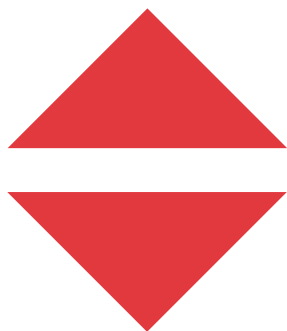


Dangerous Goods



Newsletter

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The Review of the TDG Act...

NEXT STEPS



Transport
Canada

Transports
Canada



Canada

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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.

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*Message from the Honourable Jim Karygiannis
Parliamentary Secretary to the Minister of Transport*

When I was assigned to oversee the review of the *Transportation of Dangerous Goods Act* with a view to developing legislation to amend that Act if necessary, two thoughts came to mind.

Given the number of trucks and trains I see carrying dangerous goods, are we in danger?

Given the number of trucks and trains I see carrying dangerous goods, are we safe?

Here is what first impressed me:

- The Chemical Abstracts Service indicates that over 20,000,000 distinct chemicals have been produced.
- Transport Canada tells me that not that many distinct chemicals are transported, and of those transported perhaps only 20,000 are dangerous.
- Each year in Canada there are 30,000,000 shipments of dangerous goods.

One Transport Canada manager described the dangerous goods transport program as without panache, like the electrical code or the building code. Something that is essential and which you only hear about if it goes wrong.

But even here the events of September 11, 2001 are having an impact. Protecting a system from accidents when everyone wants to do the right thing is different from protecting a system if at least one person wants it to fail.

We are initiating a review of the *Transportation of Dangerous Goods Act* to see if any changes are required concerning its safety role, and to see if it should include a security role.

I am very pleased to formally begin the review process, which in turn begins with the gathering of proposals from interested parties. During this phase, we don't intend to debate issues but rather listen until we understand all proposals. This newsletter introduces the "Consultation Document 2004" which includes issues that have been identified up to now for the review.

I strongly encourage you to participate in this review and, in so doing, help to ensure dangerous goods will be transported safely, with the least inconvenience for all, no matter how you measure inconvenience.

FEATURE

The Review of the TDG Act, 1992 Consultation Document 2004

By Raymond Auclair

Comments sought from all sources

This document is published on the Transport Canada Web site and in the TDG Newsletter. The Web version¹ will be updated as issues are added, modified or removed.

The purpose of this document is to ask if you have any issues to raise regarding the *TDG Act* or any comments on the issues raised to date.

Your comments will serve to correct our understanding of an issue, to provide possible solutions or to warn us of possible effects of proposed solutions on other aspects of Canadian life (e.g. economy, trade). We will also accept encouragement and support.

Send your comments:

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TDGAct@tc.gc.ca

or

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Decisions to be taken in the Fall 2004

This public discussion phase is expected to continue until October 2004. As we get closer to that date, discussion will concentrate more and more on proposed solutions.

In the coming Fall, the Transport Dangerous Goods Directorate of Transport Canada, along with the Federal-Provincial-Territorial TDG Task Force and representatives of various federal departments and agencies, will discuss possible solutions.

The TDG Program is a national program delivered jointly by the federal, provincial and territorial governments. One of the roles of the Task Force is to harmonize to the extent reasonably possible TDG requirements across Canada and coordinate their enforcement to make the most efficient use of all programs' resources.

Consequently, provinces and territories make their TDG Regulations the same as the national TDG Regulations, which they help to develop. Many federal departments and agencies participate by enforcing their own requirements, which are then used by the TDG Program, for example, packaging requirements under the *Explosives Act*. Therefore, other federal departments and other levels of government will be consulted during the decision-making phase.

Please note that the wording of an issue is not meant to be an indicator of the desired final decision. At this early stage, we take comments, try to understand the issue, then add the issue to the list, in the category we believe is the best fit. As discussions proceed, issues may appear, be modified or disappear.

¹ <<http://www.tc.gc.ca/tdg/consult/actreview/2004/issues.htm>>

Structure of the Document

The issues are presented in six major categories, represented by capital letters:

- A- Security issues** (dealing with possible malicious use of dangerous goods),
- B- New concepts** (new authorities may be needed for these issues),
- C- Old concepts** (we thought they were already covered),
- D- Technical corrections** (words, definitions, references),
- E- Policy issues** (Act reviews must always consider these issues),
- F- Outside the scope** (issues that pertain to other acts or regulations).

The TDG Newsletter publication includes issues that have been identified as of March 15, 2004. The Web document will be updated as needed.

What has been done so far

The fact that we already have 40 issues is a hint that we have been collecting issues for some time now. When the *TDG Act* was passed in 1992, there was a promise made in Parliament that it would be reviewed after 10 years. We were planning to begin the review but September 11, 2001 intervened.

We immediately turned our attention to the possibility that dangerous goods could be used as weapons. Our analysis showed that the goods that could easily be used as weapons are the same ones for which the *TDG Act* requires Emergency Response Assistance Plans (ERAP).

We contacted every person with an approved ERAP and confirmed that they were voluntarily putting in place measures to prevent these dangerous goods from falling into the wrong hands. There were also discussions with the provinces and territories as well as with federal departments and agencies on preventing malicious use of dangerous goods.

At the same time, Canadian industry was developing measures to enhance public security, including making specialized response teams available to public authorities in non-transport cases.

In addition to discussing the various steps taken to enhance security, we discussed with industry and

other government officials whether there would be a need for new authorities in the *TDG Act* to sustain the security efforts in the future and whether they had other, more general issues, with the *TDG Act*.

To prepare for the consultation, we established a Web site in the Fall of 2003 and advised many stakeholders such as TDG inspectors, federal departments and agencies, provinces and territories, transportation advisory councils as well as major industry associations.

Issues identified as of March 15, 2004

A. Security

As the internal review began in early 2002, we focussed on security issues and witnessed the voluntary adoption by industry of various measures to enhance security.

At first, it was thought that the definition of “public safety” in the Act was sufficient to implicitly define “security” as a subset of “safety”. However, current legal opinions indicate that we may need explicit wording to apply security requirements.

For each security question, or for the entire set, we will discuss whether the authority should be placed in the *TDG Act* or elsewhere.

A-1. Security plans for dangerous goods that require an ERAP

Security plans would parallel Emergency Response Assistance Plans (ERAP, Section 7 of the *TDG Act*) for dangerous goods that could be used as Chemical, Biological, Radiological or Nuclear (CBRN) weapons. The security plans would include the possible CBRN-response capability of industry responders.

There are some dangerous goods that are more dangerous than others. The Regulations identify quantities and concentrations which, when exceeded, require additional safety measures.

Section 7 of the *TDG Act* requires that before offering for transport or importing prescribed quantities or concentrations of certain dangerous goods, a person must have an approved ERAP. These plans must describe what resources are available to respond or to assist other response teams in case of an accident involving the dangerous goods.

Each consignor and importer is responsible for the plan(s) covering his or her dangerous goods, including for the working order of the response equipment and for the availability of experts. In general, consignors from a common sector of industry, such as the propane industry, pool their resources and, by multilateral contracts, make their resources available for any accident involving similar goods, even if such goods belong to a competitor.

Following September 11, 2001, security analyses were conducted and people responsible for safety and security looked at all opportunities that existed for terrorists. It was impossible to ignore dangerous goods.

It was quickly noted that any dangerous goods for which the *TDG Act* required an ERAP had properties that, in the event of an attack involving these goods, could cause them to behave like chemical, biological or radiological weapons.

Many consignors, especially those belonging to groups sharing emergency response plans and resources, quickly realized that these vulnerabilities had to be reduced. They voluntarily adopted measures to ensure their goods would not end up in the wrong hands.

The security plan requirement would apply to all dangerous goods already covered by the ERAP requirement in the *TDG Act*. All consignors, carriers and importers would have to show that, in addition to an ERAP, they have in place a security plan before they can offer for transport, transport or import the dangerous goods.

These security plans would be in addition to, but distinct from the ERAP. They could be inspected by different agencies. More importantly, the content would not be made public.

In addition to regulatory requirements, we are seeking ideas to encourage industry to continue the efforts that go well beyond the security of goods in transport. This could take the form of incentives such as protection from liability or reimbursement of expenses. There may be a link with issue A-6 (Industry Response to releases that are not accidental).

A-2. Security measures for all consignments of dangerous goods

Dangerous goods that require an ERAP have just been covered in A-1. However, we must not forget other dangerous goods. In expert hands, they too can become weapons. They may have less appeal

because one would have to transform them to turn them into weapons, but if we secure the ERAP dangerous goods from malicious use, then terrorists could turn to the next best thing.

A possible solution is to make it mandatory for consignors or carriers to analyze security problems associated with the transportation of dangerous goods. All employers, or self-employed persons involved with dangerous goods would determine what measures are appropriate to their activities to reduce or prevent opportunities for terrorists.

These measures could include special locks on vehicles, on means of containment, on compound gates, or special parking spaces. There are hundreds of things that could be put in place. However, many of the measures taken by one employer may be different from those taken by another. In addition, there would be a need to make these measures secret to protect their efficiency.

One important element of the implementation of these measures would be the security awareness training that employers would provide to their employees (proposed in A-4).

One possible difference between A-1 and A-2 is that A-1 would require approval of the measures, as is required for an ERAP, while A-2 would not require approval.

A-3. Immediate reporting of security breaches

The objective is to provide authorities with immediate information on dangerous goods being taken over by persons not authorized to do so.

The *TDG Act* requires that any person who has charge, management or control of dangerous goods when an accidental release occurs or is imminent, make an immediate report to the authorities (normally the police or fire department) and provide appropriate response. The immediate report allows the dispatch of emergency responders to protect public safety.

A new list of situations would be added to the accidental release reporting limits as triggers for a security report and a security response. In almost all cases, the immediate report would be to the police. Since the emergency responders would come from various agencies, the person making the immediate report would have to specify the nature of the emergency, for example, a traffic accident or a theft.

It is expected that there would be only one report for an event and the report would only include a security portion, if there was reason to think that a security breach was involved.

The person who had charge, management or control of the dangerous goods or of the means of containment used to transport the goods at the time of the event, would also have to support response. It would be mandatory to file an immediate report in the case of apparent loss, theft, or misplaced goods, or in the event of threats to the dangerous goods.

A-4. Security awareness training

The objective is to ensure that anyone whose behaviour can have an impact on the security of dangerous goods is aware of the threat posed by the goods in the hands of terrorists.

In the *TDG Act*, safety requirements mean “requirements for handling, offering for transport or transporting dangerous goods, for reporting those activities and for training persons engaged in those activities”.

The TDG Regulations prescribe the manner in which persons will demonstrate that they have been trained and how the employer of these persons will certify that they are properly trained.

The existing training requirement serves two purposes: first, to ensure that persons chosen by the employers to perform activities regulated by the *TDG Act* are employees trained to comply with the requirements and, second, to remind the employers of their liability in the event of non compliance.

The importance of compliance with security measures has greatly increased since September 11, 2001. The TDG Regulations would include security requirements.

Employers would have to put security measures in place (A-1 and A-2), and the security awareness training would be delivered to all employees by (or on behalf of) the employer. It may be that the level of security training required for employees who are remote from the dangerous goods would be different than that of employees who are actually involved in preparing the goods for transportation or transporting them.

Employers would not be allowed to issue TDG training certificates to an employee who had not

completed the security awareness training. Furthermore, TDG training certificates would have to indicate that the employee had taken the security awareness training.

The existing requirements for the safety portion of the TDG training certificate would remain unchanged.

A-5. TDG Security Clearance Certificate

Under this proposal, any person who handles, offers for transport, transports or imports dangerous goods in Canada would have to have a valid TDG security clearance certificate. There would be exceptions where the threat to public safety is minimal, for example dangerous goods in limited quantities.

To obtain a certificate, a person would apply to the Security and Emergency Preparedness Directorate of Transport Canada and provide the required information. A background check would be conducted to determine if the person met the criteria.

Proposed criteria for the certificate:

- the applicant must not be subject to a court order issued under paragraph 34(1)(a) of the *TDG Act* prohibiting the person from engaging in an activity regulated under the Act;
- the applicant must not have been found guilty of a criminal offence and been sentenced to a penalty of one year or more in the ten years preceding the application;
- the applicant must be in possession of proof of Canadian citizenship or valid landed immigrant status; and
- the applicant must not have been ordered by a court to undergo psychiatric treatment as an internee for a period of more than sixty days in the five years preceding the application.

A person would not be permitted to handle, offer for transport or transport dangerous goods unless that person held a valid certificate. In addition, a person would not be permitted to allow another person to take charge, management or control of dangerous goods, unless that other person held a valid certificate.

There would be a renewal period or a re-verification cycle, a procedure to revoke the certificate and an appeal process in case of refusal or revocation.

The certificate would be in addition to other requirements set up under various legislation. For example, if a province required a specific security test for a commercial driver's license, then a driver who wished to transport dangerous goods in that province would need to meet the criteria for the provincial test as well as those for the TDG security clearance certificate.

Criteria would be refined in consultation with industry, other federal departments, other levels of government and other countries. Where possible, harmonization would be sought. Otherwise, possibilities of reciprocity would be analyzed; for example, Canadian and U.S.A. rules do not come under the same jurisdiction, however, this would not prevent one country from accepting the other country's certificate as equivalent.

The form of the certificate is open for discussion. Should it be federally issued, provincially issued, an endorsement on an existing document (driver's license) or a biometric card?

A-6. Industry Response to releases that are not accidental

In line with their ERAP requirements and their own safety programs, industry has established very good emergency response teams. Some industry response teams have agreed to provide support to public emergency response teams in circumstances other than when obligated by the *TDG Act*. In addition, Transport Canada would like to build on existing programs to promote security response expertise in general, not only for transportation events. As such, there may be links with issues A-1 and B-4.

However, there are technicalities to satisfy, such as **liability protection**, because section 20 can only be used for accidental releases in transport and **contracting authority**, because contracts between Transport Canada and industry teams for non-accidental releases are not "incidental to the ordinary and well-recognized function" of the TDG Program.

How can the Program or the Act support these efforts?

B. New concepts

Concerns that we believe are not covered in the current *TDG Act*.

Issue B-1 appears more important simply because it is the basis for everything else. For example, the relative importance of any other issue would probably change if you were told that the Act does not apply to you. This issue was the one that led to the more drastic changes to the TDG Act in 1992. Subsection 3(2) of the current TDG Act comes from the legislator's decision to make the Act into a Public Safety Act. That decision resulted from the test questions similar to the ones listed in issue E-7 (Relevance of the program).

B-1. Application of TDG Act

Subsection 3(2) of the TDG Act states: "*This Act applies in relation to all matters within the legislative authority of Parliament, including dangerous goods outside Canada that are carried on a ship or aircraft registered in Canada.*"

Subsection 3(1) says that the Act applies to activities conducted by governments.

Subsection 3(3) allows some activities to be excluded from parts of the Act by regulations or by permits.

Subsection 3(4) excludes specific activities that are already covered by other Acts, deemed to be equivalent to the *TDG Act*, and where the TDG Program would be inefficient. Consequently, there are specific exclusions for:

- a) DND activities where the "goods" being transported do not lend themselves to our usual classification and packaging tests;
- b) pipeline operations, where goods are not "packaged" and "offered for transport" in the sense we use the term in TDG; and
- c) goods transported "in bulk" on ships, where the ship itself is the package.

It must be noted that these activities are governed by regulations that are at least as strict as the TDG Regulations.

The legislator's wish to make the application of the *TDG Act* as inclusive as possible was clear in 1992. The wording of the Act was carefully chosen to create legislation under the criminal law constitutional head of power. Also, the TDG Regulations which existed in 1992 already contained provisions to exclude some private activities on private properties, implying that without this exclusion, the requirements would have applied.

We still receive requests to exclude a field of activities or a sector of industry from the application of the *TDG Act*. Because of the nature of the Act, these are denied. Instead, we work with applicants to document the manner in which they intend to provide an equivalent level of safety and we then treat their request as a permit application. There are cases where the threat to public safety is so low that we can exclude the application of some requirements. This is normally done in the TDG Regulations.

In conclusion, it is unlikely that this review will lead to a decrease in the field of application of the *TDG Act*.

Can it lead to an increase? In subsection 3(2), there is a reference to ships and aircrafts registered in Canada. The Act applies to any Canadian registered ship or aircraft, even if it is not in Canada. This reference comes from the *United Nations Convention on the Law of the Sea* where ships may be exempted from territorial laws of a State as long as the ship is engaged in what is known as innocent passage². Of course, if the ship docks or is involved in activities that directly affect the sovereignty of the visited country, then the ship may be subject to the laws of that country.

Thus, when dangerous goods are loaded into or unloaded from a ship or an aircraft in Canada, the activity may be subject to the *TDG Act*. However, it is not clear, because of the conventions and associated traditions, whether the *TDG Act* applies to any dangerous goods that are transported through Canadian maritime economic zone or air space, if the goods are not loaded, unloaded or handled in Canada.

Since the adoption of the *TDG Act* in 1992, many changes in world affairs lead us to believe that there is a need for an explicit statement in the *TDG Act* to clarify its authority over dangerous goods transported through Canadian waters and Canadian airspace.

One scenario to which such an authority would apply is the possible transport of plutonium between Japan and Europe, either by ship through the North-West passage, or by air through Canadian airspace.

B-2. Estoppels

In the context of TDG, estoppels result from the application of a principle of law by which an authority may waive prosecution despite an apparent infraction. It exists outside the framework of any specific piece of legislation. For example, when a police officer gives you a warning to get a headlight fixed on your car, you are benefiting from the principle of the estoppel as the police officer agrees to not give you a ticket if you proceed in a reasonable fashion to repair the headlight.

Normally, estoppels are to be used in situations where the risks associated with the infraction are sufficiently small that, with some conditions, continuing transport for a short time does not increase the threat to public safety. But they can be used in more risky situations where all other procedures are even more risky. An example would be to allow the transport of a defective rail car because it should be more of a risk to try to repair it in the middle of town. Of course, in these cases, conditions form part of the agreement.

Of course, if there is an accident, the estoppel does not absolve anyone from being in non-compliance at the time of the accident.

Over the last decade, estoppels have been used in the transportation of dangerous goods to reduce risk, but not to the level of safety of full compliance, something for which there is no specific authority in the *TDG Act*.

B-3. Notices of defect (also known as Recalls)

The notices described in subsection 9(2) of the *TDG Act* cover only defective construction and apply only to manufacturers or importers of standardized means of containment. It is proposed to extend the application of subsection 9(2) to cover defective repairs, testing, etc., and to persons who distribute the means of containment.

² Innocent passage: The right of all ships to engage in continuous and expeditious surface passage through the territorial sea and archipelagic waters of foreign coastal states in a manner not prejudicial to its peace, good order, or security. Passage includes stopping and anchoring, but only if incidental to ordinary navigation or necessary by force majeure or distress, or for the purpose of rendering assistance to persons, ships, or aircraft in danger or distress.

The details would be in the TDG Regulations. In practice, the notice of recall would be applied if there were reasonable grounds to believe that a certain type of repair affected the safety of a group of means of containment (by category, date, location). For example, all means of containment that were repaired at XYZ shop between the dates of XX and YY and where the repair involved Method A welding. In such a case, the repair shop would be required to issue a notice to all customers who had a means of containment welded, using Method A, between these dates.

The Regulations would also have fallback positions and an appeal process.

The same principles could apply to persons who design, test, recondition, recycle, fill, etc. as long as the means of containment were still intended to be used for transporting dangerous goods.

Please note that a recall need not require the physical return of the means of containment.

B-4. Emergency Response Assistance Network

Section 7 of the Act establishes the requirement to have in place an Emergency Response Assistance Plan (ERAP) before offering for transport or importing certain dangerous goods. In Canada, industry went further and set up a high quality network of emergency responders. They provide assistance to public responders, even in cases that do not involve a company's own dangerous goods (e.g. similar substances, competitor's dangerous goods).

However, this puts them at a global disadvantage against countries without such programs. This disadvantage may prompt the reduction of the added benefits that Canadians get from the industry programs. How can industry be encouraged to maintain these programs?

One way is to provide liability protection similar to section 20 of the *TDG Act*. Should we do more, such as mandate response times? Provide for direct activation of response plans rather than the indirect activation used today?

B-5. People who screen persons or means of containment

There are people who are responsible for screening persons or means of containment to ensure that they

are not carrying dangerous goods or are not loaded with dangerous goods, or that they are in compliance with the requirements of the *TDG Act*. More and more, screening personnel work for organizations that do not offer for transport, handle, transport or import dangerous goods. The Act does not apply to them nor do they have any power under the Act.

There is a need to ensure that screening personnel are trained to recognize dangerous goods and to understand what requirements apply to the goods, to the persons or to the means of containment. The responsibility for this training would, under the traditional approach of the *TDG Act*, rest with the employer of these persons.

There may also be a need to provide some duties to the screening personnel, such as the obligation to report that a person or means of containment is not in compliance with the TDG Regulations. If the screening is done by the carrier, then there is no problem as the carrier controls who or what is transported and under what conditions. In this review, we must deal with the situation where the screening personnel are neither employees nor representatives of a carrier, such as Customs officers and screening staff at airports.

B-6. Readily available documents

The *TDG Act* provides sufficient authority to regulate how shipping documents are kept and made available by persons who handle, offer for transport or transport the dangerous goods described in the document.

Sometimes, copies of the shipping documents are kept in offices and end up being used in case of emergency. In the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* published by the International Civil Aviation Organization, there is a requirement to keep a copy on the ground while the goods are transported so that it “*must be readily accessible to the aerodromes of last departure and next arrival point, until after the flight.*”

It is unclear whether the *TDG Act* applies to the persons retaining the copies, especially if third parties are involved (as in B-5). It is unclear if the authority to inspect can fully apply to persons who hold documents on behalf of regulated persons, but who are not themselves persons who handle, offer for transport or transport dangerous goods. Sometimes, especially in multi-modal situations, an electronic

version of the document is sent directly to a subsequent carrier while the paper document remains with the dangerous goods. The electronic document goes through third parties like agents and brokers who are not handling, offering for transport or transporting.

Are agents and brokers part of the chain responsible for producing or retaining copies of shipping documents?

B-7. Application of requirements in standards for means of containment

The standards under which means of containment are designed, manufactured, repaired, reconditioned, tested, filled, etc., state that certain persons have to register with Transport Canada.

However, the *TDG Act* does not apply to many of these persons in a manner that could make the standard requirements applicable by law. The standard may specify a quality control system but the requirements of such a system cannot be enforced.

There is a link between issues B-7 and B-3. However, they are distinct issues.

B-8. “Non-Dangerous Goods” carriers

There are many carriers who declare themselves “non-dangerous goods” carriers.

Air carriers must explicitly declare in their Operations Manual, approved by Transport Canada, whether they will carry dangerous goods or whether they are “non-dangerous goods” carriers. In other modes, carriers do not have to advise Transport Canada; however, they may have to advise others, e.g. their insurance company.

Should the *TDG Act* apply to these non-dangerous goods carriers to ensure that their staff is trained to recognize the presence of dangerous goods or security problems associated with dangerous goods? There may be links to issues A-3, A-4, and B-5.

B-9. Operating conditions

Should the *TDG Act* provide authority to regulate vehicles carrying dangerous goods for such things as special speed limits or more frequent mechanical inspections? Should we regulate other conditions

under which dangerous goods should or should not be transported, or routes to be used?

One possible area where the discussion could take us is whether the *TDG Act* should provide authority to forbid dangerous goods from being transported under certain weather conditions. In practice, the details would be found in the *TDG Regulations*. For example, weather limits could differ from one category of dangerous goods to another or from one mode of transport to another.

The Web site provides examples of accidents where weather conditions may have played a role in increasing the threat to public safety.

B-10. Undue threat to public safety

There are cases where a TDG regulated activity is done in a manner that creates undue risk to public safety. For example, if a means of containment is involved in an accident and there is visible damage to the means of containment, yet one knowingly continues to transport the dangerous goods in that means of containment, it may create a threat to public safety that is greater than that implied by “using a means of containment that is not in standard.” In such cases, we can proceed by indictment (section 33). However, if the damage is not to a part of the means of containment regulated by TDG, such as the tires on a road vehicle, there may be a threat to public safety not recognized in the TDG legislation. There are cases where the threat can be significant.

The Criminal Code can be used to cover some of these cases; unfortunately, we may have to wait for a death or extensive pollution before being able to proceed. The idea is to ensure that dangerous goods are transported safely at all times, including after an accident to the means of transport.

Should the *TDG Act* specify that a means of containment or a vehicle involved in a reportable accident cannot be used to transport dangerous goods unless it has been inspected by the appropriate authority and declared to meet all standards and requirements?

Should the *TDG Act* have some general provision that creates an offence for the handling, offering for transport or transportation of dangerous goods in a manner that creates undue threat to public safety?

B-11. Examining failed means of containment

Means of containment sometimes fail to the extent that it is unreasonable to repair them in a manner that would put them back into compliance. TDG Inspectors should be authorized to request, for the purpose of examination, all or a portion of the means of containment that have failed, especially those that have failed during normal conditions of transport (including cases where there were no infractions). The purpose of the examination is to discover how the means of containment failed. The examination may include, for example, sectioning the means of containment for analysis.

C. Concepts which are thought to be covered in the current TDG Act

In this section, we are not seeking new authorities but rather we want to fix some of the wording so that the Act can be applied in the intended manner. This is based on documentary evidence, for example “Behind the Words”, an interpretation document prepared from Parliamentary documents used for Committee readings in the House and in the Senate.

C-1. Standardized means of containment

Because of the manner in which the phrase “standardized means of containment” is used throughout the Act, there remain situations where a means of containment used to transport dangerous goods could present a threat to public safety and where there is doubt as to the applicability of the *TDG Act*.

For example, imagine someone knowingly or unknowingly distributing, as standardized, a non-standardized means of containment. As soon as we prove that the means of containment is not standardized, do we lose the authority to order a recall? Does an inspector instantly lose the authority to inspect under sub-paragraph 15(a)(ii) the means of containment suspected of being non-standard? This is not what the legislator wanted.

Also, do we need an explicit prohibition in the *TDG Act* to prevent the use of a means of containment that is not in compliance with the standards that are supposed to apply to it? Do we need to prohibit filling a tank which is not in compliance? Does

filling a tank beyond the quantity limit set out in the standard render the tank non-compliant?

C-2. Persons offering for transport to themselves

The wording of the Act appears to treat the person who offers for transport and the person who transports as two separate persons. Interpretations in 1992 were that the *TDG Act* would clearly apply in cases where the two are the same individual. Policy documents prepared in early 1992 confirm that this was the original intent of the legislator.

However, it appears that interpretation may not be as solid as first thought. Maybe a simple sentence in the definitions (or elsewhere) could be sufficient.

C-3. Safety marks

Throughout the Act, we use this term to speak of marks intended to indicate the presence of a danger and of marks intended to show that a means of containment meets a standard.

Clearly, there are two categories of marks. We should find two short distinct names for them, other than “dangerous goods safety marks” and “certification safety marks”. What about danger marks and certification marks?

C-4. Importer

When the *TDG Act* gave the importer the same duties as the person offering for transport, it was thought that there would always be a person in Canada who would ensure that the dangerous goods are transported in compliance with the requirements.

There must always be at least one person in Canada who is legally responsible of the goods. This is the person we would turn to should there be a problem.

The current Act does not mean to include agents or brokers in the definition of “importer”. Is it clear enough?

C-5. Documents that an inspector may request or see

We thought we had everything covered (e.g. computer files). However, technology moves even faster

than we thought. Also, we have missed certain older formats that are still in use (e.g. microfilms). A change in definition may be sufficient (which would make this a category D issue) but be careful with the link to issue B-6.

C-6. Privileged information

Information communicated to CANUTEC is privileged by virtue of paragraph 24(1)(b). The legislator wanted to make sure that persons facing a threat to public safety posed by dangerous goods would feel free to contact CANUTEC and ask any question without worrying about how their question would be interpreted after the fact.

Such conversations and the information they contain are privileged. However, we use that information to prepare internal documents. Are the internal documents (or the part containing the privileged information) privileged information?

C-7. TDG Inspector authority

We claim that the authority of TDG inspectors, for the purposes of this Act or any of its provisions, are clearly described in the TDG Act. Not everyone agrees.

C-8. Federal-Provincial-Territorial discrepancies in legislation

We claim that the Act contains sufficient authority (e.g. section 4, Agreement with Provinces) to resolve any discrepancy in legislation including wording and application of the wording.

In general, all provinces and territories have adopted, in their own TDG Regulations, wording that is identical or equivalent to the wording of the federal TDG Regulations.

Some provinces have added requirements that are unique to their needs (e.g. Quebec and British Columbia have requirements specific to tunnels.) These additional requirements do not cause any conflicts.

However, some comments suggest that there may be cases where words in a provincial regulation are not interpreted in the same manner as the same words in the federal legislation. This is a discrepancy in the application of the wording. These cases are rare; however they can be very annoying.

Can the *TDG Act* do more than it already does to enhance agreement among levels of government?

D. Fixing the wording

Some portions of the Act are not as easy to interpret because sentences are complex, the words are subtly different between the English and French versions or we use defined words in a way that does not quite fit the definition. Sometimes words have to be changed because we refer to another Act which has changed name.

We have received many requests to examine a word. There may be hundreds of words to be examined during this review. We believe that most will remain unchanged because a similar examination was done when the *TDG Act* was written in 1992.

We do not list all the words to be examined. Below are examples:

D-1. Permits

The word “permit” is misleading in that no one requires a permit to comply with the *TDG Act*. The TDG permit is a permission to deviate from the Act. In general, it is false for anyone to state that they cannot offer for transport or transport their product unless they are granted a permit because the dangerous goods can be offered for transport and transported in compliance with the TDG Regulations. There is a suggestion that the term “permit for equivalent level of safety” be changed, to “certificate of non-compliance” or some other similar term.

Furthermore, because “permits” become part of the prescribed manner in which one may transport dangerous goods, we have tried to make the information available. Anyone may find out which permits exist for a particular dangerous goods and review the conditions under which these goods can be carried with an equivalent level of safety.

Some persons have suggested that the system used to make permit information available is not user-friendly and should be improved. This suggestion has been passed on to the appropriate Branch in the TDG Directorate.

If we grant a permit under the federal *TDG Act*, does provincial law still apply (and vice-versa)? Should there be a permit application fee?

D-2. Emergency Response Assistance Plans

There is discussion on "Who is responsible for having an ERAP?" In Transport Canada, the answer seems clear. It also seemed clear in Parliament in 1992.

The discussions focus more on the interpretation of some details in the application of the wording in the *TDG Act* and Regulations, not really on changing the words in the Act.

However, depending on how the discussions evolve, there may be an impact on the wording of the Act.

D-3. All words defined in section 2 of the Act (and any word used in the Act)

We have received requests to examine over one hundred words. We will not list them here; however we may compile them as a separate list. We'll see in the Spring of 2004.

E. Automatic issues

Every time a legislative text is reviewed some issues are automatically raised: is this legislation still needed? are the objectives still valid? does it interfere with other programs? are there unwanted overlaps? does it support government goals?

We do not know in advance what issues, if any, will lead to changes in legislation requiring Cabinet approval. Notwithstanding, as a policy, Transport Canada usually applies tests similar to the ones listed below, to its initiatives.

In a Memorandum to Cabinet, we must address issues such as:

E-1. Impact on the environment

The TDG Program contributes to the Government's objectives regarding the environment. In particular, we must ensure that we do not create any conflicts with legislation intended to protect the environment, for example the *Canadian Environmental Protection Act (CEPA)*.

In addition, Transport Canada has a policy on protecting the environment. Any proposal submitted for the approval of the Minister must meet the requirements of Transport Canada's Strategic

Environmental Assessment (SEA). Although we believe that the TDG Act has no negative impact on the environment, since no one is required to routinely conduct activities that may hurt the environment, we must still look at any proposed changes in light of the SEA.

E-2. Impact on trade and competitiveness

Safety costs money. In a public safety program applied to transportation, this is a delicate topic as the cost is mostly borne by one group, the industry, for the benefit of another group, the public.

Wherever possible, the *TDG Act* provides a high level of public safety for a relatively low marginal cost in equipment, devices and upgrades. In addition, flexibility is built into the requirements so that the regulated persons are normally presented with various ways of delivering an equivalent level of public safety while offering for transport or transporting dangerous goods.

We have to ensure that these principles continue to serve us whenever we modify the *TDG Act*.

E-3. Federal-Provincial-Territorial considerations

Any modification to the *TDG Act* must continue to take into account jurisdictional divisions of power between the levels of government. In addition, we must continue to ensure that the *TDG Act* allows the federal government to discharge its duties and allows the provinces and territories to discharge theirs.

Finally, given that the TDG Program has led to a very harmonized set of TDG requirements at all levels, we must ensure that any change to the Act does not harm the level of harmonization.

E-4. International and inter-program harmonization and reciprocity

We have to ensure that any proposed modification does not harm trade efficiency or set up trade barriers unless there is a strong public-safety reason to do so. We have to ensure that any proposed modification does not interfere with Canada's obligation, under multilateral agreements, on the environment or trade, for example.

Because the TDG Program is harmonized at the global level and integrated with other domestic and

international programs, we expect that any proposed modification that would interfere with this concept would also interfere with the TDG Program. We will have to explicitly verify the impact of each proposed modification.

E-5. Links with other programs

We will have to analyze the possible impact of any modification to the *TDG Act* on other programs within Transport Canada, at the federal level (the Criminal Code) and at the provincial level. This is where one would discuss overlaps and dual coverage which means two Acts covering the same activity but from different points of view.

It is generally accepted that the *TDG Act* does not pre-empt other Acts and that other Acts cannot pre-empt the *TDG Act*. Therefore, it may very well be that more than one Act applies simultaneously to the same activity.

As a minimum, we must not create conflicts in law, that is situations where the only choice that a person has to comply with one Act is to commit an infraction against another. We must also look at situations where compliance is still possible but very difficult.

E-6. Link with other government priorities

Other government policies are usually announced in the Speech of the Throne. The policies that will apply to proposed modifications to the *TDG Act* will be known as we get closer to Fall 2004. As a minimum, the priorities listed above (E-1 to E-5) will apply.

E-7. Relevance of the program

This issue is subsumed in the E issues, especially E-6. However, in 2004, the Government explicitly identified six questions as a test of program relevance. They are:

- Does the program continue to serve the public interest?
- Is this a legitimate and necessary role of government?
- Is the current role of the federal government appropriate?
- Are there parts of the program that could be

transferred to other sectors or to other levels of government?

- Can the program be made more efficient?
- Is the program affordable?

F . Issues outside the scope of review

We have received comments which we do not believe are issues for the review of the *TDG Act*. In some cases, it is because the issue deals with the Regulations rather than the Act. In such cases, the issue was passed on to the appropriate Branch in the TDG Directorate.

Other issues are covered by other federal or provincial legislation in Canada while others are not directly aimed at the promotion of public safety.

Of course, that is based on our opinion. We have listed the issues below in case our opinion needs to be adjusted. If you feel that we have misunderstood the issue and that it should not be set aside, please let us know.

F-1. Consolidated implementation guideline for “Clear Language” TDG Regulations.

The comment dealt with the manner in which the TDG Regulations should come into force. An issue with regulations or enforcement.

F-2. Notice requirement for amendments to Regulations to be more detailed in the Act.

In the *TDG Act*, only section 30 addresses this issue. However, the manner in which amendments to Regulations can be presented is already subject to other legislation and government policies which establish detailed procedures.

F-3. Harmonization with USA

The Act already provides sufficient authority to recognize international and other countries’ requirements where it is advisable to do so, usually as alternative ways of complying. However, the topic can still be discussed under issue E-4.

F-4. “Ticketing”

Should the provisions of the *Contraventions Act* be extended to provide for ticketing of TDG offences under the *TDG Act*? This is already possible. Whether it should be done is an enforcement issue.

F-6. Road Tunnels

Two provinces, Quebec and British Columbia, already have requirements dealing with dangerous goods in road tunnels. There does not appear to be a need for the *TDG Act* to be involved.

F-5. Misleading safety marks (section 6 of the TDG Act)

The Regulations are clear (we hope) as to when a safety mark is required. However, there is some doubt as to when a safety mark is forbidden. For example, if a truck carries more than 500 kg of propane, a placard is required. If a truck carries no propane, then it is clear that a mark, such as a placard or a UN number indicating that it carries propane, is misleading.

Somewhere, as the quantity on board goes down, there is a point where the mark become misleading. Is it 500 kg? 400 kg? 300 kg? 250 kg? It appears to be an issue for “enforcement.”

Number of Calls

Technical	2 924
Regulatory	1 503
Information	2 999
Other	1 687
Total	9 113
Emergency Calls	396



November 1, 2003 to February 29, 2004

Emergency Calls by Location

British Columbia	22
Alberta	38
Saskatchewan	2
Manitoba	6
Ontario	75
Quebec	57
New-Brunswick	14
Nova Scotia	1
Prince Edward Island	0
Newfoundland	0
Northwest Territories	0
Yukon	0
Nunavut	0
United States	14
International	0

Source of Emergency Calls

Fire Dept.	55
Police Dept.	16
Hazmat Contractor	10
Carrier	63
End User	16
Manufacturer	7
Government	16
Private Citizen	13
ER Centre	5
Poison Control	4
Medical	6
Others	4

Emergency Calls by Class of Dangerous Goods

Class 1 - Explosives	2
Class 2 - Compressed Gas	74
Class 3 - Flammable Liquids	47
Class 4 - Flammable Solids	1
Class 5 - Oxidizers and Organic Peroxides	9
Class 6 - Poisonous and Infectious Substances	16
Class 7 - Radioactives	2
Class 8 - Corrosives	80
Class 9 - Miscellaneous	4
NR - Non-regulated	29
Mixed Load -	0
Unknown -	13

Emergency Calls by Transport Mode

Road	46
Rail	61
Air	4
Marine	3
Pipeline	0
Non transport	115
Multimodal	0

Rail Transportation

By Julia Cloutier

This article is the last in a series of four articles that were published on the history of the transportation of dangerous goods program through the modes of transportation used to move the goods; namely, marine, air, road and rail.

Railways were a new technology. They promised access to parts of Canada that were previously too remote for commerce to reach. Dangerous goods needed to travel these rails to reach far destinations. Many of the proliferate number of small rail companies could easily be tempted to cut corners when it came to transporting these goods safely. Fortunately, at the time, trains were fewer in number and they had fewer cars. The goods they brought back and forth were in smaller quantities and the trains were much slower.

That was the environment of 1873 when the first Act on rail transportation was introduced, in which all manner of safety regulations of the time were provided for. Included were measures to make transportation of dangerous goods safer. The Railway Act was the main legislation on this topic for most of the 20th century. Yet, that Act was not the only regulating element in the transportation of dangerous goods. Canada was deeply influenced in this area by the United States. The United States Interstate Commerce Commission, following a petroleum product accident in Pennsylvania in 1906, began the process for more hazardous materials regulations which had an impact on Canadian rails. The 1920's produced in the U.S. the *Regulations for Explosives and other Dangerous Articles*. The American and main Canadian rails belonged to the Association of American Railroads (AAR). For trade to continue smoothly, standards were set that Canada adopted - standards which ran from maintenance and testing to packaging and construction.

In the mid-nineteen sixties, a twenty-eight car derailment in Ontario spilled about 150,000 gallons of sulphuric acid, prompting a federal inquiry. This inquiry produced direct results. More dangerous goods inspectors and changes to some types of valves were pushed for. In 1968, all the powers of the enforcement of transportation of dangerous goods legislation bestowed on the Board of Transport Commissioners were transferred to the Canadian Transport Commission (CTC) by Parliament. In

1972, its transportation of dangerous goods section had two professional employees and one field inspector.

The CTC wore many hats, from regulator to enforcer to accident investigator to recommendations' maker. The CTC also had to monitor variations between rail and other transportation modes as dangerous goods were often moved from another mode to rail flat cars. Included in this process was the precursor to Canutec – the Emergency Response Forms that provided pertinent information in case of accidents, from the name and type of product to who should be contacted and what actions should be taken if spills occur. Rail transportation of dangerous goods had to meet the requirements of the CTC Dangerous Goods Regulations.

The powers of CTC over dangerous goods stemmed from the *Regulations for the Transportation of Dangerous Commodities by Rail*. Canada's legislation was nearly identical to U.S. legislation on transportation of dangerous goods. This was deemed necessary to keep tabs on the growing industry that crossed borders frequently. And growing it was, especially with dangerous goods. More and more of the products produced in Canada involved dangerous goods at some level.

All of this had the potential to affect dangerous goods legislation at the deepest level. With the CTC having to play so many roles, there was growing room for problems. Those who studied the CTC often remarked that the potential for overlooking hazards was great. It set rules on the types of cars to use, investigated accidents, and later made recommendations on how to prevent future accidents. There was also the potential for conflicts of interest. However, this did not immediately concern many. First of all, most saw no infractions or abuse of authority. Secondly, safety in the transport of dangerous goods was not a priority in the public mind. For the average individual, specific legislation on the handling and carrying of dangerous goods in rail transport was not a concern.

Yet someone was thinking about it. Committees were already underway, set up by Transport Canada for various interest groups, to analyse the steps needed to reform the system. Growing differences between highway transportation and the rail mode was prompting experts to re-evaluate dangerous goods transportation. Rail was under Federal jurisdiction, and road transportation was under each of the provinces separately. The regulations the CTC placed on hazardous substances were uniform, though many substances were necessarily overlooked in the regulations as priorities in the 1970's were different and the personnel to enforce the regulations were few in number. Trucks on the other hand had regulations that varied from area to area, sometimes with fewer regulatory hurdles depending on where the goods were going. The air and marine modes were also different. Consistency was needed. What began as planning an Act to regulate road transportation of dangerous goods in a manner similar to what the other modes had evolved into something much greater.

The Act was no longer just for the road, but for all modes of transportation. Rail transportation of dangerous goods now fell under the jurisdiction of the *Transportation of Dangerous Goods Act* of 1980. This Act was partly shaped by the need to co-ordinate these two competitive modes, rail and road. New needs in the transportation of dangerous goods, because of changing industries and growing public awareness, prompted the TDG Act of 1980.

On November 10, 1979, a serious derailment occurred in Mississauga. The 24 derailed cars consisted of 11 cars of propane, 4 cars of caustic soda, 3 cars of styrene, 3 cars with toluene, 2 cars of fibreglass, and one tank car of chlorine gas. The propane tanks burned for days. Worse yet, 240,000 inhabitants had to be evacuated from their homes, as the green chlorine gas escaped and floated with the wind towards residential areas. The public was now aware of the hazards of dangerous goods. Parliament had no trouble agreeing with the need for more regulations on dangerous goods. Rail transportation of dangerous goods was now included under one single Act that would cover all modes.

It has been said that the *TDG Act* of 1980 was a result of the Mississauga derailment. This is not true. The Act would likely have gone through Parliament in any case. Yet, the legislation went through its three parliamentary readings in almost record time because of the incident. More importantly, it marked the

beginning of public awareness on the transportation of dangerous goods.

Under the *National Transportation Act*, the CTC was dissolved by Parliament with some of its former responsibilities being transferred by legislation to Transport Canada, inclusive of the responsibility to create regulations in the transportation of dangerous goods, while some other powers were transferred to the National Transportation Agency (NTA). Through the Canadian Transportation Accident Investigation and *Safety Board Act*, the Transportation Safety Board was given the power to investigate railway accidents and make recommendations to enhance safety and prevent future accidents (sometimes because of the recommendations of the Transportation Safety Board, Transport Canada would change its regulations.) For many years, the Federal Railways of Canada were subject to the provisions of the Railway Act, however, in 1989 the Railway Act was replaced by the *Railway Safety Act* and was designed to achieve the goals of the National Transportation Policy relating to rail safety. This Act gives jurisdiction to the Minister of Transport relating to safety matters involving the railway companies coming under Federal jurisdiction.

The most recent step in dangerous goods legislation that pertains to the rail mode was the revision of the *TDG Act* of 1980. It was apparent for all modes that too many loopholes existed, and that not enough dangerous goods were covered. The revisions in 1992 for shipping of dangerous goods by rail were not as extreme as the previous changes in legislation.

Rail transportation of dangerous goods is as old as the rails themselves. From the beginning, legislation was created out of fear that serious accidents would occur, such as the derailment in Mississauga. As demands for materials made from these dangerous goods grow, the legislation has evolved to keep pace and better meet the needs of the public for a safe transportation system.

If you have any questions or would like to comment on this article, please contact Edgar Ladouceur, Director, Compliance and Response at ladouce@tc.gc.ca or 613 998-6540.

Transportation of Some Dangerous Goods as Waste

By Stéphane Garneau

The new *Transportation of Dangerous Goods Regulations* (TDGR) came into force on August 15, 2002 and brought changes for the consignors and carriers of dangerous goods that are a waste. The Regulations no longer list specific wastes separately in Schedule 1 although some substances that are most often waste (eg. UN2315 POLYCHLORINATED BIPHENYLS - PCB, Class 9, Packing Group II), are still included in the Dangerous Goods List. Dangerous goods are generally treated the same way whether or not they are intended for disposal, recycling or for use, as it should be the case since the risks are the same.

One other significant change is the requirement to package Class 3, 4, 6.1, 8 and 9 dangerous goods for transport in UN standardized small means of containment (450L or less) or UN Intermediate Bulk Containers (IBCs). The TDGR refer to safety standards based on the *UN Recommendations for the Transportation of Dangerous Goods* (the Orange book) for packaging requirements. Standardized small means of containment and IBCs are thus collectively referred to as “UN Packaging”.

The standards for packaging of dangerous goods in highway tanks and railway vehicles have been updated as well but these updates do not represent a significant change for the transportation of waste in Class 9 that are in large means of containment (more than 450L). You are invited to consult the standards for the detailed requirements applicable to all classes of dangerous goods.

The Dangerous Goods Table has two entries that are of special interest to waste collectors and haulers: the Class 9 entries UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. and UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. These dangerous goods are most often wastes contaminated by one or more substances considered as hazardous for the environment. Section 2.43 of the TDGR contains the names and concentration of specific contaminants that would lead to these substances being regulated as dangerous goods in transport. It must be noted that

only the goods intended for disposal must be classified as dangerous. The same substances or mixtures shall not be classified as dangerous when they are waste intended for recycling or products intended for sale or use, unless they meet the criteria for inclusion in one or more of classes 1 to 8.

There are however cases where substances such as these ENVIRONMENTALLY HAZARDOUS SUBSTANCES are regulated as “dangerous goods” by modal regulations (eg. the IMDG Code for marine transport). If such a consignment is then transported by road after the marine leg of its journey, the container or tank may continue to display Class 9 labels or placards and/or be accompanied with the shipping documents identifying the substances as dangerous goods. Consignors must also know that the *Transportation of Dangerous Act* 1992 (TDG Act) specifies in Section 42 that, unless proven otherwise, such substances must be considered as “dangerous goods” if the container displays a safety mark indicating the presence of dangerous goods or if the consignment is accompanied by a prescribed document establishing the content as “dangerous goods”. Unless the “danger” safety marks are removed and the shipping documents amended, the consignment must be transported as “dangerous goods” by road as well.

As well, it may happen that hazardous wastes intended for recycling are accompanied by a manifest listing the substance as one of the ENVIRONMENTALLY HAZARDOUS SUBSTANCES. This happens when regulations such as the *Interprovincial Movement of Hazardous Waste Regulations* under the *Canadian Environmental Protection Act* mandates it. In such a case, the consignor may want to clarify in the shipping document that the consignment is not a dangerous good under the *TDG Act* and that the consignment is considered to be an ENVIRONMENTALLY HAZARDOUS SUBSTANCE due to regulations other than the *Transportation of Dangerous Goods Regulations*.

The packaging requirements for dangerous goods are found in Section 5 of the TDGR. For road transport

in large means of containment, the shipper has the choice between two safety standards referenced by the TDGR. For a portable container such as a flexible IBC (a supersack or tote bag), a crate, or a tote, the consignor must refer to the CAN/CGSB-43.146-2002, “*Design, Manufacture and Use of Intermediate Bulk Containers for the Transportation of Dangerous Goods*” standards. Portable tanks are addressed in CAN/CSA B621-98, “*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*”. Only the CSA B621-98 standard is applicable in the case of a tank that is permanently mounted on the chassis of a truck or trailer (highway tanks).

For transportation by rail, the CAN/CGSB-43.147-2002, “*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*”, as well as the CGSB 43.146-2002 mentioned above, may be used.

The CSA B621-98 standard allows the transportation by road of Class 9 dangerous goods, such as the aforementioned UN2315, UN3082 and UN3077 in non-standardized large means of containment that meet the general requirements of both the TDGR and

Part 4 of the standard. This means that “specification tanks” such as TC 406, TC 407, TC 412 or TC 423 are not required for these dangerous goods.

Small means of containment must be “UN Packaging” for the transportation of these Class 9 substances. A number of Permits of Equivalent Level of Safety have been issued to allow non-specification packaging to be used when the circumstances are warranted. Part 14 of the TDGR sets out the conditions for permit applications.

This article is a summary of the requirements applicable to a limited number of substances. Always refer to the Regulations and Safety Standards for the detailed requirements applicable to your situation. Some links and sources for the standards are provided below. The Safety Standards are consensus documents developed within the National Standard System and you are always welcome to participate to their development.

TDGR : <www.tc.gc.ca/tdg/menu.htm>

CSA B621-98: CSA International 1 800 463-6727, <www.csa.ca>

CGSB 43.146-2002 and 43.147-2002: *Canadian General Standards Board* 1 800 665-2472, <www.pwgsc.gc.ca/cgsb>

Use of Methanol in Tank Trucks / Aviation Refuellers that Transport Aviation Fuel

By Lorne Wedge

The purpose of this notice is to share with the industry a lesson learned from a recent CSA B620 series of tests and inspections that were carried out on an Aviation Refueller.

It has come to our attention that, especially during winter conditions, some service providers who carry out the CSA B620-98 hydrostatic tank test may use methanol as a de-icer to prevent ice from forming and to stop valves from freezing after the hydrostatic test has been completed. Methanol is not an approved additive for any aviation fuel. Further research indicates that, where methanol is introduced into jet fuel, the methanol may extract the Fuel System Icing Inhibitor (FSII) from the jet fuel creating a methanol/FSII mixture that, while it will not freeze, can become very viscous at cold temperatures. The effect that a methanol/FSII mixture can have on an aircraft filtration system is unknown.

As a reminder to industry service providers who work on Aviation Refuellers, we would request that methanol must never be used in conjunction with flight fuels.

Should you require further information, please contact Mr. Lorne Wedge at 416 218-7232 or email to: r.lorne.wedge@esso.ca

Subject: Invitation to Comment on Draft Regulatory Guide G-314, Implementation of Radiation Protection Programs by Consignors, Carriers and Consignees of Radioactive Material

By Albert Thibert

As indicated in the Fall 2003 Newsletter, the Canadian Nuclear Safety Commission (CNSC) is pleased to announce the issue of the Draft Regulatory Guide, G-314, Implementation of Radiation Protection Programs by Consignors, Carriers and Consignees of Radioactive Material for a one-year trial use, public review and comment period.

The purpose of the Draft Regulatory Guide is to help consignors, carriers and consignees of radioactive material implement, by June 1, 2004, a Radiation Protection Program in accordance with regulatory requirements and the purpose of the *Nuclear Safety and Control Act*. The proposed Regulatory Guide will be of particular interest to carriers who are regulated but not licensed by the Canadian Nuclear Safety Commission (CNSC). Consignors, carriers and consignees who are licensed by the CNSC are covered by the Radiation Protection Program implemented through the CNSC's licensing process.

Comments

The CNSC invites affected stakeholders and interested persons to assist in the further development of this draft regulatory document by commenting in writing on the document's content and usefulness. The draft regulatory guide is being issued for a one-year public consultation and trial use period.

Direct your comments to the e-mail address below by March 31, 2005, referencing file 1-8-8-314. The CNSC will take the comments received on this draft into account when developing it further. These comments will be subject to the provisions of the federal *Access to Information Act*.

Document Availability

This document and other similar guides can be viewed on the CNSC Web site at: www.nuclearsafety.gc.ca. To order a printed copy of the document in English or French, please contact the Regulatory Standards and Research Division at: consultation@cnsccsn.gc.ca.



Transportation by Road of Diesel Fuel and Heating Oil in Non-Specification Tanks

By David Lamarche

Diesel or heating oil may be transported until January 1, 2010 in non-specification tanks larger than 450 litres, according to Specific Requirement 5(b) of CSA Standard B621-98. To comply with Specific Requirement 5(b), tanks must be inspected and tested annually (please refer to CSA B621-98 section 8.4, Specific Requirement 5(b) and CSA B620-98 sections 5.6.13 and 8 for the inspection and test requirements).

In December 2002, a Permit for Equivalent Level of Safety (Permit No. SH6216) was issued to provide a two-year extension to qualify existing means of containment of 5 000 litres or less under Specific Requirement 5(b) of CSA B621-98. For an explanation of the permit, please consult the article “*Two More Years for Diesel Fuel in Non-Specification Slip Tanks*”, in the Winter 2002-2003 edition of the TDG Newsletter, available at the following Internet address: <www.tc.gc.ca/tdg/newsletter/winter2002-2003.htm#5>. Any non-specification portable tank larger than 450 litres that is used to transport diesel or heating oil by road, must be inspected and tested for the first time before January 1, 2005, and must then be inspected and tested annually until January 1, 2010. After that date, non-specification tanks greater than 450 litres in capacity will no longer be permitted for transportation of diesel or heating oil.

According to CSA B620-98, the inspections and tests required to comply with Specific Requirement 5(b) of CSA B621-98, must be performed by facilities registered with Transport Canada for inspection and testing of TC 406/306 Specification tanks. The list of the registered facilities is available on the Transport Canada Web site at: <www.tc.gc.ca/tdg/info/moc/tank/tankform_e.htm>. Several of the registered facilities have mobile units and can perform inspections and tests in the field: therefore, you do not necessarily have to bring your portable tank to the facility to have it tested and inspected. As well, tanks may not have to be empty during the inspection or test, depending on the testing method used.

Owners of fleets of tanks may consider registering themselves as inspection and test facilities under CSA B620-98. Registration requirements are described in section 9 and Appendix B of CSA standard B620-98. Because a comprehensive file has to be submitted in order to register a facility with Transport Canada, prospective applicants are encouraged to initiate the registration process early.

A summary of the regulatory requirements for the transportation of diesel fuel in portable tanks can be found on the Transport Canada Web site at the following address: <www.tc.gc.ca/tdg/newsletter/summer2002.htm#5>. If you have any questions on these issues, please contact Kevin Green at 613 998-5270 or David Lamarche at 613 993-5022.

Upcoming Events in TDG...

Federal-Provincial-Territorial TDG Task Force meeting

June 9, 2004
Ottawa, Ontario

TDG General Policy Advisory Council meeting

June 10, 2004
Ottawa, Ontario

“TDG Congress - 2004” -

**What have we learned? -
Where are we going?**
November 8 and 9, 2004
Marriott Hotel, Ottawa

Air Eligibility Marking - ICAO TI's 2003/2004 – Addendum No. 2

Introduction

This Notice pertains to the December 19, 2003 Addendum No. 2 to the 2003/2004 edition of the ICAO TI's concerning the Air eligibility marking requirements of Part 5; 2.4.12 and is of importance to shippers, freight forwarders, and Air Operators.

Regulatory Text

- **Transportation of Dangerous Goods Regulations (TDGR)**

Subsection 12.1(1) of the TDGR states – “A person who handles, offers for transport, or transports dangerous goods by aircraft between Canada and another country must do so in accordance with the ICAO Technical Instructions...”

- **2003/2004 International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI's)**

Part 5;2.4.12 – Air eligibility marking of the ICAO TI's states:

“From January 1, 2004, packagings, including those used for limited quantities of dangerous goods, must be marked to indicate that the shipper has determined that the packaging meets the applicable air transport requirements...”

- **Addendum No. 2 to the 2003/2004 edition of the International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI's) published December 19, 2003 Doc 9284-AN/905 – 2003/2004**

The Addendum amends the following provisions of the ICAO TI's which govern the use of the Air Eligibility Mark:

Part 5 – Shipper's Responsibilities

Paragraph 5;2.4.12 is revised as follows:

“Packages, including those used for limited quantities of dangerous goods, may be marked to indicate that the shipper has determined that the package meets the applicable air transport requirements. If the marking is applied, the following requirements must be met. The marking must be applied as prescribed in 2.2 and must be placed adjacent to the markings prescribed in 2.4.1. The marking must be durable, legible and of such a size relative to the package as to be readily visible. The marking must include the symbol consisting of an aircraft within a circle as shown below and may include the words “Air Eligible”.



Part 2 – Classification

Paragraph 2;7.9.7, which pertains to the air eligibility marking of radioactive material in excepted quantities, is deleted;

Part 4 – Packing Instructions

Chapter 4;8 Packing Instruction 650, General provisions, third paragraph, is amended as follows:

“For transport each package must be clearly and durably marked with the words “DIAGNOSTIC SPECIMENS”. When an air waybill has been issued it must contain the words “DIAGNOSTIC SPECIMENS”. Each package may also be marked to indicate that the shipper has determined that the packaging meets the applicable air transport requirements as specified in 5;2.4.12. The marking must be applied adjacent to the words “DIAGNOSTIC SPECIMENS”.

Chapter 4;11, Packing Instruction 910, subparagraph m), is amended as follows:

“Packages may be marked to indicate that the shipper has determined that the packaging meets the applicable air transport requirements as specified in 5;2.4.12.”

Transport Canada’s Position

Where the TDGR requires compliance with the 2003/2004 ICAO TI’s, it can be understood to mean the:

- version called into effect through the TDGR December 17, 2003, SOR 2003-400, plus it accepts compliance with;
- 2003/2004 ICAO TI’s as amended by Addendum No. 2 to the 2003/2004 edition of the ICAO TI’s published December 19, 2003 Doc 9284-AN/905 – 2003/2004 which addresses the amendments affecting the air eligibility marking requirements.

Contact the following offices to obtain advance information on the proposed amendments to the 2005/2006 edition of the ICAO TI’s.

Atlantic Region	506 851-7247
Quebec Region.....	418 640-2796 or 514 633-2838
Ontario Region.....	416 952-0000
Prairie and Northern Region	780 495-5278
Pacific Region	604 666-5655
Airline Inspection.....	514 633-3116

Or visit the Web site at:

<www.tc.gc.ca/civilaviation/commerce/dangerousgoods>