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IMPORTANT

Is this your last Newsletter?

We are concluding the update to our mailing list. If you haven't already done so, please advise as soon as possible if you wish to continue receiving the Newsletter. To do so, you can either update your information on our website at : <http://www.tc.gc.ca/tdg/newsletter/subscription.htm>, fill out the Confirmation of Address card found in the Newsletter or call 1 888 758-9999. If you wish to receive the Newsletter in electronic format only, fill out the box on the Confirmation of Address card or supply your email address on the subscription web page. This is the final reminder. If an asterisk (*) appears in front of your name on the envelope and you do not respond, your name will be deleted from the mailing list.

Thank you for your cooperation.



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The Editor,
Dangerous Goods Newsletter
Transport Dangerous Goods
Transport Canada
Ottawa, Ontario, Canada
K1A 0N5

Editor

Véronique Tessier
(tessiev@tc.gc.ca)

Graphics and Design

Yvan Meloche
(melochy@tc.gc.ca)

Writers/Contributors to this issue

Michel Cloutier - CANUTEC, TDG Directorate
Kevin Green - Regulatory Affairs Branch, TDG Directorate
Daniel Savard - Regulatory Affairs Branch, TDG Directorate
Linda Hume-Sastre - Legislation and Regulations Branch, TDG Directorate
John Tomaselli - Compliance and Response Branch, TDG Directorate
Norman Loiseau - Orion Management Consultants, Montréal
David Finlayson - Canadian Fertilizer Institute, Ottawa
Danny Béchamp - Compliance and Response Branch, TDG Directorate
François Dagenais - Compliance and Response Branch, TDG Directorate
Nathalie Belliveau - Compliance and Response Branch, TDG Directorate
Zenon Lewycky - Regulatory Affairs Branch, TDG Directorate
Eve Poirier - Remedial Measures Specialist, Quebec Region

Contacts

Transport Dangerous Goods Directorate

Director General

J.A. Read 613-990-1147 (readj@tc.gc.ca)

Regulatory Affairs

J. Savard, Director 613-990-1154 (savarji@tc.gc.ca)

Compliance and Response

E. Ladouceur, Director 613-998-6540 (ladouce@tc.gc.ca)

Research, Evaluation and Systems

P. Coyles, A/Director 613-990-1139 (coylesp@tc.gc.ca)

Legislation and Regulations

L. Hume-Sastre, Director 613-998-0517 (humel@tc.gc.ca)

Publications: 613-998-1834

Fax: 613-993-5925 and 613-952-1340

CANUTEC: Information 613-992-4624

Emergency 613-996-6666 Fax 613-954-5101

(CANUTEC@tc.gc.ca)

Atlantic Region

Dartmouth 902-426-9461 Fax: 902-426-6921

St. John's 709-772-3994 Fax: 709-772-5127

Quebec Region

514-283-5722 Fax: 514-283-8234

E-mail: tmd-tdg.quebec@tc.gc.ca

Ontario Region

416-973-1868 Fax: 416-973-9907

E-mail: TDG-TMDOntario@tc.gc.ca

Prairie and Northern Region

Winnipeg 204-983-5969 Fax: 204-983-8992

Saskatoon 306-975-5105 Fax: 306-975-4555

E-mail: PNRWeb@tc.gc.ca

Pacific Region

New Westminster 604-666-2955 Fax: 604-666-7747

Kelowna 250-491-3712 Fax: 250-491-3710

Transport Canada Dangerous Goods Directorate

Internet address – www.tc.gc.ca/tdg/menu.htm

E-mail: TDG@tc.gc.ca

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.

Potential TDG Act Amendments:

The Newsletter will publish a special edition covering this topic should a Bill be introduced in Parliament to amend the *TDG Act, 1992*.



Editorial

Welcome to the Fall edition of the Newsletter. Just as Fall is the season for change, this edition contains many articles on the latest changes in the industry, whether it be for standards, means of containment and permits updates but also regarding the new 2008 Emergency Response Guidebook and the Contraventions Regulations.

I would also like to take this opportunity to update you on changes that have occurred here, at the Transport Dangerous Goods Directorate, since the last edition in the Spring. Indeed, many colleagues have since retired; René Major, from whom I am taking over as Editor in chief of this Newsletter, being one of them, not to mention Louis Trépanier, Chief, Inspector Education and Public Awareness and Doug Dibble, Chief, Research and Governmental Activities. Furthermore, in January 2008, our Director General, Mr. John Read will also be leaving after 20 years at the helm. The Summer and Fall seasons have brought us renewal as well; Marie-France Dagenais will be the new Director General, Geoffrey Oliver has joined as Director, Research, Evaluation and Systems, and as of August, I, Véronique Tessier, am the new Intergovernmental liaisons officer, a position which involves, among other things, the editing of this Newsletter. That being said, I would like to wish a warm welcome to the new members of the Transport Dangerous Goods Directorate and a fond farewell to those who have moved on.

I hope you enjoy this edition of the Newsletter and remember, your comments are always welcome.

Véronique Tessier

Distribution of the Emergency Response Guidebook 2008

by Michel Cloutier

The Emergency Response Guidebook 2008 (ERG2008) is being developed jointly by Transport Canada, the United States Department of Transportation, the Secretariat of Transport and Communications of Mexico with the

collaboration of Centro de Información Química para Emergencias (CIQUIME) of Argentina.

It is primarily a guide to aid first responders in quickly identifying the specific or generic hazards of the material(s) involved in the incident, and protecting themselves and the general public during the initial response phase of the incident.

The Guidebook should be made available to each fire, police and ambulance (emergency basic response) vehicle to promote public safety and harmonize dangerous goods initial response.

In Canada, approximately 100,000 copies of the Emergency Response Guidebook 2008 will be printed by Transport Canada and given to the provincial/territorial coordinators for distribution. For a complete list of the distributors or to download a database version of the Guidebook (ERGO 2008) that will become available in early 2008, please visit CANUTEC at the following website: <http://www.tc.gc.ca/canutec/en/guide/guide.htm>.

In the United States, the Department of Transportation will be printing approximately 2,000,000 copies of the Emergency Response Guidebook 2008 that will be distributed by representatives of State Agencies. For a complete list of these representatives, please visit the following website: <http://hazmat.dot.gov/pubs/erg/guidebook.htm>. As well, commercial printers are expected to publish more than 6,000,000 copies of the Guidebook for sale to the trucking and rail industries as well as other transportation organizations.

Under the NAFTA initiative, the Emergency Response Guidebook 2008 is published in English, French and Spanish for distribution within Canada, the United States and Mexico. With the assistance of the Centro de Información Química para Emergencias and the Office for Foreign Disaster Agency in the United States, approximately 80,000 copies of the Spanish version will be printed and distributed to sixteen countries in Latin America. For more information on the Centro de Información Química para Emergencias, please visit the following website: <http://www.ciquime.org.ar/CIQUIME/index.htm>.

The Emergency Response Guidebook has also been translated in other languages and is used in several countries around the world. Some of those languages are: Hungarian, Dutch, German, Hebrew, Japanese, Russian, Italian, Polish, Korean, Chinese, Turkish, Portuguese and Thai.

FEATURE

Revised Standards for Highway Tanks and Portable Tanks

by Kevin Green

Amendment No. 7 to the *Transportation of Dangerous Goods Regulations* was published in the *Canada Gazette*, Part II on August 22, 2007. With this amendment, the *Transportation of Dangerous Goods Regulations* adopt the February 2006 revisions to the CSA B620¹, CAN/CSA B621², and CAN/CSA B622³ safety standards on highway tanks and portable tanks. In addition, the amended *Transportation of Dangerous Goods Regulations* override certain requirements of CSA B620 concerning testing of tanks and hoses used to refuel aircraft, and the documentation required to accompany an application for registration to manufacture, repair, inspect or test highway or portable tanks pursuant to CSA B620.

Notable changes to CSA B620 now in force

The qualification requirements for welding procedures and welder performance are clarified for welding on tanks (4.3).

Identification plate markings and their abbreviations now distinguish between the tank manufacture date and the completion and certification date of the tank, and some new markings are added for ID plates attached to modified tanks (5.1.6.1.6 & 5.1.6.4).

A specification mark can no longer be displayed on a tank nameplate until the tank is completed and certified in compliance with all the requirements of the standard for that specification (5.1.7.2 & 6.1.8.2.1).

Allowable configurations for tank structural stiffeners are clarified to address concerns with corrosion between the reinforcement and the tank wall (5.6.8.4.4).

The leakage test requirement now allows the use of a combination of test media and methods, and a test procedure is added to address difficulty in inspecting the area between the walls of tanks that are double walled (7.2.5).

The pneumatic pressure test is revised to better mitigate risks to personnel inherent in the conduct of this test. During pressurization and hold periods, all personnel including those monitoring pressure must remain at a safe distance or in a protected location (7.2.7.8).

The requirements for hose testing clarify that hose testing does not apply to short hoses found within the tank assembly piping system, and sets out how to determine the appropriate Hose Assembly Working Pressure (HAWP) for existing hoses that are not already marked (7.2.10).

The interval for external inspection is extended from 2.5 years to 3 years for anhydrous ammonia nurse and applicator tanks that are operated exclusively for agricultural purposes. This is to accommodate the seasonal nature of their use (Table 7.1).

Notable changes to CAN/CSA B621 now in force

Highway and portable tanks built to the specifications in Title 49 of the United States Code of Federal Regulations and that are operated in Canada must be inspected and tested in accordance with CSA B620 when the tests or inspections are performed in Canada (5.4 & 6.3.2).

A new grandfather provision has been added for tanks used for tars and asphalts UN1999. Existing non-specification tanks can be used until 1 January, 2016, provided they were built before 1 January, 2007, are no more than 15 years old, and are periodically inspected and tested. A special nameplate must be displayed on the tank and a lower test pressure will also be allowed for these non-specification tanks. These provisions are intended to replace a number of Permits for Equivalent Level of Safety (8.4 specific requirement 23).

¹ CSA Standard B620-03 (CSA B620), *Highway Tanks and Portable Tanks for the Transportation of Dangerous Goods*, July 2003, as amended in February 2006, published by the Canadian Standards Association (CSA).

² National Standard of Canada CAN/CSA B621-03 (CSA B621), *Selection and Use of Highway Tanks, Portable Tanks, Cargo Compartments, and Containers for the Transportation of Dangerous Goods, Classes 3, 4, 5, 6.1, 8, and 9*, July 2003, as amended in May 2004 and February 2006, published by the CSA.

³ National Standard of Canada CAN/CSA Standard B622-03 (CSA B622), *Selection and Use of Highway Tanks, Multi-unit Tank Car Tanks, and Portable Tanks for the Transportation of Dangerous Goods, Class 2*, July 2003, as amended in September 2004 and February 2006, published by the CSA.

Notable changes to CAN/CSA B622 now in force

Requirements for the selection and use of multi-unit tank car tanks (ton containers) by road have been removed and replaced with a reference to the CAN/CGSB-43.147 standard⁴. This change allows the same rules of selection to be applied for both road and rail transport of ton containers (4.3).

Non-specification highway and portable tanks used for anhydrous ammonia UN1005, other than nurse tanks or applicator tanks used for agricultural purposes, are required to be retrofitted with some of the securement, rear-end protection, excess flow protection, and discharge control features that are required of TC331 and TC51 specification tanks. These non-specification tanks must be retrofitted before the first pressure test conducted after 1 January 2007 and no later than 1 January 2012 (6.3 Specific Requirements 54 and 73).

New section 5.14.1 in the *Transportation of Dangerous Goods Regulations*

Paragraph 5.14.1(a) modifies requirements in clause 7.2.10.5(d) of CSA B620 in regard to testing of hoses used to handle aircraft fuel.

Paragraph 5.14.1(b) modifies the note in Table 7.1 of CSA B620 concerning periodic testing of highway tanks used for aircraft fuel exclusively on airport property. These tanks are not subject to periodic internal inspection nor the requirement to comply with CAN/CSA B836-00⁵, however the five-year pressure test continues to apply.

Paragraph 5.14.1(c) modifies the documentation required to accompany an application for registration pursuant to CSA B620, to manufacture, modify, assemble, test, repair or inspect tanks. Applicants are no longer required to submit a copy of the quality control manual with their application. The requirement to have and adhere to a quality control manual in accordance with the standard continues to apply. We will be verifying compliance to that requirement and may request to see a copy of a facility's manual at any time.

These are only some of the changes that have come into force with Amendment No. 7 and the February 2006 revisions to the CSA B620 series of standards. Please consult the standards carefully for new and modified requirements that may affect you. CSA standards may be purchased from the Canadian Standards Association by contacting them at 1 800 463-6727 or online at: <http://www.csa.ca/>. The changes in the *Regulations* can be viewed online at: <http://www.tc.gc.ca/tdg/clear/modifications/amendment7.html>.

New Transport Canada Standard for Small Containers Used to Transport Dangerous Goods

by Daniel Savard

Standard CAN/CGSB 43.150-97 titled "*Performance Packagings for Transportation of Dangerous Goods*" will be replaced by the new "*Small Containers for Transportation of Dangerous Goods, Classes 3, 4, 5, 6.1, 8, and 9*" standard. This new standard will address the manufacture of UN standardized containers under approval issued by Transport Canada and the use of UN standardized containers in Canada regardless of the country of approval.

The standard will be published by Transport Canada as opposed to the Canadian General Standards Board and will be developed through a process of consultation with a committee of interested and knowledgeable people that will be created for that purpose. Once a final draft is produced, it will be made available for public consultation and comments. Eventually, this standard will be posted on the Transport Dangerous Goods website for review or downloading at no cost.

Why a new standard?

Standard CAN/CGSB 43.150-97 was last reviewed and updated over 10 years ago and is based on the UN Model Regulations for the Transport of Dangerous Goods. Since the last revision of this standard, no less than five editions of

⁴ National Standard of Canada CAN/CGSB-43.147-2005, *Construction, Modification, Qualification, Maintenance, and Selection and Use of Means of Containment for the Handling, Offering for Transport or Transporting of Dangerous Goods by Rail*, May 2005, published by the Canadian General Standards Board (CGSB).

⁵ National Standard of Canada CAN/CSA B836-00, *Storage, Handling and Dispensing of Aviation Fuels at Aerodromes*, May 2005, published by the CSA.

the UN Model Regulations have been published. The Canadian General Standards Board standard was based on the 10th edition. The new standard will be aligned with the 15th edition. Numerous changes have since been made to the UN Model Regulations and it is recommended you review the structure and content of the current standard.

As before, the new standard will establish provisions and requirements for the design, manufacture, testing, selection and use of UN standardized means of containment for the transportation of dangerous goods. It will continue to focus on containers that are less than or equal to 450L in capacity or 400kg net mass and will include containers such as drums, jerricans, boxes, bags, composite, single and combination containers. New packing instructions stemming from the UN Model Regulations will be integrated into the standards to help with the selection and use of the containers. Other topics that may be included, but have yet to be discussed, are:

- salvage containers;
- containers for dangerous goods intended for disposal or recycling;
- pressure receptacles for solids or liquids;
- new comprehensive variations to a container design;
- new registration requirements for new container designs.

We anticipate this standard to be updated periodically, whenever important changes are made in industry, national or international regulations, or to resolve safety issues. In order to keep this standard active we require dedicated committee members who can bring insight, experience or expertise to this standard. In order to have a balanced committee, we require members from different interest groups. We hope to attract committee members who:

- are involved in the production, distribution, promotion or retail of small UN containers;
- are involved in the direct use of small UN containers;
- are involved in regulating small UN containers, with any federal, provincial, municipal, other government body, or authority designated by a government responsible for regulating or who are involved in enforcing these rules or regulations with regards to the small UN containers; or
- demonstrate a general interest and relevant expertise but are not associated with the production, distribution, direct use or regulations of small UN containers.

The first committee meeting is tentatively scheduled for January 29 and 30, 2008. If you are interested in actively participating in the development and maintenance of this standard, please contact Daniel Savard by telephone at 613 990-1137 or by email at savardd@tc.gc.ca.

Description of Dangerous Goods on a Shipping Document

by Linda Hume-Sastre

I am frequently asked about the sequence of the description of dangerous goods on a shipping document. Specifically, can the UN number be shown on a shipping document before the shipping name?

The answer is "Yes". In Amendment No. 4, published in the *Canada Gazette*, Part II on July 13, 2005, subsection (7) was added to section 3.5 in Part 3, Documentation. Subsection (7) provides an option and states, in part, that

"... the UN number required in the description of each of the dangerous goods may be included in the shipping document before the shipping name."

The UN number before the shipping name is mandatory for international transport. The United States brought in the new sequence as an option with a transition period allowing either sequence until January 1, 2013 but it has not been left as a permanent option.

However, the Transport Dangerous Goods Directorate is aware that not every company offers dangerous goods for transport internationally so that some companies only transport within Canada. For that reason, the Transport Dangerous Goods Directorate opted not to make the UN number first mandatory. There is no real safety reason for such a change and imposing it on those who only ship domestically could be an unnecessary burden. If, in the future, industry feels that the UN number first in the description should be made mandatory, the Transport Dangerous Goods Directorate will review the decision.

Will Critical Resources Fail You in a Crisis?

by John Tomaselli

Does your Emergency Response Plan rely on resources that reside outside of Canada? Will these resources be available when you need them? Have issues related to crossing international borders been properly addressed at the planning stage? The need to respond quickly and effectively to accidents involving dangerous goods, the liberalized movement of goods across borders and the growing tendency of multi-national companies to operate in a North America wide context has led to the more frequent use of foreign-based emergency response teams. The use of highly qualified individuals such as technical advisors with specialized knowledge or response teams with specialized equipment and expertise can greatly benefit an emergency response. Whether it is in support of an Emergency Response Assistance Plan (ERAP) or to augment local resources during a major event, the use of foreign resources can result in a timely and effective response, provided the responders have knowledge of and utilize existing tools and regulatory exemptions designed to facilitate cross-border movement during an emergency.

Pre-incident planning is a critical component of any successful emergency response. Organizations that need to cross international borders in order to respond to an incident will have to develop additional plans to ensure the effective movement of personnel and equipment and to enable personnel to work within the regulatory framework of the foreign country. The ease with which a responder will be able to cross the Canada-United States border during an emergency may depend on steps taken during the planning stage. Organizations are encouraged to make contact with authorities at the border crossings most likely to be used during an incident to sensitize local authorities about their role as emergency responders and to familiarize themselves with the Customs and Immigration requirements.

Transport Canada has recently published the Third edition of the Cross-Border Emergency Response Guide. First published in 1997 by the Major Industrial Accidents Council of Canada (MIACC) and later in 2003 by the Canadian Association of Fire Chiefs – Partnerships Toward Safer Communities Program, the guide was designed as an aid to cross-border emergency response planning. The guide describes some of the tools and exemptions available to help facilitate the movement of personnel and equipment across the Canada-United States border during an emergency. It also discusses some of the challenges organizations might face such as training and liability issues and provides contacts for various regulatory

organizations on both sides of the border. The guide is available in English and French and can be downloaded from the Transport Canada website at the following address: <http://www.tc.gc.ca/tdg/publications/menu.htm>.

Emergency Response Assistance Plan Program

by Norman Loiseau

To fully comprehend the underlying benefits of the Emergency Response Assistance Plan (ERAP) program, readers will allow me to start with a number of what are disparate observations.

We start from the premise that *“The object of an emergency response assistance plan is to ensure that there is immediately available a suitable response to emergency situations involving the dangerous goods for which the plan was created...”*

The first observation involves the role of local or regional emergency response services. Too often this means reliance only on the local fire and police services. Certainly this is the case during the initial moments of an incident. Through no fault of their own, these creatures of municipal or regional governments are often under-funded and can lack the kind of training, experience, equipment and other resources necessary to combat a major and complicated dangerous goods incident. Limitations on tax dollars preclude investment in the kind of response capability that is really required. Add to the equation the vastness and sometimes the remoteness of Canadian transportation corridors and you can appreciate the complexity of providing such response.

The second observation concerns carriers whose real interest is in providing efficient transport services. While regulatory compliance is a key component of transportation, an additional requirement for carriers to have full response capability for the products they carry or could carry in the future would have a negative and detrimental impact on the cost of transportation. Carriers already complain about the high expense to run their businesses.

The third observation is more personal. Would you for one moment consider, NOT insuring your home or your car? Of course not, we all recognize the importance of providing financial assurances against such loss.

Every day there are high risk, high consequence substances being transported in Canada. Substances that, in the event of an incident, would overwhelm the normal municipal emergency response services. By reflecting on this, you can begin to appreciate the benefit a pre-planned, well defined, and technically competent response program can provide.

The underlying principle is that an ERAP ensures appropriate, specialized resources such as chemical suits, unique tools and trained responders will be on site to deal with the situation, to minimize the consequences, and to expedite recovery operations. In many cases, it significantly reduces the time required to mitigate the situation, restore normal transport operations and reopen transportation corridors.

The ERAP concept (unique to Canada) is therefore in fact a form of dangerous goods response insurance. In the event of an incident, however complicated, there will be appropriate assistance augmenting municipal resources in order to mitigate the event.

It seems only reasonable that the cost for providing this “insurance” rests with those who would put these substances into transport. The burden of ensuring that an ERAP is in place generally rests with the person who is offering for transport in Canada or who is importing into Canada. A notable exception exists for product transiting through Canada. In this case, each carrier who takes possession of the dangerous goods becomes an “importer” and is responsible to ensure an ERAP is in place. The carrier(s) can, however, use someone else’s ERAP as per Subsection 7.1(5) of the *Transportation of Dangerous Goods Regulations*.

Who benefits from the ERAP program? Everyone, and at several different levels, when seen from these various perspectives:

- From the plan holder’s perspective: they are demonstrating a responsible attitude towards the transportation of their products, ensuring that in any untoward event they will have a means to effectively address the matter.
- From the carrier’s perspective: they can provide transportation services with the knowledge that in addition to their own commitment to safety, an ERAP will provide an additional level of safety.
- From the first responder’s perspective: they are not left alone to deal with an emergency situation. They will not be overwhelmed as assistance will be readily available through trained, qualified, properly equipped and knowledgeable personnel to deal with “the complicated bits”. (Municipal governments do not need to allocate tax dollars to cover “what if” situations).
- And finally from Transport Canada’s perspective: they will have implemented effective regulations that provide for public safety and protection of the environment in an effective and efficient manner.

All in all, the ERAP program is an effective and responsible approach to handling the issue of safety in the transport of high risk, high consequence dangerous goods. Other countries would be well advised to reflect upon this component of transportation safety.

Ammonia Safety Update: Ammonia Classification Change

by Dave Finlayson



Anhydrous ammonia is being re-classified under the *Transportation of Dangerous Goods Regulations* from a class 2.2 compressed gas to a class 2.3 toxic gas. The change is intended to better communicate the hazards of anhydrous ammonia and consequently increase the safety of transporting the product. The Canadian fertilizer industry supports the new classification and will continue to work with Transport Canada, first responders and communities across the country to facilitate a safe and smooth transition.

Anhydrous ammonia is a highly effective fertilizer used by farmers across the country to grow food. It also has many industrial applications. For example, it is used as a refrigerant in the food processing industry and in community arenas; in pollution control equipment to scrub acid gasses from industrial stacks; as a fire retardant in fabrics and in the manufacture of pharmaceuticals, resins and adhesives. It is manufactured by combining nitrogen from the air with hydrogen from natural gas. In its anhydrous form, ammonia is a corrosive gas under normal conditions of temperature and pressure.

Anhydrous ammonia is transported as a liquefied compressed gas in railcars, trucks, and in “nurse tanks” for

agricultural application. Canadian shipments amount to about 1.2 million tonnes per year. Because of its corrosive properties, anhydrous ammonia can present a serious risk in the event of a spill or leak.

The Transport Dangerous Goods re-classification will require that the placards on trucks, railcars, or anything else transporting ammonia be changed from the current green 2.2 placard to either the 2.3 placard or a new UN1005 placard. The new placard displays a black cylinder with a white background and the 1005 UN number. In the event of a transportation emergency, this placard advises first responders they are dealing with anhydrous ammonia, a toxic gas under pressure, which is highly corrosive to skin and other tissues. Trucks, railcars and farm tanks used to ship anhydrous ammonia and residues will carry the placard and the additional warning: "Anhydrous Ammonia, Inhalation Hazard."

The 2004 Emergency Response Guidebook published by Transport Canada will also need to be updated. The placard change is currently expected to be mandatory in August of 2008 with an option to use the new placard before then.

The Fertilizer Safety and Security Council of the Canadian Fertilizer Institute is supporting the re-classification with communications and training programs for first responders. In consultation with first responder representatives, the Council is producing a new awareness level DVD and web-based training program which will be freely available across Canada. An operations level program will follow in due course. In the coming months, first responders can also expect information packages, magazine articles and conference presentations informing them about the new ammonia classification and training program.

The Fertilizer Safety and Security Council was launched by the Canadian Fertilizer Institute in 2003 to promote the safe and secure manufacturing, handling, storage, transportation and application of commercial fertilizer products thereby protecting employees, transportation workers, first responders, farmers and the general public from risk due to accidental release, environmental emergency, or criminal misuse of fertilizer products.

For further information on the new ammonia classification change or on our training programs, please visit the Fertilizer Safety and Security Council website at www.fssc.ca or contact Mr. Dave Finlayson of the Fertilizer Safety and Security Council at dfinlayson@fssc.ca.

North American Inspectors Championship 2007

by Danny Béchamp and François Dagenais

During the week of August 20, 2007, roadside inspectors representing nearly every state, jurisdiction and province from the United States, Canada and Mexico met in Minneapolis, Minnesota, to compete in the annual North American Inspectors Championship. For the second year in a row, a Canadian has captured top honours. This year, Mr. James Trombley, a Commercial Vehicle Safety Alliance certified North American Standard Level I inspector from Alberta, was given the "**Grand Champion**" award for his combined performances in six competition elements within the North American Standard Level I Inspection and North American Standard HAZMAT/Transportation of Dangerous Goods Inspection events.

Fifty-four Commercial Vehicle Safety Alliance certified North American Standard Level I roadside inspectors competed in the 15th annual Championship: seven inspectors represented Canada (Alberta, British Columbia, Manitoba, New Brunswick, Ontario, Quebec, and Saskatchewan); two inspectors represented the Secretariat of Transport and Communications of Mexico; and 45 represented the United States.

Mr. Brent Grice, an inspector representing the Ontario Ministry of Transportation, took top honours in the North American Standard Hazardous Materials/Transportation of Dangerous Goods portion of the event.

The North American Inspectors Championship is held every year by the Commercial Vehicle Safety Alliance and is the only event dedicated to recognizing and rewarding commercial vehicle inspector excellence. The event gives each inspector an opportunity to receive training on the latest safety information, technology, standards and inspection procedures while sharing ideas, techniques and experiences with other inspectors. The North American Inspectors Championship recognizes roadside inspectors for job excellence, promotes uniformity and enhances the quality of commercial vehicle inspections.

The Commercial Vehicle Safety Alliance is an international not-for-profit organization comprised of local, state, provincial, territorial and federal motor carrier safety officials and industry representatives from the United States, Canada and Mexico. The organization's mission is to promote commercial motor vehicle safety and security through a coalition of enforcement, industry and policy makers. More information on the

championship may be found on the Commercial Vehicle Safety Alliance website at www.cvsa.org.

Congratulations to all the participants!

Can I Get a Ticket?

by Nathalie Belliveau

Yes, the amendments to the *Contraventions Regulations* have been published in the *Canada Gazette*, Part II. Transportation of Dangerous Goods inspectors were trained on how to issue tickets and the Transport of Dangerous Goods Directorate has established a policy that will guide inspectors as to when a ticket will be the most appropriate option.

In what circumstances?

If you handle, offer for transport, transport or import dangerous goods in a manner that is non compliant with the *Transportation of Dangerous Goods Act, 1992*, you may be issued a ticket. No new offences were created; it is the fact that you could be issued a ticket for an offence that is new.

It is important to point out that only relatively minor offences would be ticketed. Offences that are more serious in nature would continue to be prosecuted under the *Transportation of Dangerous Goods Act, 1992*.

Why?

In order to obtain compliance, inspectors had the option to either inform you of a violation on an inspection report, detain the dangerous goods or the means of containment, or prosecute. Prosecution is a cumbersome process for all the offences that are not corrected following an inspection report or a detention.

Tickets allow for a faster, more efficient way of ensuring future compliance when other options have failed and prosecution is not warranted.

If I get a ticket, what can I do?

Upon being issued a ticket by an inspector, you may, within the time limit stated on the ticket:

- plead guilty and pay the fine to the appropriate court as prescribed on the ticket without making a court appearance;
- plead guilty with an explanation, in which case you must appear in court to request a lesser fine or to request additional time to pay the fine; or
- submit a plea of not guilty, resulting in court proceedings.

If you fail to choose an option within the stated time limit, the right to challenge the ticket expires. A conviction is then entered against you, and provincial or territorial authorities will take measures to collect the outstanding fine in accordance with the applicable provincial or territorial law.

What do these changes mean?

If you are issued a ticket, you are only liable to the fine set in the *Contraventions Regulations* for that offence. Also, if you choose not to contest the charge and pay the fine just like you would a parking ticket, there will be no costs related to court appearance.

Canada/United States Reciprocal Recognition of Containers

(introduction by Zenon Lewycky)

In October 2007, new provisions on recognition of Transport Canada specification containers for domestic use within the United States came into force in the United States Hazardous Material Transport Regulations, Title 49 of the United States Code of Federal Regulations. These provisions were published earlier this year as final rule HM-215F to Title 49 of the United States Code of Federal Regulations. Under these new provisions, most Transport Canada specification containers, other than cylinders, benefit from full recognition for use in the United States, as if they were the corresponding Department of Transportation specification containers. The provisions governing use of Transport Canada cylinders in the United States remain unchanged.

We, at Transport Canada, welcome this change. Canadian standards have long recognized U.S. Department of Transportation containers as equivalent to corresponding Transport Canada containers for use in Canada but until HM-215F, this was reciprocated in the United States. In the past, Canadian manufacturers following Canadian standards were not given the same access to the United States market as the manufacturers following American standards had to Canada. The United States authorities now have come to the view that Transport Canada containers are equivalent to and can be used in the United States as such.

The following article was published by the Security and Prosperity Partnership of North America announcing this change. For more information, you may visit the website at the following address: <http://www.spp-psp.gc.ca>.

Levelling the playing field for dangerous goods trucks

A modification negotiated under the Security and Prosperity Partnership of North America (SPP) will soon ease the transportation of dangerous goods between Canada and the United States.

The U.S. Pipeline and Hazardous Materials Administration has revised its regulations to recognize containers manufactured in accordance with Transport Canada's Transportation of Dangerous Goods Regulations as equivalent to American containers.

With the change, as many as 5 per cent of trucks coming over the Canadian border that previously had to be empty can now carry loads, easing border pressure and helping the environment.

Because of small differences in the way their respective regulations are written, Canada and the U.S. certify containers separately. Typically, the classification and labelling of dangerous goods is based on recommendations set out by the United Nations in the Transportation of Dangerous Goods, model regulations. Under the UN model, countries are allowed to make the final decisions regarding their respective regulations.

In the past, the U.S. has not fully recognized Canadian specifications. Trucks carrying dangerous goods in containers made to Canadian specifications were permitted only to travel into the U.S. and unload; they could not fill up in the U.S. and return to Canada with a load. This has meant that up to 5 per cent of all trucks crossed the Canadian border empty, burning fuel and adding to border pressure.

With the modification, the cross-border transportation of dangerous goods will become seamless, creating an equal playing field for container manufacturers and shippers in both countries. Dangerous goods include flammable, corrosive, explosive, toxic or infectious materials, ranging from petroleum products to acids and compressed gases. Canada and the U.S. will recognize each other's specifications for transporting such goods, while continuing to ensure high standards in the two countries.

"Everybody's life just gets easier," said Dwaine Ferguson, the engineering manager of Goldec Hamms Manufacturing Ltd., a company in Red Deer, Alberta, that makes tanker trucks for transporting dangerous goods, especially in the oil industry.

"We were able to find an approach that showed that we have an equivalent level of safety, without being identical," explained Mr. Ferguson. "Canadian tanks are recognized as being fully equivalent, with comparable levels of safety."

He said the change benefits container manufacturers, truckers, drivers and shippers as well as the wider community, which can be assured that such goods are transported safely and effectively on public highways.

The change, which comes into effect October 2007, will allow Canadian manufacturers better access to the U.S. market, and will reduce the cost, time and paperwork associated, for example, with having to get their containers certified in both Canada and the U.S.

The Security and Prosperity Partnership of North America works to ensure compatibility in regulations in North America while maintaining standards and the individual sovereignty of countries. The initiative on dangerous goods was part of the SPP's Manufactured Goods and Sectoral and Regional Competitiveness Working Group.

2007 Chlorine Emergency Plan Team Member Training

by Eve Poirier

In April 2007, the Chlorine Institute (CI) had their Chlorine Emergency Plan (CHLOREP) Team Member Training at the Mississippi Fire Academy. There were approximately 120 participants (including instructors) from all over Canada and the United States.



Mississippi Fire Academy auditorium

Transport Canada was invited to participate in the Chlorine Institute training program on preparedness levels, knowledge and response capability for incidents involving chlorine.

The collaboration between the different industry sectors, such as the manufacturers, the packagers and the emergency response contractors was interesting to see. All were proud to share their experiences and their knowledge to benefit the younger ones, such as myself!

Throughout the week, participants spent time between the classroom and the outdoors where field exercises were held.

Topics such as the Incident Command System (ICS) structure, site assessments, site safety plans and Chlorine Institute guidelines were discussed. Chemical and physical properties of chlorine, medical surveillance guidelines,

respiratory and personal protective equipment and air monitoring and decontamination were also discussed.



Smoke house exercise wearing Level A personal protective equipment (PPE).

A fair amount of time was spent reviewing the different types of means of containment and capping kits used for chlorine; i.e.: the 100 or 150 pounds cylinder, the one ton cylinder, the tank truck (authorized only in the United States) and the tank car. It was a good review and I was amazed to see the creative process behind the improvements to the capping kits; they make the emergency response team's task easier and more effective.



Instructor Dan Moore reviewing the one ton cylinder with emergency capping kit B.



Leaking valve exercise

Some of the highlights of the training, in my opinion, were the tank car damage assessments and the transfer methods for damaged or breached tank cars. Another favorite for many was the review of past derailments detailing lessons learned and the tools since developed. For example, the introduction of the use of eductors to scrub chlorine vapors from tanks.



Transfer exercise (including the use of an eductor to scrub the vapors)

During the exercises, the instructors tested our knowledge by introducing a wide variety of scenarios such as modifying pressure levels, setting leaky valves and mixing chlorine with other chemicals. These exercises made everyone realize the importance of careful assessment before taking any remedial measures which could worsen the situation. Capping a safety relief valve may not be the ultimate solution even though it is leaking! Again, taking into consideration the BIG picture with all the information (as little as it may seem) is important before doing anything.



Response exercise at an unloading rack at a bleach facility

Present at this training were some of the emergency response teams with whom I have worked with before in the field or in simulations. It was nice to have the opportunity to further develop our relationships outside the normal working environment.



Canadian participants of the 2007 Chlorine Emergency Plan (CHLOREP) Team Member Training: Julien Lafrenière, PCI Chemicals Canada; Claude Leduc, PPG Canada Inc; Eve Poirier, Transport Canada; Jean Ouellette, CN Rail; Christian Pelletier, PPG Canada Inc and Kevin Lawlor from PCI Chemicals Canada (absent from the photo is Dan Moore, Canexus Chemicals Ltd)

I also had the opportunity to learn more about the development and testing of a pump by the Chlorine Institute, with the collaboration of Transport Canada, that will unload breached or badly damaged tank cars. I think it is important, as a regulatory agency, to be part of the development of new technologies in order to be aware of their capabilities and understand their use at the appropriate time.

By the end of our time together, participants were pooling their resources to problem solving and identifying viable solutions.

A special thanks to Dan Moore, from Canexus Chemicals Ltd, who forwarded the idea to the Chlorine Institute to invite Transport Canada to their Chlorine Emergency Plan team member training.



Transport
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“Nurse Tank” Permit to be Phased Out

The anhydrous ammonia field tank safety program administered by the Ammonia Safety Council, the so-called “Green Book”, will be phased out over a five year period beginning in 2008. The Green Book program was an alternative to the periodic inspection and pressure testing required for nurse and applicator tanks by the CSA B620 standard under the Transport Canada *Transportation of Dangerous Goods Regulations*. The permit authorizing Ammonia Safety Council members to use the Green Book as an alternative will no longer be renewed in its previous form when it expires on November 30, 2007.

Incidents of nurse tank leaks and cracks have occurred in Canada, as well as ruptures of nurse tanks in the United States causing one death. Our review of these incidents has convinced us that the Ammonia Safety Council Green Book inspection program was not adequate to ensure the continued safety of nurse and applicator tanks over the long term. The CSA B620 inspections and tests include pressure testing of each tank with water, every five years, to assess its integrity, an aspect that is missing from the Green Book. The CSA B620 also includes external inspection at a maximum three year interval.

A five year transition permit to the Ammonia Safety Council will be in force starting next year. Under this transition Permit, a nurse or applicator tank may still be inspected under the Ammonia Safety Council Green Book but only until the tank becomes due for its next five year major inspection.

Beginning in 2008, when any nurse or applicator tank participating in the Ammonia Safety Council Green Book program becomes due for its next five year major inspection, that tank will no longer be eligible for the Green Book and the testing and inspection required by the CSA B620 standard will be required, at that time, and thereafter.

Nurse and applicator tanks manufactured by Westeel to the CRN 8227 design, and tanks manufactured by the Chemi-Trol Chemical Co. must be tested as prescribed by CSA B620 no later than the end of 2009 due to particular concerns with these tanks.

All of the Green Book requirements must be followed for nurse tanks operating under the Green Book during the transition period, including the annual inspections and applications of decals, until their five year major inspection due date. Nurse tanks that have been switched to the CSA B620 program must comply with all B620 requirements. You can elect to comply with CSA B620 before the five year major inspection due date of a tank, but it is not permissible to mix and match requirements between the Green Book and CSA B620 programs.

The CSA B620 inspections and tests must be performed by a Transport Canada registered facility. Transport Canada registered facilities exist across Canada. A list of these facilities can be found on the website at the following address: http://www.tc.gc.ca/tdg/info/moc/tank/tankform_e.htm . (Search for facilities registered to test TC 51 portable tanks.)

If you have a large fleet of tanks, it may be to your advantage to register with Transport Canada as an inspection and test facility under CSA B620 to do the inspections and pressure tests yourself. It is permissible for a registered facility to inspect and test their own tanks provided that all the requirements of the CSA B620 standard are followed. The requirements and criteria for registration are listed in Clause 8 of the CSA B620 standard which you can purchase from the Canadian Standards Association. (<http://www.csa-intl.org/onlinestore/welcome.asp?Language=EN> .)

One of the requirements for registration is that a facility have, maintain and follow a prescribed quality control manual. The Canadian Association of Agri-Retailers (CAAR) has developed a training manual and course to assist members who wish to apply to Transport Canada for registration. You must, however, apply for registration under B620 yourself and satisfy Transport Canada that you meet the criteria for registration. A Certificate of Registration will be granted directly by Transport Canada to each approved facility.



where stewardship grows

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
Connect the people who grow our food

Source of Emergency Calls		CANUTEC April 1, 2007 to September 30, 2007	Emergency Calls by Location	
Shipper	12		British Columbia	73
Carrier	122		Alberta	63
Consignee	1		Saskatchewan	23
Fire Department	143		Manitoba	17
Police Department	22		Ontario	153
Hazmat Contractor	3		Quebec	117
Poison Control	10		New Brunswick	13
Mutual Aid Group	8		Nova Scotia	8
Emergency Centre	13		Prince Edward Island	1
Ambulance Service	5		Newfoundland and Labrador	8
Medical Facility	17		Yukon	0
Laboratory	3		Northwest Territories	0
Government	34		Nunavut	0
Private Citizen	35		United States	10
Manufacturing Facility	3		International	1
Distributor/Retail	6			
End User	43			
Others	7			
Number of Calls		Emergency Calls by Class of Dangerous Goods*	Emergency Calls by Transport Mode	
Information	4 765		Road	121
Regulatory	1 852	Class 1 - Explosives	Rail	90
Technical	5 523	Class 2 - Compressed Gas	Air	11
Other	1 244	Class 3 - Flammable Liquids	Marine	10
Total	13 384	Class 4 - Flammable Solids	Pipeline	0
Emergency Calls	487	Class 5 - Oxidizers and Organic Peroxides	Non transport	255
		Class 6 - Poisonous and Infectious Substances	Multimodal	0
		Class 7 - Radioactives		
		Class 8 - Corrosives		
		Class 9 - Miscellaneous		
		NR - Non-regulated		
		Mixed Load -		
		Unknown -		
		* includes primary and subsidiary classes, and possibly multiple DGs per emergency.		