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 Registry
• Protective Direction Updates
• Regulatory Amendments in Progress
• Ongoing collaboration between Canada and the US
TRANSPORTATION OF DANGEROUS GOODS REGISTRY

Transport Canada (TC) is developing a Transportation of Dangerous Goods Registry (TDG Registry) that will identify regulated parties throughout the supply chain in order to facilitate risk based assessment of dangerous goods sites across Canada.

TC has adopted a phased approach to developing/implementing the TDG Registry:
- Phase 1 – Policy Development (2016/17 - 2017/18)
- Phase 2 – Legislative and Regulatory Development (2018/19 - 2019/20)
- Phase 3 – Registry 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 and track regulated parties under the Transportation of Dangerous Goods Act.

Phase 3 will be to develop the physical platform and database.

TRANSPORTATION OF DANGEROUS GOODS REGISTRY – continued

Information collected via the TDG Registry 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 GOODS REGISTRY – continued

Work is currently underway for Phase 1 – Policy Development, including:
- Establishing who will be required to register, and what information will be required 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).
PROTECTIVE DIRECTIONS

- Issued under section 32 of the TDG Act and regulated under Part 13 of the TDG Regulations;
- Used when it is necessary to deal with an emergency that involves danger to public safety that cannot be effectively dealt with under any other provision of the Act;
- Where an activity must be ceased or to require certain activities in order to reduce danger to public safety;
- Take effect on the date the Minister or a designated person signs it, or at a date set out in the protective direction; and remain in effect until it is cancelled in writing, or expires on the expiry date set out in it.

RECENT PROTECTIVE DIRECTIONS

Protective Directions issued since 2014:

- 38: Petroleum Crude oil, sour crude oil and petroleum distillates/products, N.O.S. that is crude cannot be transported by rail unless the tank car is a class TC-117 (July 13, 2016)
- 37: Rail car pressure release device must be located in a protective housing with specifications (May 31, 2016)
- 36: Canadian Class I railways to provide registered municipalities with:
  - dangerous goods reports twice a year immediately;
  - dangerous goods reports four times a year within 24 months; and
  - a standardized format for presenting data.
  Short line railways must continue to provide a yearly report to municipalities, due on March 15 every year
- 35: Lithium ion batteries as cargo no longer allowed on passenger carrying aircraft (March 22, 2016)
- 34: removal from service of CTC-111, DOT-111 or AAR-211 specification tank cars that do not have a continuous bottom shell (April 23, 2014)

Protective Directions incorporated in the TDGR:

- 35: Incorporated in June 2016: Lithium ion batteries as cargo no longer allowed on passenger carrying aircraft
- 34, 37 and 38: to be incorporated in Transport Canada Publication TP14877 Containers for Transport of Dangerous Goods by Rail
TDG REGULATORY AMENDMENTS IN PROGRESS

- Training (Part 6)
- Emergency Response Assistance Plans (Part 7)
- Air (Part 12)
- Canadian Update (including Parts 1-5)
- International Harmonization

TRAINING (PART 6)

Purpose
- To increase compliance and improve public safety by:
  - ensuring that people who handle, offer for transport, transport or import dangerous goods have the knowledge and skills to perform their jobs; and,
  - increasing clarity of the regulatory requirements.
- To provide TC with a tool to assess whether persons have the knowledge and skills to perform their jobs.
- There is an interest for the federal government to increase its oversight on training.

TRAINING (PART 6) – continued

Progress to date:
- Targeted stakeholder consultation took place in Fall 2015 (Phase 1);
- Stakeholder comments were analyzed and a White Paper laying out TC’s proposals was developed;
- Consultations then took place in Winter 2016.
Proposed amendments

- Replace “adequately trained” with what it means to be a “competent person.”
  - To clarify expectations of a competent person and set the foundation for a competency based approach to training and assessment (CBTA).

- Develop a competency-based framework that would be reflected in the regulations, and a standard and guidelines to supplement the CBTA framework.
  - To help employers determine the training their employees need; to allow employees to better understand what is expected of them; and to provide trainers with a model to develop their training programs.

Proposed amendments (cont’d)

- Develop a standardized TDG 101 test, and related guidance materials, to provide general awareness training but not function-specific or specialized training to:
  - Increase the regulated community’s awareness of its responsibilities and liabilities;
  - Ensure consistent evaluation with regard to basic understanding of the TDG regulatory requirements; and provide TC with a benchmark to verify compliance.

Engagement results

- Over 60 responses were received from members of the regulated community including large and small companies, industry and trade associations, other levels of government within Canada, training institutions and self-employed trainers.

- Preliminary review of stakeholder comments have revealed that:
  - No particular option received overwhelming support or opposition, however some stakeholders were not fully supportive of the TDG 101 Test requirement, but supported the development of a Guidance Manual for Awareness Training.
  - The CBTA approach was generally supported by organizations that already use a similar approach in their management systems. However, they did note that CBTA design should allow for flexibility and not be too onerous.

Next Steps

- Proposed amendments planned for publication in the Canada Gazette, Part I for consultation in Winter 2018.
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;
  - Help protect public safety.

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

Background (cont.)
- April 2014: Minister announced the Transportation of Dangerous Goods (TDG) Emergency Response Task Force (ERTF).
  - Mandate to conduct research, assess, evaluate and make recommendations to improve the ERAP program.
- 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.
- A consultation document is available online at: http://www.letstalktransportation.ca/part7eraps.

Proposed Amendments
- Mandatory phone call to ERAP number when a means of transport cannot continue to its intended destination without intervention.
- Requirement for person to be available to respond to a call to the ERAP number 7 days a week, 24 hours a day while goods are in transport.
- Criteria for an ERAP being activated:
  - 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.

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<th>Description</th>
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<td>Technical assistance to operators</td>
<td>Technical assistance to operators when 1st tier of response is reached</td>
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<tr>
<td>2</td>
<td>Additional technical assistance</td>
<td>Additional technical assistance to operators when 2nd tier of response is reached</td>
</tr>
<tr>
<td>3</td>
<td>On-site support</td>
<td>On-site support to operators when 3rd tier of response is reached</td>
</tr>
</tbody>
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Next steps

- Consultations close May 1, 2017;
- Comments received during the consultation period will be reviewed, and a path forward will be developed;
- Proposed amendments planned for publication in the Canada Gazette, Part I for consultation in Winter 2018.

AIR (Part 12)

Background

- Part 12 of the Transportation of Dangerous Goods Regulations (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
• Targeted consultation of key stakeholders took place in spring 2016 (Phase 1).
• Stakeholder comments have been analyzed and a White Paper laying out TC’s proposals is being developed.

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)
• Proposals regarding documentation of dangerous goods
• 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
• Others to be identified during consultations

AIR (Part 12) – continued

Next Steps
• In May 2017, a second phase of Web-based consultations will be launched on the proposed path forward.
• 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 US 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 an exemption for the transport of 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 US
• Update classification provisions to better align with most recent version of UN Recommendations; proposed changes include:
  – 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
  – 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)
  – Eg: 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 »
• Incorporates Protective Directions 34, 37 and 38
• 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 requirement in the US, 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 US 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

Progress to Date
• Web-based consultation December 9, 2016 – February 22, 2017
• Aim to incorporate equivalency certificates into the TDGR where appropriate

Next Steps
• Analyze comments and develop proposed regulations
• Publication of proposed amendment in Canada Gazette, Part I targeted for January 2019

INTERNATIONAL HARMONIZATION UPDATE, 2016

Purpose
• Incorporate recent changes made to technical standards and international regulations
• Introduce dynamic references for UN Recommendations, IMDG Code, ICAO Technical Instructions and 14 technical standards
• Allow reciprocity with the U.S. for pressure receptacles and approvals
• Add a new exemption for hot air balloon cylinders
INTERNATIONAL HARMONIZATION UPDATE, 2016 – continued

Progress to date
- Canada and U.S. held joint meetings with stakeholders in 2012, 2014 and 2016 on RCC objectives
- Web consultation in February 2016; most comments were supportive
- Proposed amendment was published in Canada Gazette, Part I on November 26, 2016 for 60-day comment period; 18 submissions were received from stakeholders
- Support harmonizing with international regulatory requirements
- Support reciprocity with U.S.; some suggested options for further harmonization
- Support new hot air balloon cylinder exemption
- Support aligning toxic by inhalation requirements with U.S.; requested certain clarifications
- Support dynamic referencing but requested oversight and transition period for new standards

The final amendment will include:

- Clarification of toxic by inhalation requirements including minimum size requirements for lettering (small and large packaging)
- 6-month transition period for complying with new standards that are dynamically referenced
  - TC will continue to track and monitor standards development work and inform stakeholders of upcoming and new changes to standards
- 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
- No requirement for consignor’s certification on shipping document from the U.S.; the impacts of this proposed change will be further examined

The final amendment will include (cont’d):
- 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
- Incorporation of PD 38 requirements (phasing out of DOT-111 tank cars for crude oil service) in TDGR to reduce confusion for regulatees
  - Changes reflect the accelerated timelines in PD 38 and clarify that they apply to UN1268 that is crude oil
**INTERNATIONAL HARMONIZATION UPDATE, 2016 – continued**

**Next steps**
- Publication of final amendment in Canada Gazette, Part II targeted for Summer 2017

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**ONGOING COLLABORATION BETWEEN CANADA & US**

**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

**Highlights**
- TC-TDG, PHMSA/FRA continue to collaborate on:
  - 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)

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