Transportation of Dangerous Goods Standard

Owner: Senior Manager, Regulatory Compliance

Effective date: October 2, 2017 Last updated: November 30, 2021 Last reviewed: May 24, 2022

Purpose

The purpose of this Transportation of Dangerous Goods Standard (TDG Standard) is to outline Cenovus's expectations on execution and implementation of the TDG Program and ensure compliance with applicable TDG Acts (TDGA) and Regulations (TDGR).

Scope

The TDG Standard applies to staff and suppliers that import, handle, offer for transport or transport dangerous goods on behalf of Cenovus in Canada. Commodities transported by pipeline are governed by federal and provincial acts and regulations, and are not covered by this Standard.

Roles and responsibilities

Role	Responsibilities
Health & Safety, Deployed	 Respond to questions or concerns relating to the interpretation of this Standard and associated materials. Share important information with the business functions as needed.
Environment & Regulatory	Review new and emerging legislation and advise Health & Safety, Deployed on impending changes.
	 Conduct compliance assessments on Rail and Marine transload terminals and assist in road transportation as required.
	 Provide subject matter expertise as it relates to TDG requirements. Manage and update Cenovus ERAPs and Emergency Response Plans. Manage the CANUTEC and CHEMTREC accounts.
Emergency Management	Respond to emergency calls from carriers and first responders with technical advice on Cenovus products and wastes.
Staff and Suppliers who handle, offer for transport or transport dangerous goods for, or on behalf of, Cenovus	 Maintain a current TDG certificate or work under direct supervision of someone who is certified according to TDG legislation. Ensure compliance with dangerous goods regulations at
	Cenovus worksites. • Use site-specific TDG procedures, as warranted.
Business functions	 Business functions are responsible for creating processes to comply with the requirements of this Standard and applicable laws and regulations. Assign representatives to ensure compliance at both site and business lev

Standard statements

Cenovus TDG program

The TDG Program includes classification, documentation, safety marks, means of containment, emergency response, release reporting, and training to meet the requirements of Canadian federal and provincial Transportation of Dangerous Goods Acts and Regulations.

Management of Change (MOC) overview

Business functions shall ensure their respective MOC processes address changes to TDG legislation and associated protective directions enacted by regulators. This process shall involve the appropriate internal TDG subject matter expert for review, resolution and consultation, without compromising safety, while remaining in compliance with applicable Cenovus standards and procedures.

Classification and sampling

Federal and provincial TDG regulations require Cenovus, as consignor or offeror for transport, to determine the hazard classification of dangerous goods. Before Cenovus offers the dangerous goods for transport, they shall be classified through appropriate sampling and analyses.

Transport Canada recommends TDG sampling prior to the shipping of dangerous goods from a site and accepts historical analytical data captured with a reasonable time frame.

Samples shall be collected:

- To ensure they are representative of the material being transported.
- In American Society for Testing and Materials (ASTMI) approved containers.
- By trained site operators or lab technicians and sent directly to an accredited laboratory for analysis.

Proof of classification is required for the transportation of any dangerous goods.

Documentation

Staff and suppliers are required to have a shipping document in order to be a carrier or consignor of dangerous goods. Shipping documents, or Bills of Lading, are required to accompany all shipments of dangerous goods and contain information related to product classification, consignor certification, and emergency response information to be used in the event of an incident during transport.

Before allowing a carrier to take possession of dangerous goods for transport, Cenovus (the consignor) shall provide to the carrier, or authorize the transloader to provide to the carrier, a copy of the shipping document. Cenovus facilities handling dangerous goods carried by rail shall maintain rail operating approval certificates from provincial regulators, where applicable.

When Cenovus imports dangerous goods into Canada, as the consignor Cenovus must ensure the carrier has shipping documentation that contains all information required by TDG Regulations <u>before</u> the dangerous goods are transported into Canada. A Cenovus employee or representative shall write their name legibly within the consignor's certification on the shipping document.

A copy of each shipping document must be retained by Cenovus for five years.

For further details about when a shipping document is required, contact Health & Safety, Deployed.

International or interprovincial shipments of hazardous waste or hazardous recyclables are conducted in accordance with the Canadian Cross Border Movement of Hazardous Waste and Hazardous Recyclable

Material Regulations, and must be approved and manifested appropriately.

Safety marks

Dangerous goods safety marks give an instant identification of dangerous goods in the event of an emergency situation such as an accident or a release of dangerous goods from a means of containment. Safety marks must be applied to the means of containment before allowing a carrier to take possession of the dangerous goods.

Cenovus has contractual agreements between carriers and transload facilities to ensure the display of the required dangerous goods safety marks on each large means of containment (e.g., rail car, tanker truck or cargo ship) containing dangerous goods. However, Cenovus must provide the carrier or facility with the appropriate safety marks for the dangerous goods if the carrier does not have the appropriate safety marks, prior to transportation.

Refer to the Ground TDG Guidance document for commonly used safety marks.

Means of containment

When shipping dangerous goods, Cenovus must choose a means of containment that is either in standard for the contents or is designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no accidental release of the dangerous goods that could endanger public safety or the environment. All dangerous goods shall be packaged in accordance with the UN dangerous goods packaging requirements.

Rail cars must be selected according to rail car specifications (TP 14877E Containers for Transportation of Dangerous Goods by Rail), and highway tanks must conform to the requirements for selection, use, handling, filling and unloading of highway tanks (CSA B621).

Cenovus has contractual agreements with bulk carriers to load and offload, unload, and secure dangerous goods. These contracts are reviewed and processes are audited as necessary to ensure regulatory compliance with regards to standardized and appropriate means of containment for the dangerous goods.

Emergency Response Assistance Plan

An Emergency Response Assistance Plan (ERAP) outlines what is to be done if there is an accident involving certain dangerous goods. ERAPs are maintained by the Environment & Regulatory group. An approved ERAP is required for transporting the following:

- Class 2 Flammable Gases
- Class 3 Flammable Liquids

Cenovus has approved ERAPs for flammable gases in quantities over 3,000 litres for road and rail transport; and for flammable liquids in quantities over 10,000 litres for rail transport only. These ERAPs, approved by Transport Canada, are managed and tested annually by Emergency Response Assistance Canada (ERAC).

Reporting requirements

The release, or anticipated release, of any quantity of dangerous goods that pose a risk to property, the public, or the environment must be reported to Transport Canada.

If a release or anticipated release of dangerous goods occurs, those who have management or control of the means of containment must file an emergency report with local authorities as soon as possible.

Refer to the Federal and Provincial Spill Reporting guidance for further information on spill reporting.

Importing from/exporting to the U.S.

Due to alignment strategies and reciprocity agreements, transport from Canada is conducted according to TDG regulations and transport in the US (including import or export) must comply with 49 CFR.

Exemptions

When dangerous goods are transported in small quantities (e.g., test samples), a limited quantity exemption may apply. Exemptions may also be made under equivalency certificates. Please refer to the TDG Guidance document for further details.

Training and competency

Cenovus requires training and certification, in accordance with COIMS, for all staff and suppliers who may be involved in any part of handling, offering for transport, or transporting dangerous goods or as indicated by their supervisor for their role on a Cenovus worksite. This group includes schedulers, traders, and logistics specialists, as well as field personnel.

Cenovus offers TDG training that meets the general training requirements set forth in the TDG regulations. All Cenovus staff have the ability to access this course through the Learning Management System (LMS). Supplementary training for road, rail, ERAP and leadership is also available.

Competency shall be validated through formal evaluation and skill demonstration. Online/classroom training requires a written knowledge check (e.g., test, quiz, exam). On the job skill assessments of task completion shall be conducted by the employee supervisor/designate, and any gaps identified will be addressed immediately.

TDG training is valid for three years from the date of certificate issue. Cenovus maintains a record of training within the Learning Management System, as well as a copy of a training certificate, in electronic form, beginning on the date the training certificate is issued until two years after the date it expires. Certified individuals must be able to provide their training certificate, or a copy, to an inspector upon request.

Compliance and enforcement

Monitoring

Compliance with this Standard and program effectiveness shall be assessed through program assessments and COIMS assurances processes. Measurement can also be accomplished through the tracking of appropriate Key Performance Indicators (KPIs).

Consequences of non-compliance

Failure to adhere to this Standard could result in fines, business function shut-downs, and loss of ability to transport products.

Support

For additional support, please contact your Deployed Health & Safety Representative, or the Environment & Regulatory group.

Related policies and standards

• Ground TDG Guidance

Glossary

Term	Definition
49 CFR	CFR Title 49 - Transportation is one of fifty titles comprising the United States (U.S.) Code of Federal Regulations (CFR). Title 49 is the principle set of rules and regulations (sometimes called administrative law) issued by the Departments of Transportation and Homeland Security, federal agencies of the United States regarding transportation and transportation related security.
Accidental Release "Accident"	An unintentional discharge, emission, explosion, outgassing, imminent release or other escape of dangerous goods, or any component or compound evolving from dangerous goods, from a means of containment being used to handle or transport the dangerous goods.
Carrier	Means a person who, whether or not for hire or reward, has possession of dangerous goods while they are in transport
Class	Means when the word "class" is followed by (a) one digit, the class of dangerous goods listed in the schedule to the TDGA.
Consignee	The party which receives dangerous goods.
Consignor	According to the TDG Regulations, a consignor is a person in Canada who (a) is named in a shipping document as the consignor; (b) imports or who will import dangerous goods into Canada; or if (a) and (b) do not apply, has possession of dangerous goods immediately before they are in transport. A person may be both a consignor and a carrier.
CSA B621	Canadian Standards Association, 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.
Dangerous Goods (DG)	A product, substance or organism included by its nature or by the federal or provincial regulations in any of the classes listed in the schedule; Class and UN number can be found on the Shipping Document.
Equivalency certificate	Equivalency certificates are required if a person wishes to carry on an activity relating to transporting dangerous goods in a way that is not in compliance with the TDG and must show that the way in which the activity will be carried on will provide a level of safety equivalent to complying with the Regulations; look to Part 3 of the provincial TDG Regulation for Permit for Equivalent Level of Safety.
Handling	Loading, unloading, packing, or unpacking dangerous goods in a means of containment for the purposes of, in the course of or following transportation and includes storing them in the course of transportation.
In standard	A standardized means of containment is in standard with a specific safety standard if it has displayed on it the certification safety marks required by the standard and (a) was in compliance with the requirements of the standard when each certification safety mark was first displayed; and remains in compliance with the requirements of the standard that had to be complied with when each certification safety mark was first displayed.

Means of containment	A container or packaging, or any part of a means of transport that is or can be used to contain goods
Offer for transport (offeror)	For dangerous goods not in transport, to select or allow the selection of carrier to transport the dangerous goods, to prepare or allow the preparation of the dangerous goods so that a carrier can take possession of them for transport or to allow a carrier to take possession of the dangerous goods for transport.
Packing group	Group within a class ranking the inherent danger of the dangerous goods. Packing Group, I indicate great danger Packing Group, II indicates medium danger Packing Group III indicates minor danger
Proof of classification	A lab report, test report, or a document that explains how and when the dangerous goods were classified.
Safety mark	A dangerous goods mark or a compliance mark. Dangerous goods safety marks include labels, placards, orange panels, signs, marine pollutant marks, numbers, letters, abbreviations, and words used to identify dangerous goods and to show the nature of the danger they pose.
Shipping document	A document that relates to dangerous goods that are being handled, offered for transport or transported and that contains the information required by Part 3 of TDGR, Documentation, relating to the goods. Does not include an electronic record.
Shipping name	An entry in upper case letters (capitals) in Column 2 of Schedule 1 of TDGR but does not include any lower-case descriptive text except for the purpose of determining the classification of dangerous goods.
Technical name	The chemical name or another name currently used in a scientific or technical handbook, journal, or text, but does not include a trade name.
TP 14877E	Transport Canada, Transportation of Dangerous Goods, Containers for Transport of Dangerous Goods by Rail, A Transport Canada Standard.
Transloader	Facility which loads dangerous goods commodity on behalf of Cenovus.
UN Number	A unique, internationally recognized number listed in Transport Canada TDGR Schedule 1.