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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.

Editorial

This issue of the Dangerous Goods Newsletter finds us into the beginning of 2005, the twenty-fifth year of its publication. Today, more than 23,000 readers turn to us for timely information on provincial, federal and international developments in the transportation of dangerous goods.

And we are trying to do better! You will notice a few improvements in this issue. These include a fresh "look" to make the reading easier.

Our feature article, on page 4, is the publication of an "Alert" notice regarding the expiry of Permit for Equivalent Level of Safety SH 6216. All users of slip tanks must read the article to become aware of the new requirements beginning on January 1, 2005.

The Review of the TDG Act is progressing well. Consultation meetings were held across the country, as planned, and the last meeting was held in Ottawa on November 9th. For a complete insight into the review process and the work still ahead, please refer to the article on page 6.

Finally, on page 12, you will find an interesting article on the transport of infectious substances by air and the upcoming changes beginning January 1, 2005.

As always, we invite you to send us your comments and suggestions on these articles or future articles you would like to see included.

Enjoy your reading!

Renée Major

Conference on the Transport of Infectious Substances 2005

by Judith Code and Linda Hume-Sastre

On March 30, 2004, the Civil Aviation Group of Transport Canada hosted a conference on the regulatory regime for transporting infectious substances to, from and within Canada that will take effect in January 2005.

The Conference was held in Ottawa at the Conference Centre and was attended by 75 people. These participants included carriers, consignors, trainers, federal and provincial enforcement personnel and representatives from major industry associations, as well as federal and provincial government departments. The speakers for the Conference were:

Judith Code, Chief, Dangerous Goods Standards, Civil Aviation Directorate, Transport Canada; Linda Hume-Sastre, Director, Legislation and Regulations, TDG Directorate, Transport Canada; Maureen Best, Director, Office of Laboratory Security, Health Canada;

Nicole Noccey, Means of Containment Specialist, TDG Directorate, Transport Canada;

Stéphane Garneau, Superintendent, Small Means of Containment and IBCs, TDG Directorate, Transport Canada; and

Bob Richard, International Standards Coordinator, U.S. Department of Transportation.

The speakers outlined the interaction between international and domestic regulatory regimes, and the details on the requirements in the UN Model Regulations, 13th Edition for transporting infectious substances, which are adopted by the modal groups; specifically, the International Civil Aviation Organization and the International Maritime Organization. The perspectives on packaging and on how the United States will propose handling the UN changes in domestic U.S. regulations were also addressed. The requirements for transporting infectious substances by air will be effective in January 2005 in the ICAO Technical Instructions.

One of the primary messages of the conference was that the UN Model Regulations have changed the method of classifying infectious substances. Risk groups have been deleted and replaced by two Categories, Category A and Category B. Category A includes substances that pose a high risk in transport and Category B includes substances that pose a low risk in transport. The UN Model Regulations provide an example list of the Category A substances.

In Canada, the 2005/2006 version of the ICAO *Technical Instructions*, which includes both the UN requirements as well as additional requirements pertinent to the air transport of dangerous goods, will be proposed for inclusion in the *TDG Regulations*. This is also true for the IMDG Code. For road and rail transport and domestic marine transport, the TDG Directorate is working on a draft amendment for informal consultation. This draft amendment will include the Category A list of Infectious Substances along with a Category B list.

For more detailed information about the nature of the regulatory change and how it will affect you, please contact your Regional Transport Canada Dangerous Goods Office, by viewing:

http:/www.tc.gc.ca/tdg/contacts/federal.htm.

ALER

Diesel Fuel in Non-Specification Slip Tanks—Permit Expiring

by Zenon Lewycky

he Permit for Equivalent Level of Safety that granted an extension allowing use of non-specification tanks for transporting diesel, heating oil and Jet A fuel,¹ by road is expiring on January 1, 2005. Most tanks affected are the so-called 'slip tanks', mounted on pickup trucks or small trailers.

After January 1, 2005, all tanks of over 450L capacity, in use for transportation of these substances by road, must be in conformity with the *Transportation of Dangerous Goods Regulations*. Non-specification tanks may still be used until 2010, but only if they are qualified to Specific Requirement 5(b) of Standard CAN/CSA-B621-98.

To qualify under SR 5(b), the tank must be brought for inspection to a facility registered by Transport Canada for inspecting TC306 or TC406 tanks. The facility will perform a visual inspection as well as a leak and pressure test at 21 kPa (3psi).² If the results are satisfactory, the facility will attach a "non-specification flammable liquids tank" nameplate for identification. Non-specification tanks under SR 5(b) must also be periodically inspected following application of the non-specification nameplate. The periodic inspection includes an annual visual inspection and leak test at a Transport Canada registered facility. Tanks that are beyond their due date for inspection may not be refilled.

Slip tanks complying with ULC/ORD C142.13, manufactured before 2003, may be used until 2010 and they do not need the non-specification nameplate described above. They are, however, required to undergo the periodic inspections and tests for "mobile IBC's" as prescribed under standard CAN/CGSB 43.146-2002. This includes internal and external visual inspection every 60 months. The 60-month period is counted from the date of manufacture or subsequent inspection.

Any slip tank built after January 1, 2003 must be a UN Standard Mobile IBC, as prescribed by the CAN/CGSB 43.146-2002 standard, if it is to be used for transport of flammable liquids.

Refer to the summary table on the next page for details on the various containers that are permitted for use in transport of gasoline and diesel fuel. For information on the registered tank inspection facilities in your area, please visit the TDG Web site at:

http://www.tc.gc.ca/tdg/containers/menu.htm.

Change to CSA B340-02

The TDG Directorate intends to limit the size of container to which clause 5.5.3 in National Standard of Canada CAN/CSA-B340-02 can apply through an amendment to the Transportation of Dangerous Goods Regulations. The intention is to insert a qualifier limiting the application of that clause to containers of no more than 50 L capacity. Interested parties are advised of the Department's intention to insert this qualifier into Part II of the Canada Gazette when CSA B340-02 is adopted, and are invited to comment. Comments should be sent to Mrs. Linda Hume-Sastre humel@tc.gc.ca.

¹ and other flammable liquids in Packing Group III, no subsidiary classification, and with a flash point of 37.8°C or higher.

² the leak and pressure tests will be performed as if the tank is a TC306 under CAN/CSA B620-98, as authorized under Permit SH6216.

SUMMARY TABLE

PRODUCT AND CAPACITY OF CONTAINER	PRESCRIBED CONTAINER	ALTERNATE CONTAINER	SUNSET DATE ON ALTERNATE CONTAINER
DIESEL FUEL UN 1202 450L or less	Non-Specification	N/A	N/A
GASOLINE UN 1203 30L or less	Non-Specification, when the conditions for "Ltd. Qty." are met	N/A	N/A
GASOLINE UN 1203 Between 30L and 450L	Jerrican or drum to CGSB 43.150 or UN Standard IBC to CGSB 43.146	ULC/ORD C142.13, built before 2003	2010
DIESEL FUEL UN 1202 Between 450L	UN Standard IBC to CGSB 43.146 or	Code 31A and 31B IBC, TC 57 and ULC/ORD C142.13 built before 2003	2010 for ULC C142.13 and N/A for the rest
and 3000L	TC 306/406 to CSA B620	Non-spec tank built before 2003 tested and marked to CSA B621 Specific Requirement 5(b)	2010
		Non-spec tank under Permit SH 6216	2005
DIESEL FUEL UN 1202	TC 306/406 to CSA B620	ULC/ORD C142.13 built before 2003	2010
more than 3000L		Non-spec tank built before 2003 tested and marked to CSA B621 Specific Requirement 5(b)	2010
		Non-spec tank under Permit SH 6216. (5000L maximum)	
GASOLINE UN 1203 Between 450L	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, all built before 2003	2010 for ULC C142.13 and N/A for the rest
and 3000L		Non-spec tank built before July 1995 tested and marked to CSA B621 Specific Req.17	2005
GASOLINE UN 1203 more than 3000L	TC 306/406 to CSA B620	ULC/ORD C142.13 (5000L maximum) built before 2003 and TC 57	2010 for ULC C142.13 and N/A for the rest
		Non-spec tank built before July 1995 tested and marked to CSA B621 Specific Req. 17	2005

The Review of the TDG Act

by Raymond Auclair

The Transportation of Dangerous Goods Act, 1992, will be formally reviewed. In preparation for this process, we have begun a public consultation period aimed at identifying problems that stem from the Act or from its application.

All stakeholders may inform us of problems they have identified or comment on those that have been identified by others.

In this document, we explain the distinction between the Act and the Regulations and we include a brief history. Then, we explain the steps leading to a new or modified *TDG Act* in order to guide stakeholders who may want to offer comments.

Finally, we provide questions that may help you prepare your comments.

Act or Regulations?

The Act defines the field of application of the requirements, the prohibitions and the authority to make regulations. The field of application indicates to whom the Act applies; if you are outside the field of application, then the requirements (including the regulations) do not apply to you. The prohibitions define the activities that are subject to the penalties described in the Act. To keep the Act clear, simple and stable, the Act defines activities for which the technical requirements are in separate regulations.

The *TDG Act* is rather short (22 pages). Links on the Review Web Page¹ refer you to the complete text. There is also a Web Page with a brief (very brief) explanation of the sections of the Act: it is included in the presentations made at the consultation meetings in the Spring². As well, an explanatory booklet titled "Behind the Words" is available as a reference tool.

The *TDG Regulations* include the technical requirements and references to standards, parts of which are made compulsory by Regulation or directly by the Act. The Regulations are complex because they must cover all possible cases in transport, in whatever mode

of transport, for millions of chemical compounds. The Regulations are dynamic; they are often modified to keep up with the ever increasing number of chemicals, means of containment, technological advances and international recommendations with which we seek harmonization.

The *TDG Regulations* are large (722 pages). There is a continuous review process for the regulations; this process is independent from the review of the act.

History (very brief)

In November 1979, the second³ most important dangerous goods transportation accident in Canada occurred in Mississauga, Ontario. A freight train derailed in a densely populated area and a dozen different dangerous goods were released.

Despite the importance of the accident, no one died. However, over 200,000 people were evacuated for several days.

The first *TDG Act* was created in 1980. Its area of application was described in terms of the *National Transportation Act* and was intended to cover "surface" transportation, which is road and rail.

The first *TDG Regulations* were published in 1985. The Regulations were often modified; however, in general, they appeared to work. The provinces, many of which already had legislation for road transportation, agreed that the federal government should be the coordinator. Thus, the "federal" *TDG Regulations* were prepared in cooperation with the provinces and were then adopted by them through their own provincial statutes.

The Act of 1980, however, did not work as well. In fact, near the end of the 80's, so many cases had been lost in court that not much was left of the Act. During the consultation period of 1990-92, stakeholders identified many innovative ways to solve the problems.

On June 23, 1992, the new *TDG Act* was given Royal Assent and replaced the old Act of 1980. The new Act was written in a way that was easier to understand; it used a clearer language. Another advantage was that the new Act was one of Public Safety, taken under the Criminal Law Head of Power of the Constitution and it had its own field of application.

¹ http://www.tc.gc.ca/tdg/consult/actreview/menu.htm

² http://www.tc.gc.ca/tdg/consult/actreview/presentation.htm

³ Most important: the Halifax explosion in 1917 (m/v Mont Blanc)

In 1994, the government launched an ambitious regulatory review program to cover all regulations in Canada. The *TDG Regulations* were subjected to the process. Many requirements were revoked (they did nothing for public safety) or modified; some were added.

Meanwhile, those responsible for the *TDG Regulations* had begun to rewrite the regulations as part of a pilot project called "simple language." Later, formal writing and formatting tools were added to the project and it was renamed "Clear Language." The new regulations were to be ready in 1996.

By 1998, it was clear that the 1996 deadline had been too optimistic. The original project of rewriting the regulations without changing the requirements was no longer viable. We needed to integrate changes that had occurred since the 1994 review and modernize the requirements in light of the increase, in number and complexity, of chemicals and technological tools.

Finally, a near final version was proposed in August 2000, in Part I of the *Canada Gazette*. A year of public consultation followed on the proposed text. On August 15, 2001, the "final" version was published in Part II of the *Canada Gazette* and the new regulations came into force in August 2002.

Since then, there have been three amendments to the Regulations, including one that was introduced in August 2002, to modify the new wording:

- 1. Aug. 28, 2002: corrections to the text, definitions, rewrite of some sections...
- 2. Aug. 13, 2003: limited quantity, consumer products, National Defence activities...
- 3. Dec. 17, 2003: determine (and modify) the application of ICAO *Technical Instructions* for transport by air...

In addition, there are three proposals being considered:

- A. Standards CGSB-43.125, CSA-B339, B340, IMDG Code (transport by sea)...
- B. Standards CSA-B620, B621, B622...
- C. Explosives, storage of dangerous goods incidental to transport, clarify the definition of consignment, clarify Part 4...

However, these amendments deal with the Regulations and not the Act. Before looking again at the Act, let us look at other distinctions.

Safety or Security?

Safety: A collective effort to avoid negative outcomes. The more requirements are known, the better safety is served (everyone knows what to do). In French: *sécurité*.

You have a safety problem when everyone intends to do the right thing, and something goes wrong.

Security: What must be done to prevent one person from triggering the negative outcomes on purpose. Sometimes, we must hide certain things (for example, passwords must be kept secret). In French: *sûreté*.

You have a security problem when one person intends to do the wrong thing.

The similarity between the words "security" and "sécurité" causes confusion. There are some government programs where the concept of security has been translated in French as "sécurité." We will try, during this review, to use the words as defined above (Safety = sécurité; security = sûreté).

We were already preparing to review the *TDG Act* (as was promised in Parliament in 1992) when the events of September 11, 2001 occurred. The review was launched quietly in late 2001 with the emphasis on security issues. The review was expanded in 2003 to include safety issues.

The TDG Act

Official title: An Act to Promote Public Safety in the Transportation of Dangerous Goods. Short title: Transportation of Dangerous Goods Act, 1992. The date is part of the short title.

The text of the Act can be found on Transport Canada's Web site. In addition, there is a link to an explanatory booklet on the Act titled "Behind the Words". There are also links that will give summaries of the presentations made in the Spring. These presentations give an idea of the structure of the Act.

In Canada, there are 14 **regulations** on TDG (1 federal, 10 provincial, 3 territorial). All include the same requirements. Thus, a person responsible for a consignment of dangerous goods does not have to worry, in general, about which level of government has jurisdiction: the requirements are the same.

The same does not apply to the *TDG Act*. There are 14 different enabling pieces of legislations (acts or statutes). The federal Act is of a "criminal" nature.

Most provincial laws are "transport" law, while some are environmental (e.g. Manitoba) or public safety (e.g., Alberta).

Our review only deals with the federal TDG Act.

How to amend an act

Starting from the end: an act is amended when the act that modifies it come into effect. The effective date is usually determined when the modifying act receives Royal Assent, normally given by the Governor General or a representative. The Royal Assent comes after the act has been passed by the House of Commons and the Senate. While being passed, the Bill is given three readings in each House and, near the second reading in each House, it is reviewed by a committee. Before or during this review, the legislative process requires a formal public consultation.

Before getting there, there has to have been a Bill prepared, then tabled in one of the two Houses. The Bill is prepared from instructions given by the Cabinet. This means that the Cabinet of Ministers would have approved the preparation of the Bill after studying a Memorandum to Cabinet presented by one (or many) Minister(s).

The Minister will not present the Memorandum to Cabinet unless someone has convinced the Minister that the *TDG Act* needs to be amended, that the amendment satisfies that need and that it appears acceptable to all, or most, of the stakeholders. In order to achieve this consensus, we must have consulted people who are subject to the Act, people who benefit from the Act, provinces, agencies involved in the administration of the Act, other federal departments, etc. We must also convince the Minister that our analysis covered all known problems, alternative solutions and consequences of proposed solutions.

Consultation

The consultation process that is currently underway is meant to find the information needed for the analysis that will precede the preparation of the Memorandum to Cabinet. The nine step process, described on the Web, serves to find problems and to seek ideas on solving them. We also need to understand the impact of the alternatives in order to be able to select the best solution(s).

The consultation process was designed to work using only the Web, electronic mail, normal mail and

telephone. Meetings are designed to help participants better understand what is being revised and prepare comments that will help the decision-makers.

All the information required for the review is found on the Web:

List of issues;

Presentations and comments given at the meetings;

Summaries of meetings; and Links to supplementary information.

Issues

Issues raised by the stakeholders are called "questions" in French because they are the questions that stakeholders are asking the decision-makers: "How do you intend to solve the following problem?"

Because we only have forty-some issues, there is no need to rank them. It is possible to cover all of them during the consultation period. The number assigned to an issue is, therefore, not an indication of priority.

However, we did establish categories:

- A. Security
- B. New concepts
- C. Existing concepts (correct the Act)
- D. Technical problems (wording)
- E. Automatic issues (government policies)
- F. Outside scope of review (regulations, other acts).

Analysing the identified issues

For each issue identified during the consultation, we must ask ourselves:

- 1. Must we amend the *TDG Act* to solve the issue? Are there other means that could solve the issue as efficiently or even better?
- If the Act is amended, how should it be amended? We are seeking ideas and options. It is acceptable to send us comments like "I believe that the Act should not be amended;

however, if you do amend it, consider the following points..."

3. What are the consequences of amending the Act? Of not amending it?

The issues already listed have been identified by the stakeholders (e.g., the public, regulated persons, inspectors, police officers, firefighters, carriers, travellers, departments). The fact that an issue is listed does not mean that the Act will be automatically amended. If the issue is on the list, it simply means that at least one person identified it as a problem and it is worth discussing.

The team running the consultation does not have the mandate to filter comments. We may categorize them according to the list above or send them to an appropriate authority (e.g., regulations, another program).

When the Review Team begins its work on the *TDG Act* in the Fall, it will have all the comments received. The Review Team will consist of TDG Directors and the Director General. The Review Team will work with the provincial representatives and the TDG General Policy Advisory Council that is established under the *TDG Act*.

A. Security

Do we want to deal with TDG security issues in the TDG Act, or should they be included in another act (e.g., Criminal Code, a new transportation security act, existing modal acts, or a national security act outside Transport).

If included in the *TDG Act*, do we want two levels of requirements; one level for consignments that require an ERAP and another level for the rest of the dangerous goods? If yes, should the security requirements be integrated with the safety requirements (i.e., one ERAP covering safety and security)?

Requirements put in place by the United States of America may have an impact on our requirements and on the timeline needed to set them up.

B. New concepts

Should we extend the field of application to cover activities that are not presently covered? Should we create a new type of permit to replace (or supplement) the use of estoppels? How could we, in an act, encourage voluntary efforts that go beyond the legal obligation, without losing the obligations that bind others?

Should the act impose compliance with some parts of the standards? Can we allow the seizure (for analysis) of means of containment that are not in "non-compliance"?

What are the advantages and disadvantages (especially costs) of creating a registry of persons allowed to participate in regulated TDG activities?

Should the *TDG Act* prohibit actions that are already forbidden by other laws of general application (e.g., vandalism)?

C. Existing concepts

The goal here is to resolve problems that, we thought, had been fixed in the *TDG Act* of 1992. For example, "misleading safety marks" is fast becoming an important issue in this review. The intent of the legislator seemed clear in 1992. Since then, some court decisions, taken while hearing cases under provincial jurisdiction, have shed a new light on the words of Section 6 in the *TDG Act*. Should the Act be amended to reaffirm the original intent? Should we, instead, modify the original objective and, if so, what should be the new objective of Section 6?

D. Technical problems

We had reserved category D for issues of wording. We noticed that when someone proposed a change of wording, it was either to resolve an issue of category C (the words have a meaning in 2004 that differs from the meaning intended in 1992) or of category D (change the word to change the meaning of the Act). That is why that category has not changed much since 2003.

E. Automatic issues

When preparing a Memorandum to Cabinet, there are issues that must be addressed even if no one has raised them. These issues are taken from priorities imposed on all programs by government. For example, whatever the topic covered in a Memorandum to Cabinet, one must address the impact that a decision could have on the ability of Canadian industry to do business on international markets.

F. Outside scope of review

This is where we gather the issues that do not appear to deal with the Review of the TDG Act, often because the

problems raised stem from other acts or programs. Instead of hiding these issues, we keep them in category F.

Stakeholders can send us comments explaining why they believe the issue is not outside the scope and, sometimes, we agree.

Over the last year, three issues have moved from F (two B and one C). We continue to accept comments regarding issues in F and we will pass them on to the Review Team, as will be done for all other issues.

The future

Public consultation meetings will continue until November 9, 2004. Then, we will compile all comments and present them to the Review Team in late November. The Review Team will do its analysis during the winter months.

From the recommendations of the Review Team, we will prepare the first draft of a Memorandum to Cabinet. This first draft could be ready as early as April 2005. In Canada, a Memorandum to Cabinet is automatically Secret (even as a draft), and remains Secret forever.

Therefore, there will be a time period, from the drafting of the Memorandum to Cabinet to the tabling of a Bill in Parliament, where the Web site for the review will not change. We encourage you to send us your comments well before that pause.

If things progress well, a Bill could be tabled as early as September 2005, leading us to believe that the *TDG Act* could be amended as early as January 2006.

This timetable is optimistic. It could be delayed by a number of events, including general elections should they become necessary.

On the other hand, it could be accelerated, at least for security issues, depending on measures that could be put in place by the United States of by other countries.

To participate

The purpose of this consultation is to identify problems and to generate ideas to solve them. This is not a game of numbers. What is important are the ideas.

A person may offer many solutions to the same issue, even if this person believes that the best solution is to not amend the Act.

Please remember you can all send comments, even if

you do not attend the meetings and you may send comments more than once. You may even change your mind during the consultation period. We expect to, because we expect the consultation process to improve the final product.

Early comments have more impact than late comments.

To send us your comments

By email: TDGAct@tc.gc.ca

By mail: TDG Act Review

ASDE, 9th floor, Tower C Transport Canada 330 Sparks Street, Ottawa, Ontario K1A 0N5

Canada

By phone: 613 993-7207 (Katherine Stewart)

613 990-1139 (Raymond Auclair)

By fax: 613 993-5925 (address to «ASDE» or Review TDG Act)

TDG REGULATIONS AMENDMENTS

The Directorate is considering a package of amendments to be proposed to the TDG Regulations. If you would like to review a draft of these once it becomes available, please refer to the TDG Web site at: www.tc.gc.ca/tdg/menu.htm, or send an email to Mrs. Linda Hume-Sastre at: humel@tc.gc.ca and put the words "Regulations Consultation" in the subject area.

Do I Need Transportation of Dangerous Goods (TDG) Training?

by Marc Richard

Without a doubt, the most asked question with respect to the *Transportation of Dangerous Goods Regulations* is this article's title.

To train or not to train?

The more accurate question to ask with respect to TDG training is:

Do I work, in any capacity, with dangerous goods that are going to be, or currently are, in transport?

If you do, then YES you will most likely need TDG training.

The very first section in Part 6 of the *Transportation of Dangerous Goods Regulations* provides a very clear answer on the question of training.

Anyone who handles, offers for transport, transports or imports dangerous goods into Canada must be trained, or at the very least, must be working under the direct supervision of a trained person.

To further emphasize this requirement, the onus is put on employers to determine if their employees are adequately trained. If they are not, then employers must not direct or allow employees to handle, offer for transport, transport or import dangerous goods into Canada.

What is adequate training?

Section 6.2 sets out the requirements for adequate training. There are thirteen training topics that are outlined throughout paragraphs (a) to (m) that serve as a guide for the type of training that employers can expect to require for their employees.

Adequate TDG training is achieved when employees have a sound knowledge of all the topics that directly relate to their duties with respect to the dangerous goods that they handle, offer for transport, transport or import into Canada.

For employees involved in road, rail, and marine transportation, TDG training is considered to be adequate and valid for a period of three years, whereas, those involved in transportation by air have a valid period of two years (see Section 6.5 in the TDG Regulations for further information.)

Proof of training:

Once employers determine that their employees are adequately trained, they must provide a training certificate to these individuals as proof that they are adequately trained in accordance with the *TDG Regulations*. The certificate must include all of the required information from Section 6.3 of the *TDG Regulations*, and trained persons must have it in their possession at all times when working with dangerous goods.

Other considerations:

There are also requirements for keeping and showing proof of training in Sections 6.6 to 6.8.

It should be noted that self-employed individuals are responsible for being adequately trained and must issue themselves training certificates.

For a quick reference to the *TDG Regulations*, you may visit our Web site at the following link: http://www.tc.gc.ca/tdg/clear/tofc.htm

Who should provide TDG training?

Ultimately, it is the employers' responsibility to determine how to train their employees, as they are the ones responsible for ensuring adequate training.

For an outline as to what this training involves, and for further guidelines regarding training requirements, you may visit our Web site at the following link. Here you will find answers to most of your questions regarding the issue of training (you will even find an example of a training certificate!): http://www.tc.gc.ca/tdg/Documents/CLAdvisory/ADVOL1Enew.htm

This said, there are a number of Training Organizations that provide training on the TDG Act and Regulations throughout Canada. This may be a quick and easy solution for some employers needing assistance to develop training plans for their employees.

It must be noted, however, that Transport Canada does not accredit or support courses; the responsibility remains with employers to determine if a particular course is the solution for training their employees in TDG.

Though we do not endorse any particular training method, Transport Canada recognizes that these training organizations are a helpful source for employers. In light of this, the following link from our Web site provides a list of training organizations throughout Canada that provide TDG training. http://www.tc.gc.ca/tdg/training/trainorg.htm

OK... So when is training not required?

The *TDG Regulations* also include some Special Cases and Special Provisions where TDG training (as well as other requirements) may be exempted if certain conditions are met.

Here are two common examples where an involved person need not have a training certificate:

Section 1.33 in the *TDG Regulations* offers an exemption for the transport of flammable liquids that do not have a subsidiary class, and are included in Packing Group III with a flash point greater than 37.8°C (DIESEL FUEL for example) if they are contained in appropriate small means of containments. (Please see Section 1.33 for the exact details.)

Another common example is the transport of utility cylinders in the back of an open vehicle:

Special Provision 42, which is found in Schedule 2, can apply to an open vehicle – meaning that the dangerous goods can be clearly seen from outside - that is transporting up to 5 cylinders containing the typical gases that are used for welding, torch cutting, and other such activities. If all of the conditions in this Special Provision are complied with, involved persons need not have a training certificate. Please remember that this exemption applies to six specific gases only. (Please see Special Provision 42 in the Regulations for the exact details.)

Special Cases and Special Provisions such as these are found either in Sections 1.15 to 1.47, or in Schedule 2 of the *TDG Regulations*. It is important to note that the requirement to be trained person is not always exempted in these cases, and that all of the conditions in special cases must be met in order to use them.

Transport of Infectious Substances by Air 2005

by Nicole Noccey

Introduction

Transport Canada regulates the handling, offering for transport and transporting of Class 6.2 infectious substances by all modes of transport under the *Transportation of Dangerous Goods Regulations* (TDGR). Part 12 of the TDGR and by reference, the *International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air* (ICAO TIs), prescribe the classification, packaging, labeling, documentation and handling requirements for the transport of infectious substances by air within Canada and between Canada and another country.

The ICAO TIs are published every biennium. The requirements in each edition are aligned as much as possible with the latest edition of the *United Nations Recommendations on the Transport of Dangerous Goods* (UN Recommendations). The current edition of the ICAO TIs, valid until December 31, 2004, is aligned with the 12th Edition of the UN Recommendations. The next edition of the ICAO TIs, valid beginning January 1, 2005, is aligned with the 13th Edition of the UN Recommendations.

This article outlines how the classification and packaging requirements for the transport of infectious substances by air will change beginning January 1, 2005 as a result of changes introduced in the 13th Edition of the UN Recommendations and changes agreed upon by the ICAO Dangerous Goods Panel.

How will the exemptions change?

The 2003-2004 ICAO TIs exempt substances such as blood for transfusion, tissues and organs for transplant, some biological products, and substances unlikely to cause disease in humans or animals from the requirements of the TIs. The 2005-2006 TIs will maintain these exemptions but will also exempt substances for which there is a low probability that infectious substances are present or where the

concentration is at a level naturally encountered (eg. foodstuffs, water samples, living persons).

How will the classification change?

The 13th Edition of the UN Recommendations classifies all infectious substances into two categories: Category A and Category B. These categories replace the four risk groups historically used to classify infectious substances for transport.

Infectious substances included in Category A are those that pose a high risk in transport. These substances are transported in a form capable of causing permanent disability or life-threatening or fatal disease to humans or animals when exposure to them occurs. An example list of Category A infectious substances is included in subparagraph 3.2.2.1 of Part 2, Chapter 6 of the 2005-2006 ICAO TIs.

Infectious substances included in Category B are those that pose a low risk in transport. These are all infectious substances not meeting the criteria for inclusion in Category A.

The following table outlines the new classification system.

TABLE 1: INFECTIOUS SUBSTANCE
CLASSIFICATION FOR AIR
TRANSPORT IN 2005-2006

Classification	Proper Shipping Name	UN Number	Packing Instruction
Category A infectious substances	Infectious substances, affecting humans	UN2814	P602
and all cultures ¹	Infectious substances, affecting animals only	UN2900	P602
Category B infectious substances	Diagnostic specimen OR Clinical specimen	UN3373	P650

¹ Cultures are defined in subparagraph 3.1.3 of Part 2, Chapter 6 of the 2005-2006 ICAO TIs.

How will packing instructions 602 and 650 change beginning January 1, 2005?

Modified Requirements (P602)*

2003-2004	Outer packaging of adequate strength
2005-2006	for its capacity, mass and intended use. Rigid outer packaging of adequate
	strength for its capacity, mass and intended use.

2003-2004

2005-2006

Screw caps for primary receptacles must be reinforced with adhesive tape. Screw caps for primary receptacles must be secured by positive means, eg. tape, paraffin sealing tape or manufactured locking closure.

New Requirements (P602)*

- Inner packagings containing infectious substances must not be consolidated with inner packagings containing unrelated types of goods. Complete packages may be overpacked in accordance with the provisions of paragraph 1 of Part 1, Chapter 3 and subparagraph 1(j) of Part 5, Chapter 1: such an overpack may contain dry ice.
- The words "suspected category A infectious substance" must be shown in parentheses following the proper shipping name on the itemized list of contents and, as required in special provision A140, on the transport document when the infectious substances to be transported are unknown but suspected of meeting the criteria for inclusion in Category A and assignment to UN2814 or UN2900 or when there is doubt regarding the classification.
- The technical name must be shown on the transport document but not on the outer packaging (Special Provision A140).

Modified Requirements (P650)*

2003-2004 Primary receptacle must not contain more than 500 mL or 500 g.
2005-2006 (*Liquids*) Primary receptacle must not

(*Liquids*) Primary receptacle must not contain more than 1 L and outer pack aging must not contain more than 4 L. (*Solids*) Primary receptacle has no mass limit. Outer packaging must not contain more than 4 kg.

New Requirements (P650)*

- Outer packaging must be rigid and must have at least one surface with a minimum dimension of 100mm x 100mm.
- The mark illustrated on the next page must be displayed on the outer packaging with the proper shipping name "Diagnostic specimen" or "Clinical specimen" adjacent to it. Each side of the mark must have a length of at least 50 mm, the width of the line must be at least 2 mm, and all characters,

including the letters in the shipping name, must be at least 6 mm high.



- For solids, if there is any doubt as to whether or not residual liquid may be present in the primary receptacle, then a packaging suitable for liquids, including absorbent materials, must be used.
- Requirements for refrigerated or frozen specimens as specified in P602 must be complied with.
- If an overpack is used, the package markings required by this packing instruction must be visible or reproduced on the outside of the overpack.
- The proper shipping name, UN number, and name, address and telephone number of a responsible person must be on a written document or on the package.
- All packages and overpacks must be inspected for damage or leakage upon unloading. If damage or leakage is found, the area where the packages were stowed must be inspected and any hazardous contamination removed.
- Passengers and crew members are prohibited from transporting infectious substances as or in carry-on baggage or checked baggage or on their person.
- Clear instructions on filling and closing the package must be provided to the consignor or person preparing the package by the packaging manufacturer and subsequent distributors.
- Other dangerous goods must not be packed in the same packaging as Class 6.2 dangerous goods unless they are necessary for maintaining, stabilizing or neutralizing the hazards of the infectious substances. Specifically, a quantity of 30 mL or less of goods in Classes 3, 8 or 9 may be packed in each primary receptacle containing infectious substances with no other requirement in the TI's having to be met.

Can I use a packaging designed and constructed in accordance with CAN/CGSB-43.125 to transport infectious substances by air?

A type 1A packaging designed and constructed in accordance with the requirements specified in CAN/CGSB-43.125 meets all of the requirements specified in Chapter 6 of Part 6 of the ICAO TIs as referenced in P602, and can therefore be used to transport infectious substances by air.

A type 1B packaging designed and constructed in accordance with the requirements specified in CAN/CGSB-43.125 does not necessarily meet all of the requirements specified in P650 and may not be acceptable for the transport of infectious substances by air. The following table highlights some of the differences.

TABLE 2: TYPE 1B PACKAGING VS.
PACKING INSTRUCTION 650

Requirement	Type 1B	P650 (2005-2006)
Triple packaging	Required	Required
Primary receptacle quantity limit	No limit	1 L (liquid) ~4 kg (solid)
Outer packaging specifications	Must be strong	Must be rigid; Must have one surface with minimum dimensions of 100 x 100 mm
Specification marking	TC-125-1B	None required
Safety marks	If regulated, need: Class label, UN num- ber, Shipping name	Diamond with UN3373 inside; Proper shipping name adjacent
Design Tests	None required	Drop test (1.2m), pressure capable receptacle to 95 kPa
Competent Authority Registration	Not required (unless a symbol is used)	Not required
Refrigerated or Frozen Specimen	No requirements	Requirements as specified in P602

A proposal to modify the requirements for a type 1B packaging to replicate those specified in P650 of the 13th (and 14th) Editions of the UN Recommendations will be published for review and comment by the Infectious Substance Standard Committee. For further information, please contact Stéphane Garneau at 613 991-3151 or garnest@tc.gc.ca.

Please consult the ICAO TIs for the requirements in their entirety.

EMERGENCY RESPONSE GUIDEBOOK

by Michel Cloutier

The Emergency Response Guidebook 2004 (ERG2004) has been published and distributed to all Fire Departments, Police Departments and Ambulance Services across Canada through the valuable assistance from members (or a designated person) of the Federal-Provincial/Territorial TDG Task Force.

This Guidebook was developed jointly by Transport Canada (TC), the U.S. Department of Transportation (DOT), the Secretariat of Transport and Communications of Mexico (SCT) and with the collaboration of CIQUIME (Centro de Información Química para Emergencias) of Argentina, for use by fire fighters, police, and other emergency services personnel who may be the first to arrive at the scene of a transportation incident involving dangerous goods.

A complete list of contacts for the distribution, at no cost, to public emergency services as well as a list of private companies and government departments who sell the ERG2004 can be found at the following Web site: http://www.tc.gc.ca/canutec/en/guide/guide-2.htm

The major modifications and improvements to the ERG2004 are as follows:

- Deletion of old organic peroxide names
- Deletion of pre 1995 US NA numbers
- Deletion of all Canadian NA numbers
- Addition of all new United Nations 12th and 13th editions shipping names
- Approximately 700 shipping names deleted
- Approximately 250 shipping names added
- Approximately 100 shipping names moved to a different Guidepage – related mostly to firefighting foam application
- Approximately 15 shipping names added to the TIHWR listing
- Addition of radiological-related information on the Criminal-terrorist recognition section

Please visit the CANUTEC Web site regularly as work is currently being done on the production of the new ERGO2004 database that will be available in French, English and Spanish.

For any additional questions, please contact CANUTEC at 613 992-4624 or visit the Web site at: www.canutec.gc.ca.

*ERRATA

PLEASE NOTE: ENGLISH COPIES ARE ACCURATE.

On page 18 of the French and Spanish Guidebooks (only Spanish copies printed in the United States), the drawings depicting pressure and non-pressure tank cars were mistakenly interchanged.

The illustrations should appear as below in the French and Spanish 2004 Emergency Response Guidebooks:



*ERRATA

On page 19 of all three versions (English, French and Spanish), the following codes: (MC306, TC306) that appear in parentheses under the top right drawing should read (TC341, CGA341) as per the illustration below:

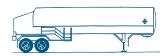












MC338, TC338 Cryogenic Liquid Tank (TC341, CGA341)

Liquides cryogéniques (TC341, CGA341)

MC338, TC338, SCT-338 Autotanque para líquidos criogénicos

(TC341, CGA341)

SPANISH VERSION

ENGLISH VERSION

FRENCH VERSION

Number of Calls

Technical 6 583 Regulatory 2717 6 202 Information 3 218 Other **Total** 18 720

Emergency Calls 520

March 1, 2004 to September 30, 2004

Emergency Calls by Class of Dangerous Goods*

Class	1 -	Explosives	10
Class	2 -	Compressed Gas	127
Class	3 -	Flammable Liquids	121
Class	4 -	Flammable Solids	1 <i>7</i>
Class	5 -	Oxidizers and	
		Organic Peroxides	47
Class	6 -	Poisonous and	
		Infectious Substances	49
Class	7 -	Radioactives	4
Class	8 -	Corrosives	188
Class	9 -	Miscellaneous	7

60

32

3

*	includes primary and subsidiary classes, and possibly multiple DG's
	per emergency.

Non-regulated

Mixed Load

Unknown -

Emergency Calls by Location

66
53
1 <i>7</i>
23
192
127
13
11
1
2
1
0
0
12
2

Emergency Calls by Transport Mode

Road Rail Air Marine Pipeline Non transport Multimodal	132 117 10 4 0 256
Multimodal	1

Source of Emergency Calls

Fire Department	155
Police Department	35
Hazmat Contractor	13
Carrier	146
End User	50
Manufacturing Facility	8
Government	31
Private Citizen	19
Emergency Centre	11
Poison Control	8
Medical Facility	18
Others	0