



Transportation of Dangerous Goods Regulatory Update

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PURPOSE

- To provide an update on recent and upcoming activities in relation to the *Transportation of Dangerous Goods Regulations* (TDGR).

OVERVIEW

- Transportation of Dangerous Goods Client Identification Database (TDG CID)
- Regulatory Amendments in Progress
- Regulatory Cooperation Council (RCC)

TRANSPORTATION OF DANGEROUS GOODS CLIENT IDENTIFICATION DATABASE

- TDG CID will identify regulated parties throughout the supply chain in order to facilitate risk-based assessment of dangerous goods sites across Canada.
- Transport Canada (TC) has adopted a phased-approach to developing/implementing TDG CID:
 - **Phase 1** – Policy Development (2016/17 - 2017/18)
 - **Phase 2** – Legislative and Regulatory Development (2018/19 - 2019/20)
 - **Phase 3** – Platform Development & Launch (planned launch by 2020/21)
- Phase 1 & 2 develop the supporting policy framework, legislative authorities, and regulatory scheme necessary to create and implement a tool to identify regulated parties under the *Transportation of Dangerous Goods Act*.
- Phase 3 will be to develop the physical platform and database.

TRANSPORTATION OF DANGEROUS GOODS CLIENT IDENTIFICATION DATABASE – Continued

Information collected via the TDG CID would:

- Provide up-to-date knowledge of the regulated transportation of dangerous goods community;
- Facilitate risk-based assessment of dangerous goods sites. Knowledge of site locations and current stakeholder data will improve TC's ability to identify areas of risk; and
- Target outreach, awareness, and regulatory consultation efforts to improve communications on emerging issues and safety measures (e.g., Protective Directions).

TRANSPORTATION OF DANGEROUS CLIENT IDENTIFICATION DATABASE – Continued

- Work is currently underway for Phase 1 – Policy Development, including:
 - Establishing who will be required to register, and what information will be needed of each registrant (i.e., TDG Registry scope);
 - Coordinating/collaborating with other Federal Government Departments to determine opportunities to leverage information; and
 - Initiating discussions with the U.S. Department of Transportation.
- Stakeholder policy consultations are planned to start summer 2017 and will continue through fall 2017. Stakeholders will have the opportunity to participate in the policy development process at this time.

**TC will engage industry and other stakeholders throughout the policy development process and ensure comprehensive consultation on policy options / recommendations.
TC will also consult stakeholders throughout the Federal Regulatory Process (i.e., Phase 2).**

TDG REGULATORY AMENDMENTS IN PROGRESS

- Training (Part 6)
- Emergency Response Assistance Plans (Part 7)
- Air (Part 12)
- Canadian Update (including Parts 1-5)
- Marine (Part 11 and Short-Run Ferry Exemption)
- International Harmonization

TRAINING (PART 6)

Purpose

- To increase compliance and improve public safety by:
 - ensuring that people who import, offer for transport, handle, or transport dangerous goods have the knowledge and skills to perform their jobs; and
 - increasing clarity of the regulatory requirements.

TRAINING (PART 6) – Continued

Progress to Date

- Phase 1 targeted stakeholder consultation took place in fall 2015 to winter 2016.
- Phase 1 stakeholder comments were reviewed and analyzed. A White Paper laying out TC's proposals was developed in fall 2016.
- Phase 2 online public consultations took place in fall 2016 to winter 2017 :
 - Replace the term “adequately trained” with what it means to be a “competent person;”
 - Develop:
 - a competency framework to identify the skills needed for particular job functions;
 - standards and guidelines to help training institutions/employers; and
 - a general TDG 101 test (a basic level test).
- Over 60 responses were received from industry (67%), government (17%), trainers (10%) and “others” (6%).

TRAINING (PART 6) – Continued

Proposed Approach

Two key components would need to be met to satisfy the requirements in the TDGR for a “competent person”:

- (1) General online TDG awareness training with a pass mark on a TDG 101 test; and
- (2) Job specific competency-based training and ongoing assessment by employers.

TRAINING (PART 6) – Continued



Next Steps

- Development of the general awareness course and TDG 101 online test as well as the Competency-Based Training Approach (CBTA) standard.
- Proposed amendments planned for publication in the *Canada Gazette*, Part I for public consultation in summer 2018, and final publication in *Canada Gazette*, Part II in summer 2019.

EMERGENCY RESPONSE ASSISTANCE PLAN (ERAP) - PART 7

Background

- An Emergency Response Assistance Plan (ERAP) describes resources available and possible response procedures to be undertaken in the event of a transportation incident involving certain higher risk dangerous goods.
- An ERAP is intended to:
 - Ensure responsible parties have appropriate measures in place to manage dangerous goods incidents for high risk dangerous goods;
 - Assist emergency responders; and
 - Help enhance public safety.

EMERGENCY RESPONSE ASSISTANCE PLAN (ERAP) - PART 7 – Continued

Background (cont.)

- April 2014: Minister announced the TDG Emergency Response Task Force (ERTF).
 - Mandate to conduct research, assess, evaluate and make recommendations to improve the ERAP program.
 - 40 recommendations with more than 50% completed.
- December 2016: Final ERTF Report and Recommendations submitted to the Director General of TDG and published online.

Progress to Date

- TC has reviewed the recommendations and is developing regulatory amendments and guidance material to address them.

EMERGENCY RESPONSE ASSISTANCE PLAN (ERAP) - PART 7 – Continued

Proposed Amendments

- Mandatory phone call to ERAP number when a means of transport cannot continue to its intended destination without intervention.
- Requirement for technical advisor to be available to respond to a call to the ERAP number within 10 minutes, 7 days a week, 24 hours a day while goods are in transport.
- Activation criteria for an ERAP:
 - Could the integrity of the Means of Containment have been compromised?
 - Is a transfer anticipated or required?
 - Is there a release or an anticipated release?
 - Did a First Responder/Authority Having Jurisdiction/Carrier ask for assistance to mitigate the situation?
- Requirement that CANUTEC be contacted once decision is made to activate the ERAP.

EMERGENCY RESPONSE ASSISTANCE PLAN (ERAP) - PART 7 – Continued

Proposed Amendments

- Implement Tiered Services Levels through regulatory and policy tools.
- Require CANUTEC to be contacted upon activation to a new Tier of Response.
- Other minor amendments to clarify expectations and reduce stakeholder burden.

Tier	Activity	Time to Repond
1	Technical or emergency response advice over the telephone	Technical Advisor to provide technical or emergency response advice by telephone within <u>10 minutes</u> of the initial request
2	Technical advisor and/or equipment (to be used by responders on site) mobilized	Technical Advisor and/or equipment on scene within <u>6 hours</u> of the initial request
3	ERAP response teams (with or without equipment) are mobilized	Response team attends the scene within <u>12 hours</u> of the initial request

EMERGENCY RESPONSE ASSISTANCE PLAN (ERAP) - PART 7 – Continued



Next Steps

- Finalize analysis of comments received during the consultation period (March 17 - May 1, 2017) and comments received during the April 25th Emergency Response Sub-Committee meeting.
- Develop a regulatory amendment and guidance material.
- Proposed amendments planned for publication in the *Canada Gazette*, Part I for consultation in Winter 2018.

AIR (Part 12)

Background

- Part 12 of the TDGR contains domestic requirements for the transport of dangerous goods by air.
- It also requires that the International Civil Aviation Organization's Technical Requirements for the Safe Transport of Dangerous Goods by Air (ICAO TI) be followed for the international transport of dangerous goods by air.

Purpose

- Domestic air provisions are outdated; many haven't been updated since 2001.
- The changes will aim to improve safety while ensuring communities and businesses have access to the dangerous goods they require.

AIR (Part 12) – Continued

Progress to Date

- Phase 1 targeted consultation of key stakeholders took place in spring 2016.
- Phase 1 comments were reviewed and analyzed. A White Paper laying out TC's proposal was developed.
- Phase 2 stakeholder consultation on the White Paper was launched on June 7, 2017 and closed on August 8, 2017.

AIR (Part 12) – Continued

Limited Access – Provisions for the transportation of dangerous goods to and from remote areas

- Revised scope/definition to be proposed;
- Common equivalency certificates proposed for incorporation (e.g. bear spray, bear bangers, etc);
- Proposals regarding documentation of dangerous goods; and
- Modified requirements for explosives.

Aerial Work

- Proposals for aligning aerial work provisions more closely with the *Canadian Aviation Regulations* (CARs).

Specific Exemptions Under Consideration

- Aerial Fire Suppression;
- Fuel Pumps & Spares Kits for Daily Support; and
- Others to be identified during consultations.

AIR (Part 12) – Continued



Next Steps

- Review and analyze comments received during the Phase 2 consultation period (June 7 – August 8, 2017).
- Publication of proposed amendment in the *Canada Gazette*, Part I for consultation targeted for early 2018.

CANADIAN UPDATE

Background

To provide many anticipated and necessary changes to aspects of the TDGR based on comments received from stakeholders over the past several years.

Part 1 – Definitions and Special Cases

Address issues with exemptions and add definitions. For example:

- Add new terms such as fire extinguishing unit, combination packaging, package, packaging and multi-element gas container, to better align the UN and U.S. and describe types of Means of Containment (MOC) used in our standards.
- Align the definition of « residue » with the 49 CFR.
- Clarify the limit of anhydrous ammonia transported in nurse tanks exempted from ERAP and shipping document (10 000L in total).
- Add a series of exemptions to facilitate transport
 - E.g.: exemption for live fish by allowing aeration and oxygenation units to be used during transport.

CANADIAN UPDATE – Continued

Part 2 – Classification

- Change the Canadian classification scheme to align with UN and U.S..
- Update classification provisions to better align with most recent version of UN Recommendations and Canadian regulations:
 - Introduction of general provisions to help with classification;
 - Align with definitions from UN Recommendations (i.e. gas, LC50, LD50, patient specimen) since they are 25 years behind in the TDGR; and
 - Align with 20th Edition of the UN Recommendations on corrosivity testing that is less invasive to animals.

Part 3 and 4 – Documentation and Dangerous Goods Safety Marks

- Introduction of the use of shoulder labels for cylinders (align with 49CFR).
- Allow pre-printed safety marks on empty packaging
 - E.g.: Category B infectious substance (Hepatitis D virus)

CANADIAN UPDATE – Continued

Part 5 – Means of Containment

- Harmonize definitions and types of packaging with the 49CFR and UN Recommendations, where beneficial.
- Reorganize and clarify (i.e. more general requirements sections related to compliance marking, design/manufacture, repair).
- Specify packaging requirements by class and mode of transport in order to simplify selection and use.

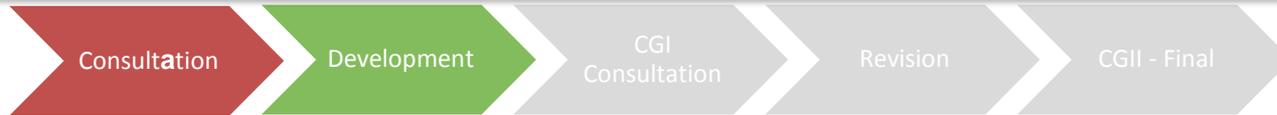
CANADIAN UPDATE – Continued

New version of « TP14877 Containers for the transport of Dangerous Goods by Rail, a Transport Canada standard »

- Updated technical requirements for Class 3, Flammable Liquids and the new tank car specification known as TC-117 (harmonization with the *FAST Act* under different timelines).
- Harmonization with existing requirements in the U.S., including tank car approvals, tank car design requirements and a new mechanism to secure One Time Movement Approvals (OTMA) – Category 2 .
- Updated materials of construction, including the addition of stainless steel, and improved thickness requirements for new tank car construction (working concurrently with the U.S. under different timelines).
- Normalized steel requirement for tank cars carrying dangerous goods classified as toxic inhalation hazard (TIH)
 - implementation 2 years after standard is adopted in the TDGR.



CANADIAN UPDATE – Continued



Progress to Date

- Web-based consultation December 9, 2016 – February 22, 2017
- 30 comments received from various stakeholders:
 - Indication of some inconsistencies in the proposed text and special provisions.
 - Support for the alignment of Part 2 (classification) with the UN.
 - Most stakeholders are very supportive of the move towards the concept of “Packaging” (Part 5).

CANADIAN UPDATE – Continued

Next Steps

- Develop proposed regulations.
- Publication of proposed amendments in *Canada Gazette*, Part I targeted for spring 2018.

MARINE (Part 11)

Background

- Marine provisions are outdated; many have not been revised since 2001;
- Marine terms and definitions don't align with the *Canada Shipping Act, 2001 (CSA 2001)*, the *Cargo, Fumigation, and Tackle Regulations (CFTR)* or the *Vessel Certificates Regulations (VCR)*; stakeholders have requested harmonization;
- Short-run ferry exemption:
 - lacks clarity and leads to confusion;
 - Distance that defines a short-run ferry differs between TDGR (3 km) and CFTR (5 km); thus some consignors/carriers are eligible for exemptions under CFTR but not under TDGR; and
 - Some stakeholders indicated that restriction on the transport of gasoline and propane on ferries with passengers has negative impacts on traffic and local businesses.



MARINE (Part 11) – Continued

Progress to Date

- Proposed amendments published in *Canada Gazette*, Part I for consultation from April 1 - May 1, 2017.

Proposed Amendments

- Terms and definitions from CSA 2001, VCR and CFTR (e.g. vessel, types of voyages);
- Remove certain requirements to align with CFTR and 49CFR (e.g. notification of loading or unloading of explosives or ammonium nitrate, flashpoint on small MOC);
- Passenger-carrying ship index for UN3156, COMPRESSED GAS, OXIDIZING, N.O.S. would be increased to 25 L to allow oxygen tanks on board with divers;
- Short-run ferry exemption would provide clarity on provisions from which it grants exemption and apply to ferries with routes up to 5 km to align with the CFTR; and
- New exemption would be added to allow the transport of gasoline and propane in highway tanks on ferries with passengers (up to 5 km) under certain conditions.

MARINE (Part 11) – Continued



Next Steps

- Publication of final amendments in the *Canada Gazette*, Part II targeted for fall 2017.

INTERNATIONAL HARMONIZATION UPDATE, 2016



Status

- The final amendment was published in the *Canada Gazette*, Part II on July 12, 2017.

The amendment includes:

- Reciprocity with the U.S. for pressure receptacles and approvals;
- A new exemption for hot air balloon cylinders;
- Clarification of toxic by inhalation requirements including minimum size requirements for lettering (small and large packaging);
- Clarification in the new special provision 155 to explain which requirements apply to polymerizing substances that are stabilized by temperature control and which apply to polymerizing substances with chemical stabilization;

INTERNATIONAL HARMONIZATION UPDATE, 2016 – Continued

The amendment includes:

Dynamic references for UN Recommendations, IMDG Code, ICAO Technical Instructions and 14 technical standards listed to the right;

- 6-month transition period for complying with new standards that are dynamically referenced.



Short Form	Safety Standard or Safety Requirement
CGSB-43.123	Aerosol containers and gas cartridges for transport of dangerous goods
CGSB-43.125	Packaging of Category A and Category B infectious substances (Class 6.2) and clinical (bio) medical or regulated medical waste
CGSB-43.126	Reconditioning, Remanufacturing and Repair of Drums for the Transportation of Dangerous Goods
CGSB-43.146	Design, manufacture and use of intermediate bulk containers for the transportation of dangerous goods, classes 3, 4, 5, 6.1, 8 and 9
CGSB-43.151	Packaging, handling, offering for transport and transport of Explosives (Class 1)
CSA B339	Cylinders, spheres, and tubes for the transportation of dangerous goods
CSA B340	Selection and use of cylinders, spheres, tubes, and other containers for the transportation of dangerous goods (Class 2)
CSA B341	UN pressure receptacles and multiple-element gas containers for the transport of dangerous goods
CSA B342	Selection and use of UN pressure receptacles, multiple-element gas containers, and other pressure receptacles for the transport of dangerous goods (Class 2)
CSA B620	Highway tanks and TC portable tanks for the transportation of dangerous goods
CSA B621	Selection and use of highway tanks, TC portable tanks, and other large containers for the transportation of dangerous goods, Classes 3, 4, 5, 6.1, 8, and 9
CSA B622	Selection and use of highway tanks, TC portable tanks, and ton containers for the transportation of dangerous goods (Class 2)
CSA B625	Portable tanks for the transport of dangerous goods
CSA B626	Portable tank Specification TC 44

INTERNATIONAL HARMONIZATION UPDATE, 2016 – Continued



The amendment includes:

- New special provision to provide exemption from ERAP requirements and toxic by inhalation requirements for sulfuric acid, fuming with less than 30% free sulfur trioxide; and
- Incorporation of Protective Direction (PD) 38 requirements (phasing out of DOT-111 tank cars for crude oil service) in TDGR to reduce confusion for regulates.
 - Changes reflect the accelerated timelines in PD 38 and clarify that they apply to UN1268 that is crude oil.

REGULATORY COOPERATION COUNCIL

Purpose

- Regulatory collaboration and harmonization with the U.S. are key to supporting and enhancing the flow of trade across the Canada-U.S. border.
- TDG has an ambitious RCC work plan with the Pipelines and Hazardous Materials Safety Administration (PHMSA).
 - The plan will help reducing red tape and unnecessary regulatory burdens for those who ship or carry dangerous goods.
- The work plan is available at: <https://www.tc.gc.ca/eng/acts-regulations/tc-usdot-870.html>.

REGULATORY COOPERATION COUNCIL

Highlights / Next Steps

TC continues to work with PHMSA on items under the RCC work plan such as:

- Mutual recognition of OTMAs/temporary certificates that are not currently recognized.
- Exemptions to the TDGR and Exceptions to 49 CFR for potential harmonization between Canada and the U.S.
- Standardization of hazard communication (labelling and placarding).
- Collaboration (i.e. joint and complimentary inspections) of means of containment facilities within Canada, the U.S. and internationally.

For more information, please contact:

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Any questions?