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# TRANSPORT DANGEROUS GOODS NEWSLETTER

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We welcome news, comments or highlights of transportation of dangerous goods activities, announcements of meetings, conferences or workshops. The Newsletter carries signed articles from various sources. Such articles do not necessarily represent the views of the Directorate, nor does publishing them imply any endorsement. Material from the **Newsletter** may be used freely with customary credit.

### TDG Act Amendments:

On May 26, 2008, the Act to amend the *Transportation of Dangerous Goods Act, 1992*, was tabled in the House of Commons; read all about Bill C-56 in this issue of the Transport Dangerous Goods Newsletter.



# Editorial

Welcome to the Summer 2008 edition of the Transportation of Dangerous Goods Newsletter. We have prepared this issue, filled with great articles, with the summer reading season specifically in mind, giving you something good to peruse, be it at the cottage or by the pool. The biggest development here at the Transport Dangerous Goods Directorate deals with Bill C-56. At the end of this past May, Lawrence Cannon, our Minister of Transport, Infrastructure and Communities tabled in the House of Commons, a Act to amend the *Transportation of Dangerous Goods Act, 1992*. The Act received Royal Assent on June 23, 1992. At that time, there was an informal commitment to Parliament to begin a review of the Act after 10 years. Bill C-56, in keeping with the commitment made, is the result of 6 years of work, as the review process was initiated in 2002.

Therefore, to bring you up to speed on all the changes affecting the transportation of dangerous goods in Canada, we are pleased to present a series of articles reporting on the main tenets of the suggested changes to the Act and an article on the amendments made to the *Transportation of Dangerous Goods Regulations*. You will also find very informative articles on the 2007 accident reports, TDG Congress III and double walled tanks, to only name a few. On that note, I wish you a great summer and happy reading!

*Veronique Tessier*

## Revised Standard for Aerosol Containers Used to Transport Dangerous Goods

*by Nicole Noccey*

Work on revising standard CAN/CGSB 43.123-M86, titled "*Containers, Metal, Aerosol (TC-2P, TC-2Q)*", has begun. This standard was last reviewed and updated over 20 years ago.

Section 5.11 of the *Transportation of Dangerous Goods Regulations* currently incorporates the technical specifications of the CGSB 43.123 standard for aerosol container design and testing, while the requirements for post-fill testing, selection and use of these containers are

specified directly in the *Transportation of Dangerous Goods Regulations*. The revised standard should address both the technical specifications as well as the selection and use requirements, maintaining the format used in other transportation of dangerous goods safety standards.

The scope of the CGSB 43.123 standard currently includes the technical specifications and testing requirements for non-refillable metal aerosol containers. Other topics that the Committee should consider for inclusion in the scope are:

- glass and plastic aerosol containers;
- the manufacture, testing, selection and use requirements for containers classified as UN2037 GAS CARTRIDGES without a release device, non-refillable; or RECEPTACLES, SMALL, CONTAINING GAS without a release device, non-refillable;
- the recycling or disposal of containers included in the standard; and
- Transport Canada registration requirements.

The CGSB committee responsible for the CGSB 43.123 standard has been dormant for some time and as a result, must be reconstituted. To achieve a balanced committee, we are soliciting representation from the following interest groups:

- those involved in the production, distribution, promotion or retail of aerosol containers and/or gas cartridges;
- those involved in the direct use of aerosol containers and/or gas cartridges;
- those involved in regulating aerosol containers and/or gas cartridges;
- those involved in transporting aerosol containers and/or gas cartridges; and
- those with relevant expertise in aerosol containers and/or gas cartridges who do not fall into the above groups.

Committee members should be prepared to draft and comment on proposed text for the revised standard. In addition, they should be prepared to work on periodic updates to the standard, as required, to address safety concerns or important changes in industry or regulations.

**The first committee meeting is tentatively scheduled for Fall 2008. If you are interested in actively participating in the development and maintenance of this standard, please contact John Knox by telephone at 819-956-7430 or by email at John.M.Knox@pwgsc.gc.ca.**

# FEATURE

## Bill C-56

*(introduction by Marie-France Dagenais)*

For this issue of the Transportation of Dangerous Goods Newsletter, we have prepared a series of articles pertaining to the proposed amendments to the *Transportation of Dangerous Goods Act, 1992*. The first article provides an overview of the proposed changes to the Act while the three others provide details on specific issues that have been addressed such as Safety Enhancements, Security Requirements and Security Emergency Response.

Much work, to say the least, has gone into what is now known as Bill C-56 and there is still much more to come before the Bill is adopted. However, as the proposed amendments were tabled on May 26, 2008, we can now discuss publicly what we at the Transport Dangerous Goods Directorate have been crafting in order to bring forward the necessary security requirements and the right security and safety enhancements to better protect public safety during the importing, handling, offering for transport and transporting dangerous goods.

As always, we would be glad to answer any questions. Please feel free to contact either myself, Marie-France Dagenais, Director General, Transport Dangerous Goods Directorate at 613-990-1147, or by email at [dagenma@tc.gc.ca](mailto:dagenma@tc.gc.ca) or Peter Coyles, at 613-990-1156 or by email at [coylesp@tc.gc.ca](mailto:coylesp@tc.gc.ca).

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## Amending the *Transportation of Dangerous Goods Act* – An Overview

*by Peter Coyles*

As you may be aware, over the last few years, the Transport Dangerous Goods Directorate has been working on amending the *Transportation of Dangerous Goods Act, 1992*, the legislative foundation of the Transportation of Dangerous Goods program.

The program was established following the 1979 Mississauga train derailment and the subsequent evacuation of about 250,000 Canadians. The Mississauga incident propelled a new Act that came into law in 1980 entitled the *Transportation of Dangerous Goods Act*. That Act was updated in 1992 to become the *Transportation of Dangerous Goods Act, 1992*.

The current Act received Royal Assent on June 23, 1992. At that time there was an informal commitment to begin a review after 10 years. In 2002, the department began a review of safety issues in the Act. In the summer of 2003, that review was expanded to include security concepts such as responding to a deliberate release of dangerous goods such as terrorist actions.

In March 2004, the Directorate began the public consultation process for the review of the Act. Extensive industry, provincial and territorial governments and public consultation sessions were held in cities across Canada including St. John's, Halifax, Quebec City, Montreal, Ottawa, Scarborough, Mississauga, Sudbury, Winnipeg, Regina, Calgary, Edmonton, Vancouver and Victoria.

The discussions have continued at each of the twice-annual meetings of the Federal-Provincial/Territorial Task Force on Dangerous Goods, where representatives from every province and territory are present, and also at the twice-annual meetings of the Minister's Transportation of Dangerous Goods General Policy Advisory Council with representatives from industry, modal representation, associations, first responders and unions.

These extensive consultations have underscored the value and relevancy of our current Act but have highlighted topics for consideration that are part of the proposed amendments. It is important to note that while the



amended *Transportation of Dangerous Goods Act, 1992* will remain focused on prevention of incidents during the offering, handling, transporting and importing of dangerous goods, the proposed changes will enable a prevention program and a response capability for the Government of Canada in the event of a security incident involving dangerous goods.

On May 26, 2008, the Minister of Transport, Infrastructure and Communities tabled the amended *Transportation of Dangerous Goods Act, 1992*, Bill C-56, in the House of Commons. The proposed amendments focus on two main areas. It provides for new security requirements as well as safety enhancement amendments.

## PROPOSED AMENDMENTS

The proposed legislative initiative first provides for new security requirements as well as safety enhancement amendments. The more significant items can be described as follows:

### Security

On the security prevention side, the Bill would provide for:

- security plans and security training; and
- transportation security clearance for the dangerous goods, including an appeals process that would be implemented like the existing *Aeronautics Act* transportation security clearance program.

The Bill would enable the use of Security Measures and Interim Orders. Similar orders and measures are found in existing Federal legislation. The Bill would also enable regulations to be made to require that dangerous goods be tracked during transport or reported if lost or stolen.

### Safety

On the safety side, the Bill would reconfirm that the Act is applicable uniformly throughout Canada, including to local works and undertakings which include the movements of dangerous goods within a province that are not using a federal carrier/shipper.

Additionally, the Bill would reinforce and strengthen the Emergency Response Assistance Plan Program including enabling the use of Emergency Response Assistance Plans to respond to a terrorist release of dangerous goods.

The Bill would also enable inspectors to inspect any place for which a means of containment is being manufactured, repaired or tested and would change the concept of importer so that it is easier to identify who is the importer into Canada that needs to meet the obligations of the Act.

Finally the Bill would enable a shipping record to be used in court as evidence of the presence of a dangerous good in a means of containment.

These proposed amendments to the *Transportation of Dangerous Goods Act, 1992*, would definitely strengthen the Government of Canada's ability to enhance the safety and security for Canadians during the transportation of dangerous goods.

## PROCESS FOR THE ADOPTION OF A NEW BILL

Before a Bill becomes applicable law, it must pass through several steps, which can be summarized as follows:

First and Second Reading, Parliament debate on the Bill, referral to Committee for review, after the review a Third Reading follows. The Bill is then referred to Senate for a First Reading in Senate, followed by a Second Reading in Senate, then a Senate Debate on the Bill, followed by referral to Senate Committee for review, after the Senate Committee review comes the final step, Royal Assent.

There is no defined timeline for this process, which is dependent on support from the Government and opposition parties both in the House of Commons, Senate and during Committee review.

At time of publishing, Second Reading of the Bill had not been scheduled. Thus, there is not yet a fixed date as to when the amendments to the *Transportation of Dangerous Goods Act, 1992*, would come into force.

# Enhancing Safety

by Peter Coyles

After extensive consultations in the past few years, an amended *Transportation of Dangerous Goods Act, 1992*, has now been tabled in Parliament.

During these consultations, while the value and relevancy of the current Act in terms of safety were highlighted, some deficiencies were also identified.

The *Transportation of Dangerous Goods Act, 1992*, is criminal law and applies to all matters relating to the importing, handling, offering for transport and transporting of dangerous goods. The Act's main objective is to promote public safety during the importing, handling, offering for transport or transporting of dangerous goods. Public safety is defined as the safety of human life and health and of property and the environment.

The proposed amendments that have been introduced in this new Bill take into consideration those concerns in order to enhance public safety during the importing, handling, offering for transport and transport of dangerous goods.

The main proposed safety amendments include:

- A new definition for **release**;
- Reinforcing and strengthening the **Emergency Response Assistance Plan Program**;
- Reconfirming that **inspectors are able to inspect any place** for which a means of containment is being manufactured, repaired or tested which must be done under a warrant if it is in a private dwelling;
- Changing the name of Permits of Equivalent Level of Safety to **Equivalency Certificates** and adding the notion of a “**Temporary Certificate**” to replace the use of Estoppels.

## 1) Definition of “release”

Section 2 of the Act would be amended to reflect the new definition of the term “release” which would provide as follows:

“release” in relation to dangerous goods;

- (a) a discharge, emission, explosion, out-gassing or other escape of dangerous goods, or any component or compound evolving from dangerous goods, from a means of containment being used in the handling or transporting of the dangerous goods; or
- (b) an emission from a means of containment being used in the handling or transporting of dangerous goods of ionizing radiation that exceeds a level or limit established under the *Nuclear Safety and Control Act*.

With this new definition of the term “release”, the amended Act would apply to handle both the safety and security side of a dangerous goods release.

## 2) Emergency Response Assistance Plans

The amended subsections dealing with the requirements for a person to hold an Emergency Response Assistance Plan and its contents are similar to those that are found in the current *Transportation of Dangerous Goods Act, 1992*.

Amended subsections 7 (3) and (4) would introduce the notion of specified time periods for interim and formal approval of a plan. These time periods would need to be established through regulations.

The new section 7.1 would enable the Minister of Transport, Infrastructure and Communities to direct a person with an approved Emergency Response Assistance Plan to activate the plan for the protection of public safety.

Sections 7 and 7.1 would provide as follows:

Section 7.(1) No person shall import, offer for transport, handle or transport dangerous goods in a quantity or

concentration that is specified by regulation — or that is within a range of quantities or concentrations that is specified by regulation — unless the person has an Emergency Response Assistance Plan that is approved under this section before:

- (a) importing the dangerous goods;
- (b) offering the dangerous goods for transport; or
- (c) handling or transporting the dangerous goods, in the case where no other person is required to have an Emergency Response Assistance Plan under paragraph (a) or (b) in respect of that handling or transporting.

## Contents

(2) The plan shall outline what is to be done to respond to an actual or anticipated release of the dangerous goods in the course of their handling or transporting that endangers, or could endanger, public safety.

## Approval

(3) The Minister may approve the plan for a specified period, if the Minister believes on reasonable grounds that it can be implemented and will be effective in responding to such a release.

## Interim approval

(4) The Minister may grant an interim approval of the plan for a specified period before finishing the investigation of the matters to be considered under subsection (3) if the Minister has no reason to suspect that the plan cannot be implemented or will be ineffective in responding to such a release.

## Revocation of approval

(5) The Minister may revoke an approval of an Emergency Response Assistance Plan if:

- (a) in the case of an interim approval, the Minister subsequently believes on reasonable grounds that the plan cannot be implemented or will be ineffective in responding to such a release;
- (b) the Minister believes on reasonable grounds that the plan can no longer be implemented or will no longer be effective in responding to such a release;
- (c) the Minister has requested changes to the plan that the Minister believes on reasonable grounds are needed to make it effective in responding to such a release and the changes have not been made within a reasonable time or have been refused;
- (d) the Minister believes on reasonable grounds that there has been a release of dangerous goods to which the plan applies — or that such a release has been anticipated — and that the plan was not used to respond to the actual or anticipated release; or

- (e) a direction made in respect of the plan under paragraph 7.1(a) has not been complied with.

### Direction and permission

7.1 The Minister may, if the Minister believes that doing so is necessary for the protection of public safety,

- (a) direct a person with an approved Emergency Response Assistance Plan to implement the plan, within a reasonable time as specified in the direction, in order to respond to an actual or anticipated release of dangerous goods to which the plan applies.

### 3) Reconfirming that inspectors are able to inspect any place for which a means of containment is being manufactured, repaired or tested

New provisions have been added through the amended Act to ensure that inspectors have access to facilities involved in manufacturing, repairing or testing means of containment in accordance with identified standard and procedures. They would also enable an inspector to be accompanied by a qualified person to enter any place or means of transport to accomplish a specific task requested of that qualified person (e.g., take a sample or specified quantity of dangerous goods for analysis).

The definition of the term “safety requirement” would also be added. It would provide as follows:

“safety requirement” means;

- (a) a requirement for persons engaged in importing, offering for transport, handling or transporting dangerous goods,
- (b) a requirement for persons engaged in designing, manufacturing, repairing, testing or equipping a means of containment used or intended to be used in importing, offering for transport, handling or transporting dangerous goods; or
- (c) a requirement for reporting by persons referred to in paragraphs (a) and (b) or a requirement for their training or registration;

The sections relating to the powers of an inspector would be amended as follows:

### Powers

15.(1) For the purpose of ensuring compliance with this Act, an inspector may, subject to section 16 but at any reasonable time, stop any means of transport for which the inspector is designated and enter and inspect any place, or any such means of transport, if the inspector believes on reasonable grounds that in or on the place or means of transport there are:

- (a) dangerous goods being offered for transport, handled or transported;
- (b) means of containment being manufactured, repaired or tested on which a compliance mark is displayed or will be affixed;
- (c) standardized means of containment;
- (d) books, shipping records, emergency response assistance plans, security plans or other documents that contain any information relevant to the purposes of this Act; or
- (e) computer systems, data processing systems or any other electronic devices or media that contain information relevant to the purposes of this Act, or that have such information available to them.

15.(2) In the course of carrying out an inspection under subsection (1), an inspector may:

- (a) open and inspect, or request the opening and inspection of, any means of containment for which the inspector is designated, including any closures, valves, safety release devices or other appurtenances that are essential to the use of the means of containment to contain dangerous goods, if the inspector believes on reasonable grounds that it is being used to handle or transport dangerous goods or to contain dangerous goods offered for transport;
- (b) open and inspect, or request the opening and inspection of, any means of containment described in paragraph (1)(b) or (c), including any closures, valves, safety release devices or other appurtenances that are essential to the use of the means of containment to contain dangerous goods;
- (c) for the purpose of analysis, take, or request the taking of, a reasonable quantity of anything the inspector believes on reasonable grounds to be dangerous goods;
- (d) examine, or request the examining of, information described in paragraph (1)(d) or (e) that the inspector believes on reasonable grounds is relevant to the purposes of this Act and make, or request the making of, copies of any of it; and
- (e) ask questions of any person for the purposes of this Act.

### Authorized person

15.(3) An inspector may, in accordance with the regulations, authorize any qualified person to enter any place or means of transport that the inspector may enter under subsection (1) and to exercise any of the powers set out in subsection (2).

### 4) Permits replaced by Equivalency Certificates and a new concept - Temporary Certificates

Most of the concepts found in section 31 are the same as those found in the current Act. The important amendment is renaming **permits** as **equivalency certificates** or **emergency certificates**.

However, the new concept of a **temporary certificate** would be added in an amended Act and would replace the current practice of using Estoppels.

Section 31 would provide as follows:

### Equivalency certificate

31.(1) The Minister may issue an equivalency certificate authorizing any activity to be carried on in a manner that does not comply with this Act if the Minister is satisfied that the manner in which the authorized activity will be carried on provides a level of safety at least equivalent to that provided by compliance with this Act.

### Emergency certificate

(2) The Minister may issue an emergency certificate authorizing any activity to be carried on in a manner that does not comply with this Act if the Minister is satisfied that the authorized activity is necessary to deal with an emergency in which there is danger to public safety.

### Temporary certificate

(2.1) The Minister may, in the public interest, issue a temporary certificate authorizing any activity to be carried on in a manner that does not comply with this Act.

### Immunity

(2.2) No action lies against Her Majesty in right of Canada, the Minister, his or her Deputy or any person employed in the Department of Transport for anything done or omitted to be done in good faith under subsection (2.1).

### Exemption from *Statutory Instruments Act*

(3) An equivalency, emergency or temporary certificate is not a statutory instrument for the purposes of the *Statutory Instruments Act* and the contents of an emergency certificate or a temporary certificate may be issued orally, but the emergency certificate or temporary certificate shall be issued in writing as soon as possible and the writing is conclusive proof of its content.

### Terms and conditions

(4) An equivalency, emergency or temporary certificate may include terms and conditions governing the authorized activity and, if any of the terms or conditions is not complied with in the course of carrying on the activity, the Act and regulations apply to the activity as though the certificate did not exist.

### Scope of certificate

(5) An equivalency, emergency or temporary certificate may specify the persons who may carry on the activity

and the dangerous goods or means of containment that it may involve.

### Revocation of certificate

(6) The Minister may revoke an equivalency, emergency or temporary certificate — including an emergency or temporary certificate the contents of which have been issued orally — if the Minister is no longer satisfied of the matter described in subsection (1), (2) or (2.1), respectively, or the regulations have been amended and have the same effect as the certificate

These amendments brought forward to amend the *Transportation of Dangerous Goods Act, 1992*, will bring the right safety enhancements to protect public safety during the importing, handling, offering for transport and transporting dangerous goods.

## Building a Security Prevention Program

by Peter Coyles

The *Transportation of Dangerous Goods Act, 1992*, provided for a prevention and response program for safety incidents during the importing, handling, offering for transport or transporting of dangerous goods. In 1992, when the Act came into force, no one could have envisaged the new security environment that would emerge following the terrorist incidents of September 11, 2001, the transit bombings in Madrid in 2004 and London in 2005, as well as attempts to use dangerous goods as a weapon at the Glasgow Airport in 2007.

Taking into consideration these events, the proposed amendments to the Act would add new security requirements to the *Transportation of Dangerous Goods Act, 1992*.

The legislative provisions on which the prevention program would be based would include:

- Requiring security plans and security training;
- Requiring a transportation security clearance for the dangerous goods, including an appeals process (which would operate like the existing *Aeronautics Act* transportation security clearance program);
- Enabling the use Security Measures and Interim Orders as found in other existing Parliament Acts; and
- Enabling regulations to be made to require that dangerous goods are tracked during transport or reported if lost or stolen.



## Security Plans and Security Training

The regulated requirements associated with security plans and security training would be modeled on existing United Nations Recommendations and aligned with North American conventions. The new sections would provide as follows:

### Security plans

7.3(1) No prescribed person shall import, offer for transport, handle or transport dangerous goods in a quantity or concentration that is specified by regulation — or that is within a range of quantities or concentrations that is specified by regulation — before the person has undergone security training in accordance with the regulations, has a security plan that meets the requirements of subsection 2 and has implemented the plan in accordance with the regulations.

### Contents

(2) The plan shall, in accordance with the regulations, set out measures to prevent the dangerous goods from being stolen or otherwise unlawfully interfered with in the course of the importing, offering for transport, handling or transporting.

## Transportation Security Clearances

In August 2005, *The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU) came into force in the United States requiring commercial motor vehicle drivers licensed in Canada or Mexico transporting dangerous goods into and within the United States in truck load quantities to undergo a background security clearance similar to those required for United States' truck drivers transporting truckload quantities of dangerous goods in the United States. Canadian drivers are currently satisfying this provision if they have been accepted into the Free and Secure Trade (FAST) programs of the Canada Border Services Agency and the U.S. Bureau of Customs and Border Protection. However, this arrangement is temporary and the United States still expects Canada, under the SAFETEA-LU, to implement a long-term solution.

As such, new section 5.2 would provide the authority to establish a transportation security clearance program as a long-term solution to border crossing for truck drivers.

Section 5.2 provides as follows:

### Prohibition

5.2(1) No prescribed person shall import, offer for transport, handle or transport dangerous goods in a quantity or concentration that is specified by regulation — or that is within a range of quantities or concentrations that is specified by regulation — unless the person has a transportation security clearance granted under subsection 2.

### Granting, suspending, etc.

(2) The Minister may, for the purposes of this Act, grant or refuse to grant a transportation security clearance to any person or suspend or revoke such a clearance.

The Bill also enables an appeal process through the enactment of new regulations.

The above section dealing with transportation security clearances would come into force separately and at a later date than the rest of the provisions of the Bill, and only once the analysis of the scope, policy and costing of the program has been completed.

## Security Measures

Security measures are immediate regulations that would be used to respond to an urgent and immediate identified threat, where the normal regulatory process would take too long to protect public safety.

Security measures are not immediately published, because publishing the regulation would compromise the intent of the regulation and public safety. Security measures would be reviewed every two years to ensure that they are still required and/or if they can be made public. The notion of Security measures can already be found in the *Public Safety Act* as well as 10 other existing federal legislations.

The legislative provisions that deal with security measure in an amended Act provide as follows:

### Authority

27.2(1) The Minister may make measures — referred to in this Act as security measures — respecting the security of the importing, offering for transport, handling or transporting of dangerous goods.

### Restriction

(2) The Minister may make a security measure in relation to a particular matter only if:

- (a) a regulation could be made in relation to that matter under subsection 27.1(1); and
- (b) the publication of the regulation would compromise the security of the importing, offering for transport, handling or transporting of dangerous goods or would endanger public safety.

### Review

(3) A security measure comes into force immediately when it is made, but the Minister shall review the security measure within two years after the day on which it is made and within every following two years to determine whether the disclosure of the particular matter that is the subject of the security measure would no longer compromise the security of the importing, offering for transport, handling or transporting of dangerous goods or endanger public safety.

## Suspension of subsection 27.5(1) and repeal of security measure

(4) If the Minister is of the opinion that the disclosure of the particular matter that is the subject of a security measure would no longer compromise the security of the importing, offering for transport, handling or transporting of dangerous goods or endanger public safety, the Minister shall:

- (a) within 23 days after the day on which the Minister forms that opinion, publish in the *Canada Gazette* a notice that sets out the substance of the security measure and states that subsection 27.5(1) no longer applies in respect of the security measure; and
- (b) repeal the security measure before the earlier of
  - (i) the day that is one year after the day on which the notice is published, and
  - (ii) the day on which a regulation is made under subsection 27.1(1) in respect of the matter dealt with by the security measure.

## Effect of notice

(5) If a notice is published under paragraph (4)(a), subsection 27.5(1) ceases to apply in respect of the security measure as of the day the notice is published.

## Consultation

(6) Before making a security measure, the Minister shall consult with any person or organization that the Minister considers appropriate in the circumstances.

## Exception

(7) Subsection (6) does not apply if, in the opinion of the Minister, the security measure is immediately required for the security of the importing, offering for transport, handling or transporting of dangerous goods or for public safety.

## Unauthorized disclosure

27.5(1) Unless the Minister states under subsection 27.2(4) that this subsection does not apply in respect of a security measure, no person other than the person who made the security measure shall disclose its substance to any other person unless the disclosure is required by law or is necessary to give the security measure effect.

## Interim orders

Interim orders are also immediate regulations that would be used to respond to an urgent and immediate identified threat, where the normal regulatory process would take too long to protect public safety. Interim orders become public 24 days after Governor in Council approval.

The legislative provisions dealing with interim orders provide as follows:

## Authority

27.6(1) The Minister may make an interim order that contains any provision that may be contained in a regulation under subsection 27.1(1) if the Minister believes that immediate action is required to deal with an immediate threat to the security of the importing, offering for transport, handling or transporting of dangerous goods or to public safety.

## Deputy may make interim orders

(2) The Minister may authorize his or her deputy to make, subject to any restrictions or conditions that the Minister specifies, an interim order whenever the deputy believes that immediate action is required to deal with an immediate threat to the security of the importing, offering for transport, handling or transporting of dangerous goods or to public safety.

## Duration

(3) An interim order comes into force immediately when it is made but ceases to have effect on the earliest of:

- (a) the day that is 14 days after the day on which it is made, unless it is approved by the Governor in Council;
- (b) the day on which it is repealed;
- (c) the day on which a regulation made under subsection 27.1(1) that has the same effect as the interim order comes into force; and
- (d) the day that is two years after the day on which the interim order is made or that is at the end of any shorter period that the interim order specifies.

## Publication

(4) An interim order shall be published in the *Canada Gazette* within 23 days after the day on which it is made.

## Tabling of order

(5) A copy of each interim order shall be tabled in each House of Parliament within 15 days after the day on which it is made.

## House not sitting

(6) In order to comply with subsection 5, the interim order may be sent to the Clerk of the House if the House is not sitting.

## Tracking/reporting lost or stolen dangerous goods

Finally the proposed amendments would enable regulations to be made to establish security requirements for tracking dangerous goods as well as regulations to be made to require companies to report lost or stolen dangerous goods.

These new legislative provisions would provide as follows:

### Security Regulations

27.1(1) The Governor in Council may make regulations respecting the security of the importing, offering for transport, handling or transporting of dangerous goods including regulations:

- (a) respecting the prevention of unlawful interference with the importing, offering for transport, handling or transporting of dangerous goods and the action that is taken if the interference occurs or is likely to occur;
- (b) establishing security requirements for equipment, systems and processes used in importing, offering for transport, handling or transporting of dangerous goods including means of transport tracking and identification protocols.

It is important that a new *Transportation of Dangerous Goods Act* provides for security requirements for the importing, handling, offering for transport and transporting dangerous goods. The legislative initiatives being brought forward in the amended Act would harmonize security requirements with our North American partners and continue to enhance public safety for Canadians.

# The Use Of Emergency Response Assistance Plans Following A Terrorist Dangerous Goods Incident

by Peter Coyles

The proposed amendments to the *Transportation of Dangerous Goods Act, 1992*, will enhance the transport of dangerous goods prevention response program by providing for a response to security incidents involving dangerous goods.

In 2002, the Transport Dangerous Goods Directorate received funding to put in place a Chemical Biological Radiological and Nuclear (CBRN) Response Program

that would be part of the federal government initiative on counter-terrorism.

The mandate of the CBRN Response Program is to ensure product response services following a CBRN incident. Such response would occur once all terrorist-related hazards have been eliminated.

The proposed amendments to the *Transportation of Dangerous Goods Act, 1992*, will enhance public safety by enabling a response to a terrorist incident involving dangerous goods. The response would be based on the existing industrial Emergency Response network and infrastructure established under the Emergency Response Assistance Plan requirements pursuant to the *Transportation of Dangerous Goods Act, 1992*, and its Regulations.

During the consultations to establish the CBRN program, industry indicated its willingness to respond to a terrorist incident should it be able to recover costs and receive indemnity protection during a government requested response.

The new authorities proposed in the recently introduced Bill will enable industry to recover costs associated with a response while providing indemnity protection during that response.

### Proposed amendments

The new legislative provisions are sections 7.1 and 7.2 of the amended Act. They would provide the authorities to demand a response by industry using an existing Emergency Response Assistance Plan and to offer payment for the costs associated to that response. Section 20 would be amended in the Bill to provide indemnity protection.

The following are the detailed legislative provisions that have been proposed in the amendments to the Act.

### Direction and permission

7.1 The Minister may, if the Minister believes that doing so is necessary for the protection of public safety,

- (a) direct a person with an approved Emergency Response Assistance Plan to implement the plan, within a reasonable time as specified in the direction, in order to respond to an actual or anticipated release of dangerous goods to which the plan applies; or
- (b) authorize a person with an approved Emergency Response Assistance Plan to implement the plan in order to respond to an actual or anticipated release of dangerous goods if the Minister does not know the identity of any person required under subsection 7.1(1) to have an Emergency Response Assistance Plan in respect of the release.

## Compensation

7.2(1) The Minister shall compensate, in accordance with the regulations, any person who is authorized to implement an approved Emergency Response Assistance Plan under paragraph 7.1(b) for expenses authorized to be compensated under the regulations that are incurred by that person as a result of implementing the plan.

(2) The compensation shall be paid out of the Consolidated Revenue Fund.

## Personal Liability

20. The following persons are not personally liable, either civilly or criminally, in respect of any act or omission done in good faith and without negligence:

- (a) any person who responds to an actual or anticipated release using an Emergency Response Assistance Plan that applies to the release, acts in accordance with the plan and informs the Canadian Transport Emergency Centre of the Department of Transport of their response to the release;
- (b) any person who is directed or required under paragraph 7.1(a), section 17, sub-section 18(2) or paragraph 19(1)(a) or (b) to do or refrain from doing anything and acts in accordance with the direction or requirement; and
- (c) any person who acts in accordance with an authorization given under paragraph 7.1(b).

## How it would work

There are two potential security scenarios that could trigger activation of the Emergency Response Assistance Plan following a security incident:

The first deals with a terrorist incident involving a known shipper / producer / manufacturer / offerer of dangerous goods; and the second a terrorist incident involving an orphaned release of dangerous goods whereas the shipper / producer / manufacturer / offerer of dangerous goods is not known.

During the first scenario, industry would use their existing Emergency Response Assistance Plan to assist first responders following a terrorist incident during the transportation of dangerous goods for its own product.

During an incident involving an unknown or orphaned release of dangerous goods, the Minister of Transport, Infrastructure and Communities would ask a company with an approved Emergency Response Assistance Plan if they would be willing to respond to this incident on the Government's behalf. Should an approved company accept to respond, the Government would agree to pay the costs associated with that response and provide the responders with indemnity protection.

The Emergency Response Assistance Plan would only be activated after the site has been cleared by the appropriate agencies (for example, local police, Royal Canadian Mounted Police or the Department of National Defense). The Government would choose the plan holder who has the most appropriate plan and who could respond in the timeliest manner.

## Cost recovery

As provided in the proposed amendments, the Government would offer to pay the costs associated to a response during an incident involving an unknown or orphaned release of dangerous goods to an industry willing to respond on the Government's behalf. New regulations would be developed following the coming into force of the Bill that would enable industry to recover capital and operational cost associated with a response.

These regulations, which will be developed later, would provide the payment for costs such as salaries, meals, hotels, suit replacement, fuel and travel expenses as well as costs associated with damage to equipment such as non sparking tools, vehicles, pumps or hoses due to a government requested response.

The Government would also be responsible for any damage to third parties caused by necessary response actions by responders to enable, for example, access to a site during the requested response. This would include, for example, replacement cost to a third party for fencing that needed to be cut or removed to have access to a site or damage to the grass caused by the responder's vehicles.

Costs such as the purchase of any new equipment to enable enlargement of a plan holders response capabilities outside of its approved Emergency Response Assistance Plan or to replace aging equipment in that plan to conduct a response, or the loss of production due to the acceptance of the Government's response request would not be covered.

These new amendments enable an effective and efficient way to use existing capacity, knowledge and expertise to protect public safety in the event of a terrorist incident involving dangerous goods. The new Act would finally provide an appropriate prevention and emergency response program for both safety accidents and security incidents.

**For more information on the changes proposed in Bill C-56, consult the full version of the Bill online at: <http://www2.parl.gc.ca/HousePublications/Publication.aspx?DocId=3513980&Language=e&Mode=1> or contact Marie-France Dagenais, at 613-990-1147, or by email at [dagenma@tc.gc.ca](mailto:dagenma@tc.gc.ca) or Peter Coyles, at 613-990-1156 or by email at [coylesp@tc.gc.ca](mailto:coylesp@tc.gc.ca).**



# Transportation of Dangerous Goods Regulations Review

by Marc Grignon

Changes made to the *Transportation of Dangerous Goods Regulations* came into effect on February 7, 2008 following the publication of Amendment No. 6 in the *Canada Gazette*, Part II.

Changes brought forward in Amendment No. 6 will impact 12 of the 16 Parts of the *Transportation of Dangerous Goods Regulations* as well as its three Schedules. The following is a short summary of the notable modifications to each of those parts. The text that follows does not replace the Regulations, safety standards or safety requirements that apply. For interpretation and application, you should consult the *Canada Gazette*, Part II and other official regulatory documents.

## Part 1: Coming into force, repeal, interpretation, general provisions and special cases

This part is modified to include new interpretations, update the table of documents referring to safety standards and safety requirements and the list of definitions. There are also some changes to general provisions and special cases.

One of the major changes in this part is the removal of almost all of the expressions "These Regulations do not apply to...". This expression is replaced with different wording that indicates which parts do not apply. Consequently, Part 2 (Classification), isn't automatically exempted so that the dangerous goods will have to be classified before being transported or, indeed, in some cases before a consignor can determine if an exemption or the Schedules apply.

Certain special cases are either modified or added. For example, the 150 kg Gross Mass Exemption is no longer restricted to personal use. Therefore, many service type vehicles or other vehicles used to transport small quantities of dangerous goods will come under this exemption. Certain modifications are also made to the 500 kg Gross Mass Exemption and the Limited Quantities Exemption. The latter now allows the display, on a means of containment, of the UN number within a black diamond shaped mark instead of the limited quantities markings as done internationally. Several other special cases are modified or added and some are removed.

## Part 2: Classification

The key changes made in this Part involve infectious substances. Henceforth, these substances will be classified

into two categories instead of four risk groups. These modifications allow the harmonization with recent changes made to the UN Recommendations, which have been adopted, by the modes (air through the International Civil Aviation Organization (ICAO) Technical Instructions and marine through the International Maritime Dangerous Goods (IMDG) Code) and most national authorities.

Other important changes in this Part relate to the flash point for Class 3 Flammable Liquids (60°C instead of 60.5°C), the limit values for inhalation, dermal and oral toxicity of Class 6.1 Toxic Substances and the classification requirements for Class 7 Radioactive Materials and for Class 9 Miscellaneous Products, Substances and Organisms.

## Part 3: Documentation

Principal changes made to this Part pertain to the way subsidiary classes and packing groups must be shown on shipping documents. Requirements for risk groups are removed and the unit of measure for the quantity of dangerous goods transported can now also be displayed with a unit of measure acceptable for use under the International System of Units (SI system). For example 1 t = 1,000 kg.

## Part 4: Dangerous Goods Safety Marks

Amendment No. 6 modified fourteen sections of this Part. Changes concern, in particular; the carrier's responsibilities, requirements relating to the size and colour of the UN number and adds new requirements for the display of subsidiary class placards in certain circumstances. Other changes clarify the requirements for Class 2, Gases.

Additionally, new requirements are added concerning the display of dangerous goods safety marks for anhydrous ammonia, infectious substances and radioactive materials. New placards and labels are also added to the Appendix of Part 4.

## Part 5: Means of containment

Modifications made within this Part include changes to the table in section 5.7 that is used to determine which explosives can be stored or transported together in the same means of transport. There are new requirements for cylinders containing Class 2, Gases, and for Infectious Substances of Class 6.2.

Highway tanks and some portable tanks selected in accordance with CSA B621 and B622, and constructed and used in Canada after August 31, 2008 must be constructed in compliance with the requirements of CSA B620 Standards. They must also be tested and inspected in accordance with CSA B620 when the most recent periodic re-test or periodic inspection is performed in Canada on or after August 31, 2008.

## Part 7: Emergency Response Assistance Plan

Amendment No. 6 affects only section 7.1 of this Part. This section now has nine subsections to better define the requirements for emergency response assistance plans.

These additions introduce new situations for which an Emergency Response Assistance Plan is required: for interconnected rail tank cars carrying dangerous goods with a UN number of UN1202, UN1203 and UN1863; and for Class 6.2, Infectious Substances.

One of the new subsections introduces requirements to further define the responsibility of the person responsible for the Emergency Response Assistance Plan, which is the person who offers for transport or imports the dangerous goods. The new requirements also clarify classification requirements of dangerous goods made through the ICAO Technical Instructions, the IMDG Code and the UN Recommendations.

## Part 8: Accidental Release and Imminent Accidental Release Report Requirements

Amendment No. 6 brings only two minor changes to this Part. These modifications involve requirements for dangerous goods included in Class 1, Explosives, and Class 6.2, Infectious Substances.

## Part 9: Road

One of the major changes to this Part establishes that, from August 31, 2008, placards and labels displayed on a means of containment transporting dangerous goods included in Class 2.3, Toxic Gases, and Class 6.1, Toxic Substances, must be those required by the *Transportation of Dangerous Goods Regulations*. However, these placards and labels may be displayed before August 31, 2008. Other modifications bring changes to the requirements relative to the description of dangerous goods on shipping documents for dangerous goods transported from the United States to Canada or passing through Canada. They also clarify that exemptions in 49 CFR for safety marks and packaging that are not permitted in the *Transportation of Dangerous Goods Regulations* are not granted reciprocity.

The remaining modifications clarify the requirements regarding the display of dangerous goods marks when dangerous goods are transported by road vehicle to or from an aircraft, an aerodrome, or an air cargo facility as well as to or from a ship, a port facility or a marine terminal. A new section is added to introduce new requirements to establish the maximum net explosives quantity that can be transported in a road vehicle.

## Part 10: Rail

Modifications identical to Part 9 (Road) are made to Part 10 (Rail) in regards to the description of dangerous goods on shipping documents and to the requirements to display dangerous goods marks.

Other changes include the rescinding of the prohibition to transport a highway tank that contains dangerous goods by railway vehicle, a new method to locate railway vehicles containing dangerous goods in a train, a new table for coupling railway vehicles and a new inspection requirement for owners of railway vehicles subject to a coupling report.

## Part 11: Marine

Changes made to this Part touch on the requirements regarding means of containment containing dangerous goods during international and home-trade voyage, class 1.

## Part 12: Air

In this Part, changes are made to clarify some existing requirements and align the *Transportation of Dangerous Goods Regulations* with the recent changes in the ICAO Technical Instructions.

The term “risk group” is removed to reflect the new terms “Category A and Category B” for infectious substances and a new exemption is introduced to authorize a peace officer, as defined in section 1 of the *Canadian Aviation Security Regulations*, or an in-flight security officer, to transport a loaded firearm on board an aircraft.

Other changes align this Part with terms that are changed in Part 1 of the *Transportation of Dangerous Goods Regulations* such as the definitions of “capacity” and “gross mass”.

## Part 14: Permit for Equivalent Level of Safety

One minor change is made to correct an error in the indentation of sub-paragraphs.

## Part 16: Inspectors

Three new sections are added to introduce requirements concerning the detention of dangerous goods or means of containment, the direction to remedy non-compliance and direction not to import or to return to place of origin dangerous goods or means of containment.

## Schedules

Changes in Schedule 1 relate to the header of column 4 to reflect the replacement of “risk group” by “category” and changes are made to the legend to Schedule 1. Some dangerous goods descriptions are updated and one new UN number is added to Schedules 1 and 3. This new UN number is UN3475 for ETHANOL AND GASOLINE MIXTURE with more than 10 per cent ethanol. Another change concerns the primary class of ANHYDROUS AMMONIA, UN1005. This substance will now be classified as a Class 2.3, Toxic Gas.

In Schedule 2, Special Provisions, a number of special provisions are repealed, changed, or added. Some special provisions are moved to Part 1 of the *Transportation of Dangerous Goods Regulations*. For example, special provision 29 concerning UN1075,

LIQUIFIED PETROLEUM GASES, is moved to section 1.32.1 and special provision 42 concerning a partial exemption of the Transportation of Dangerous Goods Regulations for certain gases included in Class 2 is moved to section 1.32.3. These two exemptions are also modified.

Special provisions referring to explosives vehicle certificates are removed since the Department of Natural Resources will abolish this certificate.

New special provisions are added for interconnected railway vehicles; means of containment for certain flammable liquids (glues, inks, paints and resins); emergency response assistance plans for certain infectious substances; ammunitions; explosives; refrigerated liquid oxygen; vehicles transporting gasoline, diesel and propane; and, finally, small means of containment used to transport tare.

## Summary

Upon reading the changes adopted within the Regulations amending the *Transportation of Dangerous Goods Regulations*, it is obvious to note that these modifications clarify the requirements, address safety issues, continue to improve safety in the transportation of dangerous goods and align the *Transportation of Dangerous Goods Regulations* with international recommendations and modal requirements and the U. S. dangerous goods Regulations.

# Diesel Fuel and Fuel Oil Transport: Transport Canada Does NOT Require Double-Walled Tanks

by Zenon Lewycky

There is no existing, nor forthcoming, Transport Canada requirement for use of "double walled" tanks for transport of dangerous goods such as diesel fuel and fuel oil. Although Transport Canada does not prohibit the use of double-walled tanks that otherwise satisfy the prescribed safety standards in the *Transportation of Dangerous Goods Regulations*, we do not require, nor do we recommend, the use of double-walled tanks.

Even though it may seem beneficial to use a double walled tank to contain leaks, in fact the inter-wall space of double-walled tanks can collect contaminants and moisture causing accelerated corrosion. Moreover, it is more difficult

to perform an adequate inspection to detect this potential corrosion between the tank walls. Effective and adequate periodic inspection of transport tanks is a key contributor in preventing leaks and other failures. Since double-walled tanks are likely to be more prone to corrosion and are more difficult to inspect, they may be less reliable over the long term unless sophisticated measures are taken to conduct the periodic inspections. We do not believe that double-walled tanks are necessary for safety.

Diesel fuel and fuel oil are dangerous goods within the scope of the *Transportation of Dangerous Goods Act, 1992*, and the *Transportation of Dangerous Goods Regulations* (see <http://www.tc.gc.ca/tdg/clear/menu.htm>). The *Transportation of Dangerous Goods Regulations* prescribe safety standards for containers that must be satisfied when any dangerous goods are in transport. There are standards in place for tank trucks, portable tanks, drums, jerricans, railway tank cars, compressed gas cylinders and more.

In August of 2002 the *Transportation of Dangerous Goods Regulations* were amended. Among the changes at that time was a new requirement to use a container that meets one of the Transport Canada Transport Dangerous Goods safety standards when transporting diesel fuel or fuel oil in a container of greater than 450L capacity. Along with that new requirement, existing non-standardized containers of over 450L capacity were grandfathered for continued use, under certain conditions, until the end of 2009. Starting 2010, the grandfathered non-standardized containers of over 450L capacity will no longer be acceptable for transport of fuel oil or diesel and only containers meeting the prescribed standards will be acceptable. Once again, the Transport Canada TDG prescribed safety standards detail design, manufacturing, periodic retesting, approval and use requirements, but they do not require double-walled tanks. Containers acceptable for transport of diesel, fuel oil, and gasoline were the subject of an article in our fall 2004 newsletter (see "Alert - Diesel Fuel in Non-Specification Slip Tanks - Permit Expiring" on our website at <http://www.tc.gc.ca/tdg/newsletter/fall2004.htm>).

## Accident Summary Report 2007

by Lindsay Jones, Susan Williams and Jonathan Rose

The Transport Dangerous Goods Directorate receives hundreds of accident reports each year. Most are submitted to comply with the requirement to complete a "30-Day Follow-up Report" when the quantity of dangerous goods released in an accident exceeds the amount listed in the table contained in Part 8 of the *Transportation of Dangerous Goods Regulations* (reportable accidents). However, the Transport Dangerous Goods Directorate also receives many voluntary accident reports<sup>1</sup>.

<sup>1</sup> Voluntary Accident Reports are received for accidents that technically fall outside the reporting requirements of the regulations.

As of May 2008 a total of six hundred and seventy-eight (678) dangerous goods accidents had been identified for 2007. This is higher than the actual number of accident reports collected for 2006 (655). The 2007 total will likely change because some accident reports have yet to be received.

Companies submitted six hundred and twenty-eight (628) "30-Day Follow-up Reports" for accidents, which occurred in 2007. Almost 66% (414) of these dealt with reportable accidents, and the remaining 34% (214) were voluntary accident reports. Thirteen (13) additional reportable accidents identified from Transport Dangerous Goods Inspector and Remedial Measures Specialists reports, newspaper clippings and other sources are still outstanding. The Directorate also added 37 non-reportable accidents of interest to the accident database for analytical purposes.

The Transport Dangerous Goods Directorate pursues the collection of outstanding "30-Day Follow-up Reports", with the assistance of regional inspectors who conduct follow-up investigations. Letters requesting the filing of outstanding reports are sent to companies who had charge, management or control of the dangerous goods at the time of the accidental release. To date, the number of letters sent out to companies is significantly down compared to the same period last year.

Accident reports provide the Directorate with valuable and timely information on what took place, how the accident

occurred, its severity and what response measures were taken to mitigate the event. Therefore, companies are encouraged to complete the "30-Day Follow-up Report" as soon as possible following an accident once the required information is collected. The Directorate also encourages you to continue to provide voluntary accident reports. Accidents involving minor releases, or no release at all, may still highlight trends, or flag potential risks for a more significant event. Reports for accidents where the means of containment sustained damage, imminent accidental releases and no release occurred, can also assist us in understanding how means of containment<sup>2</sup> perform during accidents.

When completing the "30-Day Follow-up Report", please remember to provide the means of containment identification markings and specify the location(s) on the means of containment where damage or releases occurred, as required under paragraph 8.3(2)(f) of the *Transportation of Dangerous Goods Regulations*.

**For more information on how to complete a "30-Day Follow-up Report", please contact Jonathan Rose at 613-990-1142, or by e-mail: [rosej@tc.gc.ca](mailto:rosej@tc.gc.ca) .**

Below is a short selection of accidents for 2007. Every effort was made to vary this sample of accidents, by choosing different provinces and territories, classes of dangerous goods, modes of transport, means of containment and the accident severity.

### **The Transport Dangerous Goods Directorate currently assesses the severity of an accident based on the following 10 questions:**

- |                                                      |                                                          |
|------------------------------------------------------|----------------------------------------------------------|
| 1. Was there a compressed gas or explosive involved? | 6. Was the accident reported in the press?               |
| 2. Was there a fire or explosion at the scene?       | 7. Were TC personnel at the accident scene?              |
| 3. Was there a dangerous goods release?              | 8. Was site cleanup required?                            |
| 4. Was there a death, serious or multiple injuries?  | 9. Was property/equipment damage greater than 65 000 \$? |
| 5. Was there an evacuation or a road closure?        | 10. Was there mechanical failure of the vehicle?         |

A point is assigned for each positive response to each of these questions. The sum of the points for the accidents is shown under "Severity Ranking" to represent the accident severity level. Although rare, a zero severity ranking can be assigned to an accident, indicating no positive responses to any of the questions.

**20070276**

02/06/2007

**Severity Ranking 1**

St. John's, Newfoundland

Sodium Hydroxide Solution

During handling operations at an airport terminal warehouse, a **Fireboard Box (UN4G)** containing six plastic containers of Sodium Hydroxide Solution was found damaged and wet. Upon further inspection it was discovered that 100 millilitres of product had leaked from one of the plastic containers and was absorbed by the box. There were no injuries. The box and plastic containers were then placed into a recovery drum for proper disposal.

<sup>2</sup> A "means of containment" means a container or packaging, or any part of a means of transport that is or may be used to contain goods.



**20070193**

01/03/2007

**Severity Ranking 5**

Halifax, Nova Scotia

Liquefied Petroleum Gases

During transport, while pulling out of a delivery location, a Tank Truck (TC331) containing Liquefied Petroleum Gas experienced a mechanical problem. The piping on the tank sustained damage releasing 50 litres of product. There were no injuries. Emergency response personnel were on site and evacuated a nearby facility until the leak was mitigated. The unit was then placed on a flatbed truck and moved, under special permission, back to the shipper for offloading and repair.

**20070185**

20/01/2007

**Severity Ranking 1**

Moncton, New Brunswick

Methanol

While unloading a Box (UN4G) containing two 2.25 litre bottles of Methanol Solution from an aircraft in blizzard like conditions, an employee slipped on the stairs and the box was dropped. One of the bottles was damaged and 2.5 litres of product were released. There were no injuries. The remaining product was placed in a recovery drum for proper disposal.

**20070425**

18/09/2007

**Severity Ranking 2**

Saint-Antonin, Quebec

Diesel Fuel

During transport a Tractor Compartmentalized Tank Trailer (MC406) containing Diesel Fuel was attempting to avoid a vehicle in its path, went off of the road and overturned in a ditch. As a result, 8,000 litres of product was released from one of the compartments. There were no injuries. Emergency response personnel were on site to contain and clean up the spill and to upright the overturned unit.

**20070187**

01/02/2007

**Severity Ranking 6**

Cobourg, Ontario

Gasoline

During transport, a Tractor with 2 Standard Tank Trailers B-Train (TC306) carrying Gasoline was rear ended, caught fire and exploded while attempting to avoid an accident involving several tractor-trailers and small vehicles. The B-Train was completely burnt to the frame. Twenty cars and three transport trucks were involved. The highway was closed overnight. There were two fatalities and eleven injuries. Fire and Police Department, Transport Dangerous Goods Inspectors and a clean up contractor were on the scene. A decision was made to let the fire burn itself out. Residue gasoline, fire fighting foam and water was removed from the accident scene and the lead and pup were loaded onto flatbed trailers for transport off site.

**20070206**

01/05/2007

**Severity Ranking 4**

Notre Dame de Lourdes, Manitoba

Anhydrous Ammonia

During transport, a trailer and pup nurse tanks carrying Anhydrous Ammonia overturned while driving on a soft shoulder. One Nurse Tank (TC51) sustained damage to the rollover protection, vapour valve, and a dent to the head of the tank. It released all of its contents over a period of twenty minutes. The other tank was dented but did not release its content. There were no deaths or injuries. Twelve people were evacuated from their residences for twenty-four hours.

**20070325**

27/07/2007

**Severity Ranking 3**Maidstone, Saskatchewan  
Petroleum Crude Oil

During unloading operations from a **Straight Truck with Standard Trailer (TC406 Crude)** into a storage tank, the driver did not close the cam lock ears completely. When the valve was opened, the load hose came off and sprayed hot Petroleum Crude Oil (Produced Water) on the driver and spilled 500 litres of product. The driver was hospitalized. A vacuum truck was dispatched to the site for cleanup.

**20070482**

01/10/2007

**Severity Ranking 5**Moose Jaw, Saskatchewan  
Liquefied Petroleum Gases

During rail yard operations, **Rail Tank Car CGTX64076** containing Liquefied Petroleum Gas leaked 4.55 litres of product from the dome area and the pressure relief valve of the rail tank car. There were no injuries. Emergency response personnel were on site and a 24 hour evacuation was required for commercial businesses and residences within an 800-foot perimeter around the rail yard. A product transfer was performed after which time the tank car was moved with special permission and taken to a repair facility.

**20070231**

04/05/2007

**Severity Ranking 3**Calgary, Alberta  
Resin Solution, Flammable

During unloading operations from a tractor-trailer, a **Metal Drum (UN1A1)** containing Resin Solution, Flammable (AROPOL 7334-30 RESIN DR444) was pierced with a forklift blade, spilling 220 kilograms of product. There were no injuries. Twenty to thirty people were evacuated. A clean up contractor offloaded other pallets and removed the remaining product contaminates by pump and hand tool.

**20070270**

26/05/2007

**Severity Ranking 3**Vancouver, British Columbia  
Anhydrous Ammonia

During rail yard operations, a **Residue Rail Tank Car PLMX003962 (105J300W)**, last containing Anhydrous Ammonia, leaked 8 litres of product from a rusted safety valve when an outbound air test was performed. There were no injuries. The rail tank car was isolated, the o-ring was changed and the leak was stopped. An **Emergency Response Assistance Plan** was activated during the incident.

**20070521**

16/10/2007

**Severity Ranking 2**Whitehorse, Yukon  
Engines, Internal Combustion (Flammable Liquid Powered)

During transport in the cargo hold of an airplane, an undeclared **Chainsaw** leaked 0.05 litres of Diesel Fuel from the fuel tank reservoir onto the floor. There were no injuries. The spill was discovered when the airplane reached its destination and was being offloaded. Cargo personnel secured the chainsaw and cleaned up the spilled product.

**20070111**

07/03/2007

**Severity Ranking 2**Fort Liard, Northwest Territories  
Diesel Fuel

During transport, a **Tractor Trailer and Compartmentalized Tank and Pup (B-Train) (TC306)** containing Heating Oil Light was traveling on a snow covered road when the unit ventured too close to the shoulder and went into the ditch. Product spilled out of the lead trailer and pooled in the ditch. There were no injuries. The trailers were offloaded into a different tank trailer, removed from ditch and transported for repairs.

# TDG Congress III

*(introduction by Edgar Ladouceur)*

The first TDG Congress was held in 2001 at a time when the *Transport Dangerous Goods Regulations* had just been completely re-written in “Clear Language”. A need had been identified for a national forum where governments and industry could get together to review and exchange views on the new Regulations. Based on the overwhelming success of TDG Congress I, a second Congress was held in 2004 to take stock of the impacts of the “Clear Language” Regulations and plot future directions. TDG Congress III was held in 2007 taking on a more global view by focusing on international harmonization. The Managing Editor of the Hazardous Cargo Bulletin, Peter Mackay, graciously agreed to report on TDG Congress III and his article follows. The planning for TDG Congress IV, to be held in Ottawa in October 2010, is progressing at a fast pace. TDG Congress IV will further the scope of discussions by looking at security matters as they relate to the transport of dangerous goods and at developments in Asia-Pacific with invited speakers from New Zealand, China, Australia and Russia.

## Un pour tous

*by Peter Mackay*

CANADA Harmonisation issues are high on the agenda for shippers and carriers in Canada, who do a lot of cross-border and intercontinental business. The problems arising from having to deal with a variety of regulations were highlighted at a recent conference hosted by CCPA in Ottawa.



Harmonization or harmonisation? English or French? American English or British English? These sorts of quandaries are meat and drink to Canada, a country where two languages sit side by side, and especially to its compact and bijou capital Ottawa where, lying on the linguistic fault-line between Quebec and the rest of the country, bilingualism is a virtual necessity. Problems of translation are as nothing, though, compared to the problems chemical shippers in Canada face when exporting dangerous goods; there is a massive cross-border trade with the US so they need to know their way around the US Hazardous

Materials Regulations (HMR) as well as Transport Canada's Transport of Dangerous Goods (TDG) Regulations – or TMD for the French speakers. And there is plenty of trade with western Europe and growing business with Asian shippers.

It was against this background that the Canadian Chemical Producers' Association (CCPA), with the support of numerous trade association representing shippers and logistics companies, hosted its third congress on the transportation of dangerous goods. As with previous congresses, CCPA had also secured



the backing of Transport Canada, which made sure that plenty of its dangerous goods staff were on hand throughout the event this past 15 and 16; this was not too hard, since the venue, the Ottawa Marriott Hotel, is in the same block as Transport Canada's own offices. CCPA managed to attract more than 240 delegates to the event and they were kept busy with two full days of plenary sessions, workshops and breakout meetings.

The congress kicked off with welcoming remarks from **Edgar Ladouceur** of Transport Canada and CCPA's **Louis Laferrière**, who outlined the aims of the meeting. "We are here to encourage dialogue, not confrontation," he said, "though you might not get the answer you want or expect." **John Read**, director general for dangerous goods at Transport Canada, listed the multifarious regulations that might be relevant to a shipment from the hom of the day's first speaker to the congress location before introducing that speaker, who Louis had already titled 'Sergio Unplugged'.

Indeed, since his retirement at the end of last year as chairman of the UN Sub-committee of Experts on the Transport of Dangerous Goods, and from his day job with the Italian government, **Sergio Benassai** said he felt able to say a few things about which he used to have to keep quiet. As a general rule, he said, the transport provisions should apply equally to transport by all

modes and classification, labelling and packaging should be aligned. Currently, however, there are variations in definitions, terminology, labelling requirements, limited quantity limits, documentation and packing instructions. He regretted that the International Civil Aviation Organisation (ICAO) had missed an opportunity to harmonise its packing instructions with those in the UN model regulations during its recent revision process; some of the differences are not really justified, he said. No proper risk assessment has been undertaken to justify the changes or lack thereof, although he acknowledged there is always an understandable reluctance to introduce changes for the sake of it.

Sergio proposed a way to deal with current disharmony: a World Convention on the transport of dangerous goods. A mandatory instrument with requirements for all modes and all countries would avoid the need for national legislation and could also reduce the need to hold international meetings. It could make more use of references to international standards and the Globally Harmonised System (GHS) of classification and labelling. Discussions about this possibility have shown many countries are not sold on the idea so it is necessary to consider alternatives, Sergio said:

- (a) open discussion on a website prior to regulatory meetings, so that lengthy unprepared discussions can be avoided at plenary sessions;
- (b) discourage modal bodies from making changes without their being discussed first at UN level;
- (c) avoid unnecessary editorial variations from the UN text in the modal rulebooks;
- (d) align the modal regulations with the UN paragraph numbering system; and
- (e) strengthen coordination at national level so that each country's delegations take the same message to the UN, ICAO, the International Maritime Organisation (IMO) and other rule-making bodies.

The language of the regulations needs to be clearer, Sergio said. Sharp intakes of breath followed his suggestion that regulators need to accept that English is the global language of trade and that it should be made the official language of all regulations.



Further suggestions from Sergio to foster harmonisation included:

- (a) better definition of the responsibilities of the consignor/shipper, loader, carrier, consignee, etc;
- (b) closer harmonisation with GHS and the inclusion in the Dangerous Goods List of substances that are carcinogenic, mutagenic or reprotoxic (CMR);
- (c) a default system for classifying wastes (something that is being worked on for RID and ADR); and
- (d) a single list of dangerous goods using only nos entries and with a UN numbering system similar to that used in the Kemler Code. This would take a lot of work, though, Sergio said – perhaps it would be simpler to work towards a World Convention after all!

## The case for and against

The session continued with a paper from Jeff Hart, head of the Dangerous Goods Unit at the UK Department for Transport (DfT), who began by asking, “what’s the point of harmonisation?” The standard answer is that it is to “ensure an appropriate level of safety for workers, the public and the environment worldwide”. It is not clear, though, what the meaning of “appropriate” should be – is it the minimum level of safety, the maximum possible, or a happy medium?

In addition, harmonisation is needed to facilitate the legitimate distribution of dangerous goods for the benefit of all, to facilitate the intermodal transfer of goods and to minimise modal differences other than for justifiable safety reasons; regulators and industry should share these aims, Jeff said.

Some people say there are too many regulators, Jeff said, which makes Sergio’s point that a World Convention could reduce the number of regulatory meetings rather attractive. Still, the world is changing fast and the emergence of new chemical production centres in China, India and elsewhere means it is important to ensure that regulations are common. There are still modal disharmonies and national transport regulations often vary from the international provisions.



Multinational companies want standard regulations, Jeff said, and also need to be able to source compliant packagings, labels and documentation wherever they operate. The UN Committee of Experts’ parent body, the UN Economic and Social Council (Ecosoc), charged the Committee with coming up with ways to improve implementation or to come up with a World Convention. The process of debate on the World Convention has started, with some countries – notably Italy and the Netherlands – backing it. The alternative is to improve implementation through a better decision-making process, more participation by trade associations, a longer revision cycle and the promotion of awareness of the model regulations.

The case for harmonisation speaks for itself, Jeff said. Some progress has been achieved – he quoted the agreement on excepted quantities and the “real progress” made with harmonising limited quantity provisions. And there are clearly problems with the idea of a World Convention: the existing model regulations would need revising, since they are not suitably worded; it could never be totally multimodal so would need to include modal annexes; the adoption process would be long and arduous; some countries will never cede sovereignty in this area; and who is going to perform the cost/benefit analysis? Jeff noted that the air and sea modes already have their own internationally harmonised regulations for dangerous goods – should the putative Convention be limited just to land transport?

Industry can play a part in pushing the harmonisation process forward, Jeff said. Companies should identify the problems that exist to hamper trade and to let their relevant authorities know. They should participate in trade associations and conferences and, where possible, in international meetings. They can talk to their business partners and competitors. Jeff closed

with the observation that global harmonisation has to be done internationally at the same time.

## We did it our way

After a quick break for coffee, Duane Pfund, director of the Office of International Standards at the Pipeline and Hazardous Materials Administration (PHMSA) in the US Department of Transportation (DOT), opened with the observation that harmonisation means different things to different people but generally translates as “you do it our way”.

The US keeps its HMR in line with international regulations through the HM-215x series of dockets, although PHMSA is required to vary from the UN model regulations if it feels safety is not adequately addressed. Duane moved on to consider six issues that are currently being addressed internationally and where harmonisation is important if new regulations are to be effective and not impede trade.

The first of these is the new entry in the Dangerous Goods List for ethanol/gasoline mixtures, UN 3475. Because of growing concerns that the transport of such mixtures in the US is raising a safety issue, notably that a different fire-fighting medium is needed for fuels with a high alcohol content, the US has implemented this change immediately. Canadian shippers need to be aware of this. There is also the question of how to placard tank trucks that are carrying E85 and gasoline in different compartments; they may need to carry two placards, although it is not clear how this would help emergency responders.

The new provisions for excepted quantities in the UN model regulations were based very closed on those already in the ICAO Technical Instructions so there have only been minor changes to the air mode’s provisions – and those mainly relating to the new mark. IMO has adopted the provisions for the International Maritime Dangerous Goods (IMDG) Code but, in common with its approach elsewhere, wants such shipments to be accompanied by documentation, unlike the other modes.

A working group at the July 2007 meeting of the UN Sub-committee of Experts looked at the marking of limited quantity shipments and came up with a

proposal for a generic marking that would cover consumer commodities as well. This could also replace the domestic ‘ORM-D’ marking used in the US, or run alongside it. There has been favourable feedback from IMO and the RID and ADR authorities. It is likely that revisions to Chapter 3.4 will be proposed at the July 2008 meeting of the UN Sub-committee.

Incidents involving batteries in transport continue to occur – those on aircraft are unacceptable and this is one of PHMSA’s highest safety priorities at present. Duane mentioned that the market has changed since lithium batteries were first introduced; they are no longer restricted to original equipment manufacturers, so oversight of packaging and consignment procedures is less tight. A regulation is being worked on in the US that will cover all batteries, not just lithium, but Duane said that a non-regulatory solution is just as important.

Duane also referred to the revision of the ICAO packing instructions. “Let us know if there are any problems,” he appealed.

Finally, Duane said that e-freight should be able to be applied to improved hazard communication, emergency response, security and accuracy. A lot of effort is being put in around the world and various projects are currently being drawn together, since this is one area where harmonisation will be absolutely necessary.

Duane turned lastly to the future of harmonisation. A lot of work has been done already by the UN Sub-committee of Experts and the modal authorities but more work is necessary to keep on top of technical developments, he said. Requirements differ around the world because of legislative, political, cultural, environmental and transport conditions, as well as public perceptions. “Of course harmonisation is a good thing,” he said, “but there are other interests.” For instance, major flag states have a big say at IMO but are not represented at the UN Subcommittee of Experts; the ICAO Dangerous Goods Panel includes input from air carriers. The US would find it hard to let go of its exceptions, Duane stated, noting that over many years they have provided an equivalent level of safety while saving industry a lot of money.

## That's a wrap

Louis Laferriere had promised the audience that the speakers would be provocative but **Kim Headrick**, senior policy advisor at Health Canada and chair of the UN Sub-committee of Experts on GHS, said: "I work for the government – I'm not allowed to be provocative."

After giving an overview of the creation and structure of GHS, Kim noted that its work has included the development of a standardised format for safety data sheets (SDSs), with 16 elements, which is being adopted by ISO. Kim also mentioned progress with implementing GHS around the world; it is meant to be implemented next year but, as she said, "we're not quite there yet". Asked what would happen in Canada if the US failed to implement GHS, Kim said it is too early to determine. However, various agencies are working together towards NAFTA-wide implementation.

Reviewing the session, John Read said that the trouble with harmonisation is that there are too many safe ways of doing things. The modes have their own "phobias", John said. For air it is depressurisation, for rail it is vibration, for sea it is fire. He described the UN system of classification as a "work of genius" but said it could be simplified by making wider use of nos entries.

Jeff Hart said there seems to be general support from industry for greater harmonisation, the question is when this might be achieved. Regulators will always be influenced by industry opinion and industry needs to let the regulators know if it thinks this should be at the top of the agenda. Sergio agreed, noting that the World Convention can happen if regulators and industry make it happen; it could also assist in ensuring that GHS gets implemented. Duane Pfund concurred with the broad comments, saying that there are a lot of good ideas around. "Industry needs to hold the regulators accountable," he said.

## Going home

After lunch in the revolving restaurant atop the Marriott, delegates came back down to earth to face a difficult choice: which of three concurrent workshops to attend. The **Bulletin** chose to go with the local flow and hear **Linda Hume-Sastre**, director of legislation

and regulations within the Transport Dangerous Goods Directorate at Transport Canada, explain current developments in Canada's national regulations and respond to some frequently asked questions.

Amendment 7 to the TDG Regulations has now been published in Part II of Canada Gazette, Linda said, so it is now in effect. This was a nice, neat rulemaking designed simply to update references to some tank standards. Amendment 6 is a different thing altogether. This magnum opus is still with the Justice Department and Linda admitted she had no idea when it will be published. She had hoped it would be ready for Canada Gazette Part II before the end of the year, but that is now looking very unlikely. Clearly industry is keen for this amendment to become law so that Canadian regulations are brought more into line with international requirements.

Amendment 8 is now being prepared. This will update the TDG Regulations to the 15th revised edition of the UN model regulations and address a few odds and ends. It will focus on the Dangerous Goods List and Special Provisions to keep it as simple as possible and speed its passage through the regulatory system. It will also address GHS harmonisation and will aim to simplify the air transport requirements in Part 12.

Linda reiterated her appeal for industry to speak to the regulators. "If we don't know where the problems are, we can't fix them," she explained, reminding delegates to get in touch if there is something they particularly like – "if you like it, tell us that too". She admitted that the pace of regulation is too slow, as it is not good for Canada to be out of line, but there appears little that can be done about the way regulations are made in Ottawa. This is clearly something that frustrates industry.

Linda explained the way that new regulations are generated – it is not just a question of adopting what the UN agrees. Her office has to deal with appeals and new technologies, respond to incident investigation reports and enforcement activity and consider the transfer of permits into the regulations. Linda said this last route is problematic and that permits should be used wherever possible to respond quickly to new developments. The more informal consultation that can be carried out, the better the chance of the text that goes

into Part I of Canada Gazette resembling the final rulemaking in Part II.

Linda also mentioned air transport in particular. The TDG Regulations reference ICAO for international transport and gives exceptions for domestic transport. Canada is a big country, she reminded delegates, and “domestic air transport in Canada is not the same as domestic air transport in the Netherlands”.

## And so to sea

After another swift coffee another choice had to be made from three workshops on offer. **Josée Lamoureux**, senior advisor to Transport Canada’s Hazardous and Noxious Substances (HNS) programme, described the long and tortuous road towards the anticipated widespread application of HNS incident response programmes and requirements. She noted that the ever-growing quantity of HNS being carried by sea, the wide range of products involved, the number of international incidents and an increasing threat that Canadian waters would be subjected to such a spill all combined to encourage the government to develop federal regulation and the capacity to respond to a tanker incident involving HNS.

Various studies led to the formation of the Marine Chemical Emergency Response (MCER) scheme in 1994; this was subsequently discontinued but its seven fundamental principles continue to guide development in this area. These are:

- (a) the polluter pays;
- (b) the user responds;
- (c) the cost to government should be minimal;
- (d) the system must be impartial and fair;
- (e) the system must use existing natural resources;
- (f) it should harmonise with international regimes; and
- (g) it should harmonise with other national regimes.

Canada took an active part in the development of the Protocol on Preparedness, Response and Co-operation to pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS) and is a signatory to the final act, which places an obligation on signatories

to set up a national regime. It is also working towards ratification of the HNS Convention, which is concerned with liability and compensation.

The Protocol does not specify those substances that fall under the definition of HNS, other than it specifically excludes those referred to in Annex I of the International Convention for the Prevention of Pollution by Ships (Marpol). As well as ‘obvious’ noxious cargoes such as chemicals, it covers LPG, LNG, radioactive materials and explosives as well as some substances carried in dry bulk form. This range of products makes response provision complex, Josée explained; whereas most oil cargoes behave in a similar way, HNS cargoes display the whole range of chemical and physical properties. This means that at least 6,000 substances will have to be individually evaluated to establish the appropriate response requirement. Clearly this is an enormously complex process that will involve cooperation between several parties and the harmonisation of legislation and regulations.

A comment from the audience complained that ports already implement response planning requirements for HNS cargoes. Josée confirmed that some indeed do, and if they do they will need to exercise them, but they are not as yet mandatory and, once the Protocol is in effect, they should all be aligned.

After a lengthy day in the conference halls, a welcome cocktail or two preceded an evening exploring Ottawa’s Byward Market district, home to a wide range of cuisines, and an early night (or not) ahead of another full day listening to the experts. The second day’s proceedings will be covered in next month’s **Bulletin**.





## Transportation of Diesel Generators

Transporting a diesel generator involves the transportation of dangerous goods: diesel fuel (unless the tank has never been used), and an electric accumulator. Many people who use generators seem to think that the transportation of the dangerous goods required for the operation of the generator is not regulated, however that is false. The transportation of large quantities of fuel can present certain risks and those risks are even greater if the fuel tanks used are not approved or tested and inspected periodically. The transportation of these dangerous goods must be done in accordance to the *Transportation of Dangerous Goods Regulations*.

The transportation of a large means of containment with a capacity greater than 450 litres of diesel fuel is subjected to the *Transportation of Dangerous Goods Regulations*. The means of containment must therefore comply with Part 5 of the regulations. The domestic transportation by road, rail or ship of a diesel tank with a capacity of 450 litres or less (small means of containment) is exempt, according to section 1.33 of the *Transportation of Dangerous Goods Regulations*.

Many options are available for the selection of a diesel tank with a capacity of more than 450 litres. An article titled “Diesel Fuel in Non-Specification Slip Tanks—Permit Expiring”, written by Mr. Zenon Lewycky and published in the Fall 2004 edition of the Transport Dangerous Goods Newsletter (<http://www.tc.gc.ca/tdg/newsletter/fall2004.htm>), describes the options available at time of writing.


The Permit for Equivalent Level of Safety number SH 6216 expired in 2004 and a new specification, TC 44, for portable tanks has since been adopted. This new specification was developed to transport fuel in non-cylindrical portable tanks and will be included in the CSA 620 standard.

The following large means of containment can be used to transport diesel fuel:

CAPACITY OF CONTAINER	PRESCRIBED CONTAINER	ALTERNATE CONTAINER	SUNSET DATE ON ALTERNATE CONTAINER
Between 450L and 3 000L	UN Standard IBC to CGSB 43.146 or TC 306/406 to CSA B620	Code 31A and 31B IBC, TC 57 and ULC/ORD C142.13 built before 2003	January 1, 2010 for ULC C142.13 and N/A for the rest
		Non-spec tank built before 2003 tested and marked to CSA B621 Specific Requirement 5(b)	January 1, 2010
More than 3 000L	TC 306/406 or TC 44* to CSA B620	ULC/ORD C142.13 built before 2003	January 1, 2010
		Non-spec tank built before 2003 tested and marked to CSA B621 Specific Requirement 5(b)	January 1, 2010

\* Non-cylindrical tanks with a capacity greater than 3 000L can be manufactured according to TC 44 specifications. However, as TC 44 is not included in the CSA B620 standard referenced in the *Transportation of Dangerous Goods Regulations*, a Permit for Equivalent Level of Safety must be obtained for the manufacture of portable tanks according to this specification. (See <http://www.tc.gc.ca/tdg/permits/menu.htm> for more information).


There are no exemptions allowing for the transportation of a large means of containment of diesel that is not listed in the above, unless the means of containment is unloaded, cleaned or purged. Therefore, a generator with a diesel tank with a capacity greater than 450 litres not included in the table above can not be transported unless the tank is unloaded, cleaned or purged so that there is no longer a danger present in the means of containment.



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Anhydrous ammonia, an effective fertilizer used by farmers to grow food, is being reclassified to better identify its hazards and improve the safety of first responders. The classification will be changed from a Class 2.2 Compressed Gas to a Class 2.3 Toxic Gas. The Canadian Fertilizer Institute's Safety & Security Council is supporting the new ammonia classification and placard with communications and training programs for first responders.

www.fssc.ca  
(613) 230-2600  
info@fssc.ca

  
Fertilizer Safety & Security Council  
Conseil de la sécurité en fertilisation

**The Emergency Response Guidebook 2008 is now available.**  
A complete list of the distribution coordinators and their contact information can be found at: <http://www.tc.gc.ca/canutec/en/guide/guide-2.htm>.

The Guidebook is also available in a database format named ERGO2008 and can be downloaded for free from the following site:  
<http://www.tc.gc.ca/canutec/en/guide/ERGO/ergo.htm>

The Internet interactive on-line version is available on the CANUTEC website at:  
<http://www.tc.gc.ca/canutec/en/guide/guide.htm>.

CANUTEC has also developed a PowerPoint training presentation on the use of the ERG2008. It may be copied for free from the following site:  
[http://www.tc.gc.ca/canutec/en/guide/ERGO/Training\\_ppt.htm](http://www.tc.gc.ca/canutec/en/guide/ERGO/Training_ppt.htm)

Number of Calls		<div>CANUTEC</div> <div>October 1, 2007 to May 31, 2008</div>	Emergency Calls by Location		
Information	3 802		British Columbia	59	
Regulatory	1 593		Alberta	60	
Technical	4 038		Saskatchewan	20	
Other	1 009		Manitoba	9	
			Ontario	128	
			Quebec	71	
			New Brunswick	5	
			Nova Scotia	10	
			Prince Edward Island	1	
			Newfoundland and Labrador	7	
			Yukon	0	
			Northwest Territories	3	
			Nunavut	0	
			United States	9	
			International	0	
Source of Emergency Calls		Emergency Calls by Class of Dangerous Goods*		Emergency Calls by Transport Mode	
Shipper	4	Class 1 - Explosives2		Road	83
Carrier	86	Class 2 - Compressed Gas76		Rail	57
Consignee	3	Class 3 - Flammable Liquids79		Air	5
Fire Department	94	Class 4 - Flammable Solids9		Marine	2
Police Department	14	Class 5 - Oxidizers and Organic Peroxides26		Pipeline	0
Hazmat Contractor	9	Class 6 - Poisonous and Infectious Substances25		Non transport	189
Poison Control	8	Class 7 - Radioactives6		Multimodal	1
Mutual Aid Group	3	Class 8 - Corrosives132			
Emergency Centre	9	Class 9 - Miscellaneous12			
Ambulance Service	2	NR - Non-regulated86			
Medical Facility	13	Mixed Load -4			
Laboratory	5	Unknown -15			
Government	39	* includes primary and subsidiary classes, and possibly multiple DGs per emergency.			
Private Citizen	42				
Manufacturing Facility	4				
Distributor/Retail	5				
End User	46				
Others	3				

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**Have a great summer!**

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