



# TRANSPORTATION OF DANGEROUS GOODS NEWSLETTER

We invite you to read the fall/winter 2020 edition of the Transportation of Dangerous Goods (TDG) Newsletter. This issue includes articles on the initiatives and activities of the TDG Directorate during the last few months.

## INSIDE

- Word from the Director General . . . 3
- Adapting to a virtual training environment . . . . . 4
- Interview with Pacific Region on remote inspections . . . . . 5
- CANUTEC – Emergency Response Guidebook 2020 (ERG 2020) . . . . . 6
- Engagement with National Indigenous Organizations for transportation of COVID-19 patient samples . . . . . 7
- Publication of formatting changes on the Department of Justice website. . . . . 8
- Temporary certificates issued by the Transportation of Dangerous Goods (TDG) Directorate in response to COVID-19. . . . . 8
- Scientific research publications . . 10





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## WORD FROM THE DIRECTOR GENERAL

Author: Benoit Turcotte

**I am pleased to introduce this edition of the Transportation of Dangerous Goods (TDG) Newsletter. This edition will highlight some of TDG’s significant achievements while we have adjusted to the new reality brought on by the pandemic.**

The TDG Directorate has worked hard to provide regulatory relief and deliver quality services and information to stakeholders during the pandemic. I would also like to acknowledge the great work that is currently being done remotely by TDG staff, such as the development of tools and delivering virtual training to inspectors in order to better equip our inspectors to undertake their oversight role.

With that in mind, the TDG Program continues to explore ways to innovate through different initiatives such as research on the development of “smart” packaging for lithium battery transportation that can indicate a warning about an issue inside the package, analysis of potential uses for shredded waste from used explosives packaging, and regulatory changes to permit the use of drones for transporting dangerous goods, just to name a few. We also continue developing safety awareness materials for first responders, communities and municipalities, industry and the public, such as the “You’re Not Alone!” publications. Furthermore, the TDG Program continues to provide its inspectors with guidance material, including the most recent one on remote inspections.

I am also very pleased with the collaboration and the hard work undertaken by Canadian Transportation Emergency Centre (CANUTEC), the United States Department of Transportation (DOT), the Secretariat of Transport and Communications of Mexico (SCT) and, CIQUIME (*Centro de Información Química para Emergencias*) of Argentina on the newly released ERG 2020 edition. This very important tool continues to guide first responders during an incident involving dangerous goods and is used throughout the world.

The TDG Program continues collaborating with various partners such as with Indigenous communities, the Canadian Public Health Laboratory Network, Public Health Agency Canada, and other stakeholders to increase awareness of the transportation of dangerous goods.

Thank you for your continued support and valued advice as we continue ensuring the safe transportation of dangerous goods together.

# ADAPTING TO A VIRTUAL TRAINING ENVIRONMENT

Author: Rebecca Conway

Quality training and clear standard operating procedures are integral components of a successful oversight program. In the Transportation of Dangerous Goods (TDG) Directorate, these components are developed by the Inspection Standards Team which is part of the Compliance and Response Branch.

The Inspection Standards Team aims to support the oversight program by ensuring inspectors have the knowledge and tools they need to effectively oversee the transport of dangerous goods. We accomplish this through technical training and publishing of standard operating procedures, guidance materials, and job aids. These efforts help to increase knowledge and expertise within the inspectorate and bring greater uniformity to the way the *Transportation of Dangerous Goods Act, 1992* (TDG Act) and Regulations are enforced.

Being responsive to the needs of the oversight program requires us to be flexible and adaptable. These qualities have allowed the Inspection Standards Team to pivot to a new virtual working environment and transform the way we offer training.

Until recently, in-class training was the most practical and preferred method of delivery as this approach tends to provide more opportunities for engagement with the learning content and more interaction between colleagues. However, when the COVID-19 crisis forced us all to work remotely, we had no choice but adapt and learn to operate in a new virtual training environment.

Adapting training for a virtual environment was not a simple process; one cannot simply convert a full day of in-class training to a full day video conference and expect the same level of engagement. Adapting our training has necessitated the reorganization of the learning content and learning materials, and a total transformation in our teaching approach. It has entailed coming up with innovative ways to elicit participation, engage participants, and conduct assessments, and it has forced us to embrace new digital technologies.

Throughout this process, we have found a number of advantages to offering training in a virtual format:

- the training is now completely paperless after the material has been converted to a digital medium



- find a training space is no longer a dilemma
- more flexibility in scheduling and allows to be more responsive to the needs of inspectors
- the virtual teaching platform allows to create more ways for participants to learn independently, and to create virtual learning communities
- more opportunities for interaction and collaboration which help to foster comradery even as we sit thousands of miles apart

Since March 2020, we have delivered virtual training in Introduction to TDG Inspections (condensed), the TDG Act and Regulations, and B620 Highway Tank Facility Inspections. All have been met with tremendously positive feedback, and we are enthusiastically working on adapting more courses to deliver in 2021.

While we still consider in-class training the preferred method of delivery for longer and more comprehensive courses, we now see immense potential for our new virtual tools and capabilities to elevate our training program. Going forward, we envision a hybridized training approach, allowing us to make the most of our digital capabilities, while still providing meaningful in-person engagement. We also see a permanent place for virtual training for short courses or micro-learning sessions that will enable us to be more responsive to the needs of the inspectorate.

In the wake of COVID-19, we were forced to make changes to our way of working that were unfamiliar and uncomfortable. Now, as we start to settle into the new normal, we can look back and appreciate how this crisis, however terrible, has really served to drive our transformation, leading to positive change in the way we work to support the program.

# INTERVIEW WITH PACIFIC REGION ON REMOTE INSPECTIONS

Authors: Sara Johnston and Sharon BrakeLeong

**“It doesn’t happen very often that a company is excited for an upcoming inspection,” TDG Inspector Sharon BrakeLeong recalled laughing. “I felt terrible having to cancel so I was dedicated to figuring out a workaround.”**

Sharon had scheduled the inspection on Vancouver Island before the COVID-19 travel restrictions went into place. This type of inspection is required prior to a company receiving a certification to test dangerous goods tanks – the kind that can be found in the back of a pickup truck, on a barge or at a construction site. The company needs to demonstrate they can safely inspect the tank using the correct tools, techniques and safety procedures. She realized that the inspection could be done virtually using live video and began brainstorming the best secure video platform. After getting approval from the national certification group, she called the company to check if the testers would be comfortable with the solution. They agreed to the idea with the same enthusiasm as the initial inspection.

With Sharon at her home office in Richmond, and the tester on the phone from Vancouver Island, it took a few awkward moments for the tester and Sharon to adjust to the new format. She said the “tester was great and figured out how to make the phone camera work for the hour-long inspection. He went through all valves, and testing with the camera in the pocket of his coveralls. I could see what he was doing all the time. I found it easy to take screen shots to document the inspection and feel like I was there.”

Once the test was complete, Sharon “went back to the business’s office” to do a group debrief and get a representative sample of the knowledge of the company and their tools. The company got their certification without having to wait until after the travel restrictions lifted.

“This inspection was critical and the company had to demonstrate that everything was in place before we certify them,” Sharon explained from her home office. “I needed to see everything the tester was seeing, as well as the general setup of the facility. While it was not the same as a physical inspection, I was able to confidently gauge the company’s ability to perform the work.”

Sharon enjoyed the experience of being a virtual inspector – although she missed getting to see the site in person. “We are in an exceptional situation and it felt great to follow through with what company needed. Maybe one day we will be conducting inspections using 4D glasses!”



# CANUTEC – EMERGENCY RESPONSE GUIDEBOOK 2020 (ERG 2020)

**Author: Martin Chaumont**

The Emergency Response Guidebook (ERG 2020) has arrived!

The ERG 2020 provides first responders with a go-to handbook to help first responders in making critical decisions at the scene of an accident. Canadian Transportation Emergency Centre's (CANUTEC) goal is to have a guide in every public emergency service vehicle coast to coast in Canada.

The ERG 2020 was developed over a four-year period by Transport Canada – CANUTEC, the United States Department of Transportation (DOT), the Secretariat of Transport and Communications of Mexico (SCT) and, with the help of CIQUIME (*Centro de Información Química para Emergencias*) of Argentina.

## This guide helps first responders by:

- identifying hazards based on the material involved in a transportation incident
- protecting themselves and the public during the initial response to an incident

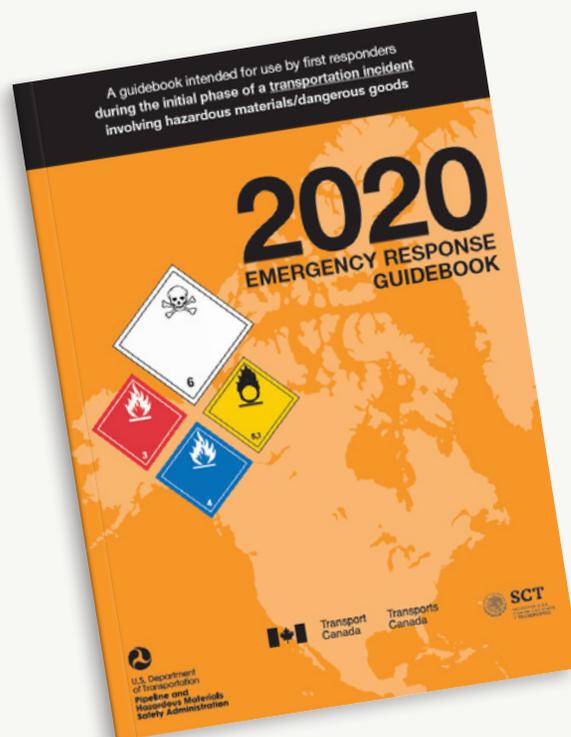
This guide is designed for dangerous goods incidents on a highway or rail line. It may be less useful at fixed-facility locations, on aircraft or vessels.

## This guide **does not**:

- include information on the physical or chemical properties of dangerous goods
- replace emergency response training, knowledge, and good judgment
- address every possible factor related to a dangerous goods incident

The ERG is distributed free to Canadian First Responders from public emergency services such as:

- municipal fire departments
- police departments
- ambulance services
- RCMP
- First Nations' emergency services



More than 16 million copies of previous editions have been distributed to the emergency response community in the United States, Canada, Mexico, and Argentina.

Since September 2020, over 25,000 free paper copies have been distributed to our Canada First Responder community. Over the years, TDG has taken many concrete actions to support first responders and enhance response capabilities. The ERG is a significant tool to assist first responders.

## The new edition includes updates such as:

- an introductory page on how to use the safety recommendations and emergency response information guides
- a comprehensive review of the guides for certain products and additional cautionary advice
- an expansion of the glossary of new terms and definitions
- new sections, namely on decontamination and heat-induced tears on tank cars
- new visual identifiers for quicker access to information

For more information, consult our page on the [Emergency Response Guidebook](#).

# ENGAGEMENT WITH NATIONAL INDIGENOUS ORGANIZATIONS FOR TRANSPORTATION OF COVID-19 PATIENT SAMPLES

Author: Mathieu DesRoches

As Transport Canada (TC) moves forward many of our transformation projects, work is also underway on an important subject: reconciling and renewing the government's relationship with Indigenous communities.

Within the Transportation of Dangerous Goods (TDG) Directorate, this work is focused around a new Indigenous engagement strategy, which we are carrying out in conjunction with the Rail Safety Directorate. At its core, the strategy focuses on improving the way we communicate and consult with Indigenous communities, while also giving them important information about transportation of dangerous goods.

As we began to develop the strategy, our colleagues in Rail Safety raised some feedback they received through their consultations. It made it clear that there were obvious links between our two topics. Following some discussions, we decided to work together on an engagement strategy that would allow us to engage with Indigenous communities while also allowing clear and open communications around rail safety, transporting dangerous goods, and the transportation of dangerous goods by rail in Canada.

In June of 2020, we took our first steps in implementing the new Indigenous engagement strategy, while supporting work on the pandemic.

Through a series of calls with National Indigenous Organizations, we introduced and answered questions about the temporary certificates being used to support Canada's response to the pandemic. This material was received positively, and underlined not only the importance of this project but also the interest of Indigenous communities in continuing to work with the TDG directorate.

Following these calls, we completed work on the Emergency Response Guidebook 2020 (ERG 2020) and made plans to share details on the updated materials. During another series of calls in the fall, Canadian Transportation Emergency Centre's (CANUTEC) presented and delivered important information regarding the updated ERG 2020, and changes from the 2016 version.

Moving forward, we will continue to focus on this important project while also looking for new ways to engage with and support Indigenous communities. While the COVID-19 pandemic has resulted in a number of challenges engaging on the transportation of dangerous goods, we continue to look for new ways to continue the conversation.

As we move into a new year, TC remains committed to reconciling and renewing our relationship with Indigenous communities, and we look forward to the new opportunities for engagement this year will bring.



# PUBLICATION OF FORMATTING CHANGES ON THE DEPARTMENT OF JUSTICE WEBSITE

Author: Geneviève Sansoucy

The Transportation of Dangerous Good (TDG) Regulations have historically only been available on the Transport Canada (TC) website as an unofficial version.

On February 19, 2020, TC published an amendment titled: [Regulations Amending the Transportation of Dangerous Goods Regulations \(Formatting Changes\)](#). The purpose of this amendment was to meet the Department of Justice formatting standards for regulations and provide easy access to the official consolidated version of the regulations on the Department of Justice website. Here are some of the changes that have been made to the TDG Regulations:

- The definitions copied from the [Transportation of Dangerous Goods Act, 1992](#) (TDG Act) have been removed;
- All tables of contents have been removed, but there is a table of provisions at the beginning of the TDG Regulations;
- Explanations in italics have been removed.

Please refer to [Adopted amendments to the Regulations](#) for more details and other changes.

The TDG Regulations can be found on the [Justice Laws website](#).

## TEMPORARY CERTIFICATES ISSUED BY THE TRANSPORTATION OF DANGEROUS GOODS (TDG) DIRECTORATE IN RESPONSE TO COVID-19

Author: Caroline Rodriguez-Charette

Following the World Health Organization declaring the COVID-19 pandemic on March 11, 2020, the Transportation of Dangerous Goods (TDG) Directorate worked quickly to find a way to promote the public's safety.

Pursuant to subsection 31(2.1) of the *Transportation of Dangerous Goods Act, 1992* (TDG Act), temporary certificates can be issued to allow activities in the public interest to be carried out in a way that does not comply with the act.

The Approvals Team, led by David Lamarche, worked together to issue these six (6) temporary certificates to facilitate the distribution of dangerous goods needed in order to respond to the public health emergency and allowing the continuity of businesses.

One of their biggest challenges was obtaining all the information they needed to have a better understanding of the issues that the industry was facing. This was a very difficult task at the start of the pandemic since the circumstances were changing rapidly on a daily basis.

This dedicated team took factored-in the existing safety measures and TDG requirements, and the state of the situation during the height of the pandemic. They worked evenings and weekends: brainstorming, researching, and working with numerous stakeholders to obtain a better understanding of the issues.





Here are short summaries of the six (6) [temporary certificates](#):

### **TU 0750.1: Training**

At the beginning of the pandemic, it was difficult to obtain or provide recurrent training as required by TDG Regulations due to temporary measures put in place by provincial authorities.

This temporary certificate allows a person who was in possession of a valid and compliant TDG training certificate on March 1, 2020, to continue handling, offering for transport or transporting dangerous goods with an expired certificate, as long as they have thorough knowledge of all TDG aspects related to their duties.

### **TU 0751.2: Testing and inspection requirements**

Due to many of temporary measures put in place by provincial authorities, many registered means of containment facilities have temporarily closed or are limiting travel for their employees who perform mobile inspections.

This certificate allows means of containment which have not been inspected or tested in accordance with Part 5 of the TDG Regulations, to continue to be used for the transportation of dangerous goods. This temporary certificate cannot be used for rail cars. Inspection and test marks must have been valid on February 29, 2020. However, for means of containment used to transport class 2.1 and 2.2 gases, the inspection and test marks must have been valid on February 28, 2019.

### **TU 0752.2: Transporting hand sanitizer**

Canadian industry was asked to reorganize its operations to manufacture essential medical supplies, such as hand sanitizer.

This certificate allows hand sanitizer to be handled, offered for transport or transported in non-standardized packaging, without TDG labels, shipping documents or TDG training. There are unique sets of conditions depending on the amount of hand sanitizer being shipped.

### **TU 0753.2: Canada Post Corporation – Transporting hand sanitizer by air**

This certificate allows the handling, offering for transport or transporting hand sanitizer by the Canada Post Corporation via air to remote communities. Canada Post is normally restricted from transporting a number of dangerous goods by air, including hand sanitizer.

### **TU 0754.1: Transporting hand sanitizer by air**

Many new producers of hand sanitizers do not have the required TDG training or the appropriate resources to handle, offer for transport, or transport dangerous goods, like hand sanitizer, in compliance with the TDG Act.

This certificate authorizes hand sanitizer to be transported by air. Hand sanitizer is typically transported by road, but this certificate allows distributors to quickly distribute their product to markets in communities across Canada.

### **TU 0764: Test Samples for COVID-19**

Due to the pandemic, Canadian health care workers were tasked with conducting wide spread testing for COVID-19.

This certificate allows, under certain conditions, the handling, offering for transport or transporting of COVID-19 test samples, in non-standardized packaging and without TDG training.

As you can see, these temporary certificates have helped the Canada's industry, healthcare and frontline workers, and communities deal with these unprecedented times. The certificates have been well received by countless companies – providing them with some regulatory relief but still allowing the continuous flow of goods in a safe manner.

**TU 0750.1 and TU 0751.2 expired on January 31, 2021. The other certificates expired on December 31, 2020.**

# SCIENTIFIC RESEARCH PUBLICATIONS

Author: Nathalie Péloquin

Within the Transportation of Dangerous Goods (TDG) Directorate, the TDG Scientific Research Division has the responsibility to plan, manage and deliver engineering and scientific research, with the objective of informing and contributing to the improvement of public safety during the transportation of dangerous goods. This research is done in accordance with section 25 of the *Transportation of Dangerous Goods Act, 1992* (TDG Act).

In an effort to disseminate its research to a wider audience, the Division publishes abstracts for completed research projects on the TDG website.

Since May 1, 2020, abstracts for the following reports have been published:

ABSTRACT TITLE	DESCRIPTION
Hypochlorites reactivity	This report describes a study on how some hypochlorite products react based on factors like temperature and mixing speed.

The abstract listed here, along with other research abstracts in the past 5 years, are available for reading on the [TDG Publications page](#).

[The TDG Scientific Research Division](#) can provide a copy of all published reports upon request.

