

- for explosives not in Class 1.4 and subject to special provisions 85 or 86, exceeding 1000 articles.

Spills of Class 6.2 must be reported for any quantity.

Paragraph 8.1(5)(h) has been amended to indicate that CANUTEC must be called for any accidental release of Class 1 (as well as Class 6.2) materials.

Part 9, Road

Section 9.1(1) has a new paragraph added (9.1(1)(c)), that eliminates reciprocity for PIH (Poison Inhalation Hazard) labels and placards for Class 2.3 and 6.1 coming from the U.S.A. These materials must display the standard Canadian/UN labels or placards, in addition to the PIH symbols shown in the U.S.A. (This is because shipment from Canada to the U.S.A. must be double labeled/placarded already.)

Section 9.1(2) is amended to update the references for permits (exemptions) from the DOT, and to indicate that reciprocity does not extend to dangerous good safety marks or packaging exceptions from 49 CFR that are not permitted by these regulations.

Section 9.2(3) has been changed regarding placarding of loads to or from airports. Previously, the placarding was required to match the labels assigned by the ICAO Technical Instructions; now they must meet TDG Part 4 requirements.

Similarly, section 9.3(3) has been changed regarding placarding of loads to or from ships, marine terminals or ports. Previously, the placarding was required to match the labels assigned by the IMDG Code; now they must meet TDG Part 4 requirements.

A new section, 9.5 has been added, regarding maximum net explosives quantity on a road vehicle. The total net explosives quantity of all explosives transported together on a road vehicle must not exceed the following:

- 25 kg, if any of the explosives in the load are UN1090, SAMPLES, EXPLOSIVE
- 2,000 kg, if any explosives in the load belong in Class 1.1A; and
- 20,000 if the first two points do not apply.

Part 10, Rail

Section 10.1(1) has a new paragraph added (10.1(1)(c)), that eliminates reciprocity for PIH (Poison Inhalation Hazard) labels and placards for Class 2.3 and 6.1 coming from the U.S.A. These materials must display the standard Canadian/UN labels or placards, in addition to the PIH symbols shown in the U.S.A. (This is because shipment from Canada to the U.S.A. must be double labeled/placarded already.)

Section 10.1(2) is amended to update the references for permits (exemptions) from the DOT, and to indicate that reciprocity does not extend to dangerous good safety marks or packaging exceptions from 49 CFR that are not permitted by these regulations.

Section 10.2(3) has been changed regarding placarding of loads to or from airports. Previously, the placarding was required to match the labels assigned by the ICAO Technical Instructions; now they must meet TDG Part 4 requirements.

Section 10.3(3) has been changed regarding placarding of loads to or from ships, marine terminals or ports. Previously, the placarding was required to match the labels assigned by the IMDG Code; now they must meet TDG Part 4 requirements.

Section 10.5, which prohibited a highway tank of dangerous goods from being transported by rail, has been repealed.

Section 10.6, Locations of Placarded Railway Vehicles on a Train, has been modified:

- It is permitted to order a train differently than as per this section if following it will “have a serious impact on train dynamics”.
- More detail is added describing what’s meant by “protruding cargo”.

A subsection (2) has been added, authorizing trains transported from the U.S.A. to or through Canada to follow 49 CFR sections 174.84 and 174.85 instead of Part 10.6.

Section 10.7(4) has been expanded. Subsection (4) has added details on requirements for tanks cars equipped with a stub sill. Also, a new subsection (5) says that this section does not apply if the tank car or other railway vehicle is equipped with certain cushioning devices.

Part 11, Marine

Section 11.1 has been modified as follows:

- Subsection 11.1(2) clarifies who is responsible for functions under this section.
- Subparagraph 11.1.(2)(c)(iv) has been extended to cover aerosols, as well as other means of containment for gases.

Part 12, Air

Section 12.2, referring to the air document, has been simplified to require information as required by the ICAO Technical Instructions, and to have slanting red hatchings on the left and right margins.

Section 12.4 has been expanded into two subsections:

- Paragraph 12.4(1)(f) has been rewritten to clarify packaging requirements for 1.4S explosives for domestic air shipment.
- Subsection 12.4(2) allows a peace officer to take ammunition loaded in a firearm on board a domestic flight.

Section 12.6 has been rewritten to no longer make reference to risk group 4 for infectious substances.

Section 12.7, Infectious Substances: General, has been repealed and not replaced.

In section 12.9(6), regarding carriage of certain Class 3 fuels, such as gasoline, the maximum quantities per means of containment have been corrected from gross masses to volumes.

In section 12.9(7)(a), the reference to ICAO has been updated to include usage of Special Provision A87 for vehicles and internal combustion engines.

In section 12.9(8)(c), the packing instruction for fire extinguishers transported by air has been updated to 213 from 200.

The exemption in section 12.15 (Air Ambulance) is repealed, since it is now covered in Part 1.

Section 12.6 (Emergency Response) is repealed.

Part 16, Inspectors

New sections have been added to Part 16, Inspectors:

- Section 16.3 deals with the powers of an inspector to detain dangerous goods or a means of containment. A specific notice is shown, and procedures for giving the notice, as well as the options for the person receiving the notice of detention.
- Section 16.4 gives the inspector the power to issue a direction to remedy non-compliance. Again, a specific notice is shown, the procedures the inspector must follow, and the responses that the recipient may take.
- Section 16.5 gives the inspector the power to issue a direction not to import dangerous goods, or to return them to the place of origin. Once more, the exact format of the notice is shown, inspector's duties and the options of the recipient.

Schedule 1, List of Dangerous Goods

Column 4 has been changed from "Packing Group / Risk Group" to "Packing Group / Category".

In the legend for Column 7 "ERAP Index", it explains that there are extra requirements for UN1202, UN1203, UN1863 and for certain Class 6.2, Infectious Substances.

In the legend for Column 8, “Passenger Carrying Ship Index”, the units of measure are clarified. Special requirements for Class 1, Explosives, are detailed.

In the legend for Column 9, “Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index”, the units of measure are clarified. Special requirements for Class 1, Explosives, are detailed. Note that by removing the word “consignment”, and not replacing it with “means of containment”, it would appear that this limit now applies to the whole shipment, rather than individual packages.

For Class 1, Explosives, changes have been made to the special provisions for many entries; for example, reducing the applicability of Special Provisions 4 and 5, or adding Special Provisions 85 or 86.

For UN1005, AMMONIA, ANHYDROUS, the primary hazard has been changed to 2.3 from 2.2.

The ERAP index for many entries has been changed.

New entries added for UN3373, BIOLOGICAL SUBSTANCE, CATEGORY B, and UN3475, ETHANOL AND GASOLINE MIXTURE.

Schedule 2, Special Provisions

Special Provision 2 (restrictions for carriage of explosives by road) has been repealed.

Special Provisions 4 and 5 have been replaced.

Special Provisions 6 to 9 have been repealed.

Special Provision 29, gases that can be classified as UN1075, LIQUIFIED PETROLEUM GAS, has been repealed, since this is now covered in Part 1.32.1.

Special Provision 42, provisions for up to five gas cylinders on an open truck, commonly referred to as the ‘welding exemption’, has been repealed, since this is now covered in Part 1.32.3.

Special Provision 75 has been repealed.

Additional Special provisions have been added:

Special Provision 81 is an exemption from specification packaging for goods such as dry ice (UN1845), lifesaving appliances, and engines, internal combustion (UN3166).

Special Provision 82 is a reminder that UN1202, UN1203 and UN1863 have special requirements for ERAPs.

Special Provision 83 – An exemption from specification packaging for UN1133, UN1210, UN1263 and UN 1866, in Packing Groups II and III, in means of containment of 5 L or smaller. This is to be equivalent to similar exceptions in the IMDG Code and 49 CFR.

Special Provision 84 is a reminder that infectious substances in UN2814 and UN2900 have special requirements for ERAPs.

Special Provision 85 is a provision for UN0044 to be carried under section 1.31 in loads of 15,000 or less articles.

Special Provision 86 is a provision for certain explosives to be carried under section 1.31 in a quantity of 100 or less articles.

Special Provision 87 allows UN1073 (REFRIGERATED LIQUID OXYGEN) to be carried on a passenger carrying road or railway vehicle, when used for medical purposes during transport, and in means of containment not exceeding 1 liter.

Special Provision 88 makes a vehicle carrying passengers along with UN1202, UN1203 or UN1978 not subject to the passenger carrying road vehicle restrictions, unless the passengers are paying passengers.

Special Provision 89 is a provision for UN1999 (TARS, LIQUID) to be carried in non-specification tanks, until January 1, 2010.