



# **CIAC Submission on the** *Training in the Transportation of Dangerous Goods: A White Paper*

**Submission to Transport Canada**  
**February 28, 2017**



**CHEMISTRY INDUSTRY  
ASSOCIATION OF CANADA**



**Responsible Care®**  
Our commitment to sustainability.

## Introduction

The Chemistry Industry Association of Canada (CIAC) is pleased to submit its comments and recommendations on the *Training in the Transportation of Dangerous Goods: A White Paper*. CIAC is the voice of Canada's \$53 billion chemistry sector. We represent the interests of Canada's leading chemistry companies – from petrochemical, inorganic and specialty chemical producers, to bio-based manufacturers and chemistry-related technology and R&D companies. Canada's chemistry industry employs 87,500 Canadians directly, and supports another 525,000 jobs in the Canadian economy.

CIAC members produce goods that are needed everywhere; they are essential to Canada's economy and our quality of life. Among them, hundreds of dangerous goods are also manufactured and shipped across Canada daily.

Safety is a top priority for Canada's chemistry industry, both at plant sites and along transportation routes. During the past 25 years, CIAC members have invested hundreds of millions of dollars in transportation-related research and upgrades; and have set the gold standard for transportation safety through the TRANSCAER® (Transportation Community Awareness and Emergency Response) and TEAP® III (Transportation Emergency Assistance Program) initiatives. Canada's chemistry industry goes above and beyond what is required by Canadian laws related to the transportation of chemical products, including dangerous goods.

As part of our commitment to Responsible Care® – the Association's United Nations recognized sustainability initiative - CIAC verifies that each of its members and transportation partners is meeting Responsible Care's stringent safety standards, by requiring independent, public verifications of these companies every three years. For example, as part of the Operations Code companies commit to have "a process to evaluate workplace health and safety hazards and implement suitable means to control such hazards..." Furthermore, companies employ management systems designed for fostering continuous improvement. Verification reports are publicly available at [www.canadianchemistry.ca/responsiblecare](http://www.canadianchemistry.ca/responsiblecare).

## Comments on the *Training in the Transportation of Dangerous Goods: A White Paper*

CIAC and its members agree that the safe transportation of dangerous goods depends on well trained people.

In reviewing the White Paper's conclusion it is stated, "The proposed amendments are necessary first steps in strengthening TDGR training requirements that, until now, have been largely administrative. These steps will improve public safety, and will give inspectors the enforcement tools they need to ensure compliance." CIAC members are interested in learning what measures will be put in place to ensure a fair and consistent approach is used among inspectors. Additionally, industry would like to work with Transport Canada to ensure that expectations for employees, employers, and regulators are clear and assessed in a fair, consistent, and fact-based manner.

What do you think of the existing definitions of "competent person"? Is one clearer than others? Why?

While CIAC members have not expressed concern with the definition of "adequate training" and find the definition in section 6.2 to be clear, they could be supportive of another definition and more detailed expectations being included in the regulations. However, the proposed definition of "competent person" shared in the White Paper from the International Civil Aviation Organization (ICAO) or the

Occupational Health and Safety Regulations (OSH) may not be appropriate or necessary for general training in TDG. Rather than defining a “competent person”, it is strongly recommended that Transport Canada harmonize more closely with the training requirements found in the UN Model Regulations (Section 1.3.2) and the US DOT 49 CFR (172.700-172.704), which include general awareness, function-specific and safety training expectations. This proposal would allow for an equivalent level of safety to Transport Canada’s proposal to move from a knowledge-based to both knowledge and skills-based definition while also allowing for increased harmonization and consistency among regulations.

[What do you think of the move to a competency-based training and assessment \(CBTA\) approach? What else should be considered, and why?](#)

CIAC and its members agree that fundamentally it is the responsibility of the employer to ensure their employees are competent and trained. For competency-based training to be supported it would not be overly prescriptive, job-specific, and the employer would remain responsible for determining competency. CIAC members are not supportive of a complete and exclusive CBTA framework similar to that of ICAO’s being adopted for TDG Training in Canada. Given the variety of job functions, diversity of dangerous goods in transit, numerous means of containment, and multiple modes of transport developing a CBTA framework for each specific role and assessing against it would be extremely complex, very time-intensive, and lead to increased misalignment with other international regulations.

CIAC members are supportive of and use competency-based training for many aspects of their TDG training but also believe that flexibility in training and approach is important. For example, a company may use online training courses for an awareness level but then move to practical or competency-based training and assessment for more detailed functions to perform a specific role safely. If all aspects of TDG training were required to be delivered in-person it would be cost-prohibitive and logistically challenging for many companies.

CIAC members also agree that a one-size-fits-all approach is not appropriate or possible for the enforcement aspects of competency based training. However, of key importance to members is ensuring any assessment of an individual’s competency consists of clear and known expectations, is fact-based, and is assessed consistently among inspectors. Furthermore, it is key that any competency based training framework that identifies performance expectations be linked to and based on a person’s job functions.

[What are your thoughts on a Transport Canada Transportation of Dangerous Goods 101 Test? Is there anything in particular that we should consider in its development? Why?](#)

Overall, CIAC members are not opposed to Transport Canada creating guidance, criteria and a TDG 101 Test as one option or tool for organizations looking for guidance in this area. However, after reviewing Appendix C of the White Paper, “Sample Transport Canada TDG 101 Course” it was thought that several of the topics were too detailed for a 101-level course. For instance, explaining exemptions, identifying penalties, and completing paperwork may be too detailed for a 101 level course. It is the opinion of CIAC members that a possible TDG 101 Test should be very high-level and applicable to employees regardless of their specific job tasks, which could be limited to loading tank cars or creating shipping documents.

Additionally, one of the noted advantages to standardized training in the White Paper and previous consultation documents was “creating a skilled workforce with portable training.” This concept seems to extend beyond the general scope of ensuring safety. Additionally, while skills may be transferrable as

responsible employers, and to perform their due diligence, CIAC members would still require any new employees to successfully complete and be tested on their own company training.

In your experience, are there other safety issues related to training in the transportation of dangerous goods that have been overlooked? Please explain.

CIAC and its members agree that the safe transportation of dangerous goods depends on well trained people. They also believe that it is the employer's responsibility to determine adequate training for their employees and that this should be based on the employee's specific job requirements. There is a significant diversity that exists amongst the products, means of containment, and mode CIAC members are using - this diversity can be accounted for in company training. Additionally, it is very important to be able to include site or company specific operations/guidelines into a training and evaluation program.

Many companies also have operations outside Canada and use harmonized training systems; therefore, harmonization with the U.S. and other international dangerous goods regulations is key. For companies that require more robust training programs a guidance template, similar to what the U.S. DOT has offered could be provided while others meeting or exceeding expectations could continue with their current training programs.

CIAC and its members would like to work with Transport Canada to provide industry input on training programs that currently exist and work collaboratively to explore the potential of addressing gap areas before establishing a new training regime. Finally, CIAC and its members would like to meet with Transport Canada to clarify and discuss these responses in greater detail.

For information concerning this submission please contact:

Kara Edwards  
Director, Transportation  
Tel. 613-237-6215 Ext. 244  
kedwards@ciac-acic.ca