

2010

Regulatory Activity

(part 3)

By David Stainrod, CET, CFEI, D.J. Stainrod & Associates Ltd.

This article focuses on proposals by Transport Canada to introduce a mandatory internal inspection of propane cylinders and the review of recent Transportation of Dangerous Goods Regulations amendments.

PROPOSAL FOR MANDATORY VISUAL CYLINDER INSPECTIONS

The Rationale

At the January 2010 meetings of the CSA-B339 (Cylinders, Spheres and Tubes for the Transportation of Dangerous Goods) Technical Committee, Transport Canada tabled a docket that would require the propane industry to conduct internal inspections on all propane cylinders at the time of their 10-year requalification.

The following was the proposed new clause to the CSA-B339 Standard:

"An internal visual inspection, in as much as the size of the orifice(s) permit(s), shall be performed in addition to the external visual inspection when the valve is required to be removed for replacement or requalification of the pressure-relief device. Cylinders showing signs of corrosion or other internal defects such as cuts, mechanical abrasions and fabrication irregularities that exceed the limits established in the applicable CGA Publication shall be condemned."

Transport Canada stated as its rationale for this proposal that it had received reports of corroded cylinders in the field that leaked. By mandating a visual internal inspection of cylinders, Transport Canada believes the additional inspection will mitigate the use of cylinders with internal defects. Transport Canada holds the view that, since the pressure relief device must be changed at the time of requalification, performing an internal visual inspection should not be a hardship to the requalifier.

At the time, the proposal was deferred pending further review by the propane industry.

PGAC National Technical Regulatory Committee Response

The National Technical Regulatory Committee (NTRC) of the Propane Gas Association of Canada (PGAC) is made up of active members of the propane industry from across the country. The diversity of the

group's geographic locations allows the industry to consider a variety of business practices taking into account regional considerations. The process of discussing regulatory changes at this grassroots level provides a comprehensive industry support system for addressing regulatory amendments that impact the industry.

Transport Canada's proposal for internal inspections was discussed at the NTRC meeting held on March 18, 2010. At that meeting industry members concluded that the proposal could not be supported until such time as Transport Canada could provide more sufficient rationale and objective evidence.

When asked for additional information, Transport Canada responded by indicating it had evidence of one cylinder that had corroded from the interior outward. Without more information, industry cannot determine how large an issue internal corrosion of propane cylinders is and whether an internal inspection program is necessary, and would address the problem.

Transport Canada also offered as additional rationale that an internal inspection will provide an opportunity to catch cylinders suffering from internal corrosion or other internal defects such as cuts, mechanical abrasions and fabrication irregularities.

With respect to internal corrosion, propane is a sweet gas, with the interior of the cylinder considered to be a non-corrosive atmosphere. Industry experience indicates that cylinder shells corrode from the exterior inward and, as such, external inspections should be sufficient to pick up defective cylinders.

Propane cylinders at the time of requalification are evacuated of all liquid propane and the internal pressure lowered to atmospheric pressure to facilitate removal of the combination service valve/pressure relief valve or standalone pressure relief valve. The interior of the cylinder will still contain propane vapour at atmospheric pressure. Removing the cylinder service valve or pressure relief valve can introduce air into the interior, creating an explosive atmosphere within the cylinder.

The smallest opening (barbecue cylinder), once the service valve is removed, is $\frac{3}{4}$ ". The interior will have to be lighted for examination, which will require the use of explosion-proof lighting. Also, the diameter of the opening through which the examination must be completed will severely restrict the internal area of the cylinder that can be properly examined.

The general consensus of the National Technical Regulatory Committee was that internal inspections were unnecessary, and could introduce new and possibly unnecessary risks and significant costs for the industry.

CSA-B339 Committee Votes Against the Proposal

Transport Canada's proposal was again discussed at the April 13-14 meeting of the CSA-B339 Technical Committee. It was defeated as a majority of the Committee members supported the propane industry's position.

David Stainrod has been providing technical fuel and investigative consultation to governments on both sides of the 49th parallel. He is in charge of the technical hotline for members of the Propane Gas Association of Canada (PGAC), has written several training courses for the PGAC's Propane Training Institute (P•T•I), and sits on many industry committees on behalf of the PGAC and its members. If you have any questions, please contact David at david.stainrod@sympatico.ca.



RECENT TDG AMENDMENTS – A REVIEW

The PGAC has an arrangement with Transport Canada to review regulatory proposals informally prior to their being issued for formal public comment. This gives industry an opportunity to change proposals early in the drafting stages. The PGAC recently reviewed the following three early proposals.

TDG Regulations Amendment (Z)

New Definitions – Consignee and Overpack

In this amendment Transport Canada is proposing that two definitions, namely “Consignee” and “Overpack,” be added to the regulations. Consignee means the person to whom dangerous goods are to be delivered. Overpack means an enclosure that is used by a single consignor for convenience in handling means of containment or to consolidate two or more means of containment, but it is not a minimum required means of containment. Examples of overpacks are two or more means of containment placed or stacked onto a load board, such as a pallet, and secured by straps, shrink wrap, stretch wrap, nets or other similar means, or placed in a box, crate or bin.

The National Technical Regulatory Committee was of the opinion that the definition of overpack would appear to provide for additional warning when dangerous goods may be out of sight, but suggested that further clarification be added to define “enclosure.” The italicized examples included in the draft regulations might also need to be revisited as they are open to broad interpretation and could even include wire cylinder cages, which may store propane or other products.

Adding Consignees on the Shipping Documents

The amendment also proposed to add to the shipping document the name and address of the place of business in Canada of the consignor and consignee.

The Committee felt that the requirement to include all consignee names on the shipping document for multiple domestic volume deliveries, or cylinder deliveries, did not seem reasonable. The bulk truck driver would have electronic or paper delivery tickets in the cab for all volume deliveries to be completed.

The rationale for adding the consignee to the shipping document is to regulate shipments originating from outside Canada. When it is the case that a shipment is transported directly from point A to point B, the proposal would not appear to be a burden. However, the burden imposed for domestic shipments would be significant because the vast majority of domestic propane shipments to the end users are not direct A-to-B shipments – they are multiple delivery operations.

The addition of up to approximately 25 consignee names and addresses for a typical delivery route would add significant complexity and cost to existing processes. In addition, the changes to software/electronic processes may or may not be possible with currently used software.

It was suggested to Transport Canada that the wording be changed as follows:

“The name and address of the place of business in Canada of the consignor and consignee for shipments originating from outside Canada.”

Overpack Labels

The third change in this amendment dealt with the display of labels on the means of containment in the overpack. Unless the labels on

the means of containment in the overpack are visible through the overpack, primary class and subsidiary class labels must be displayed for each of the dangerous goods contained in the overpack.

The amendment to display labels on the overpack did not contain any prescriptive requirements for the required label, leaving the interpretation open as to the size and type of label required, which could lead to compliance difficulties.

TDG Regulations Amendment 8

The Amendment 8 proposal was about allowing for the assignment of Emergency Response Assistance Plans (ERAPs) from one company to another. More specifically, the proposal is to allow a company, other than a manufacturer or producer, who offers for transport or imports dangerous goods for which an approved ERAP is required, to forego applying for approval of an ERAP.

Instead, the company could show the originating approved ERAP reference number and the ERAP activation telephone number on the shipping document, and, with approval and agreement from the company holding the ERAP, have the ERAP holder respond to an emergency on behalf of the company without the ERAP.

The PGAC had some difficulty with the direction proposed to be taken by Transport Canada concerning the open assignment of ERAPs by ERAP holders to other companies. While the proposal stipulates that an ERAP used by another company must meet certain requirements, there does not appear to exist in the current wording any linkage of the product between the original ERAP holder and the company to which the ERAP number may be assigned. Thus, two companies could use one ERAP even if their businesses are unrelated.

Assigned ERAPs should be tied to the goods of the original ERAP holder. An ERAP can be assigned as long as the allocated ERAP is being used to cover the distribution of the dangerous goods of the original ERAP holder.

It was also felt that the draft proposal could compromise the effectiveness of emergency responses. If the emergency response service provider is not familiar with or aware of all activities covered under an assigned ERAP, then its ability to effectively respond to an incident not related to the original ERAP holder’s dangerous goods could be compromised at an incident scene.

TDG Regulations Amendment XX

A review of this amendment found that the majority of the proposals were editorial in nature. One of the amendments will allow a person to transport up to six aerosol containers without packing them in a wood, fibreboard or plastic box.

The explanation provided by Transport Canada stated that the TDG Directorate has received a number of comments about these packaging requirements from industries who provide technical services to customers and who use aerosol containers in providing that service.

The TDG Directorate has issued permits to allow the transport of aerosol containers without the required packaging. This proposed change corrects an inadvertent impact regarding the changes made to section 1.15 in Amendment 6.

I will continue to keep you updated on these and other developing regulatory matters.