

TDG-001 Chapter 1 Notes

Overview:

Transporting dangerous goods poses several hazards to workers, the general public and the environment. As someone involved in the transportation of dangerous goods. It is your responsibility to prevent injury, property damage and environmental harm by being adequately trained and operating in a safe and responsible manner.

To help accomplish this, the Canadian TDG ACT and regulations have been created. Proper adherence to this act and its associated regulations, ensures the safety of drivers, the public and the environment.

Please note that the transportation of dangerous goods is subject to extensive and changing government regulations. These regulations have been interpreted here based on our understanding of them. Which means that not all interpretations provided herein may be completely accurate or applicable in every situation.

When legal interpretations regarding these regulations are required, always consult the official TDG ACT and regulations. Note as well, that additional information on the TDG regulations, your responsibilities and what to do in an emergency, can be found in the TDG clear language guide book.

Training and Certification:

Individuals involved in the transportation of dangerous goods must undergo training and certification to ensure they have the knowledge and skills necessary to handle hazardous materials safely and comply with regulatory requirements.

The Transportation of Dangerous Goods (TDG) Regulations require that all individuals involved in the transportation of dangerous goods receive appropriate training to understand the hazards associated with dangerous goods and to safely handle, package, label, and transport these materials

Training must cover topics such as classification of dangerous goods, packaging requirements, labeling and marking, placarding, documentation, emergency response procedures, and regulatory compliance which will be covered later in the course.

All TDG trained individuals shall:

1. understand the hazard of each class of dangerous goods
2. recognized the dangers that are shown by labels and placards
3. carry a valid training certificate

4. handle dangerous goods carefully to prevent leaks/spills
5. take action in case of an emergency

While there is no formal certification process mandated by the TDG Regulations, individuals who complete approved training programs like this one, may receive a certificate of completion or other documentation to demonstrate their competency in handling dangerous goods.

Below is the information that is required on a dangerous good certificate:

TDG TRAINING CERTIFICATE	
_____ has completed the training required by the Transportation of Dangerous Goods Regulations .	
Employer:	_____
Employer's address:	_____ _____ _____
Issued on (date):	_____
Expires on:	_____ (maximum 3 years)
Employer's signature:	_____
Employee's signature:	_____
<i>Details of training are listed on reverse.</i>	

The topics of training are also required and are usually found on the back of the card. Below is an example of the back of a TDG Certificate. Often times, there are blank topic spots for company specific training, which would be required if someone were to take only a generic course.

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|--|--------------------------|
| • Responsibilities (Shipper, Handler, Carrier) | • Safety Marks |
| • Classification | • Means of Containment |
| • Schedules 1-3 | • ERAP Requirements |
| • General, Special Provisions, and Exemptions | • Reporting Requirements |
| • Documentation | |

Additional details or topics of training:

<u>Topic</u>	<u>Date</u>	<u>Employer's Signature</u>
_____	_____	_____

Responsibilities

Individuals involved in the transportation of dangerous goods have specific responsibilities to ensure the safe handling, packaging, labeling, and transport of hazardous materials.

Here's an overview of the individual responsibilities for the transportation of dangerous goods:

Shipper (Consignor)

Shippers play a crucial role in the transportation of dangerous goods. Their responsibilities involve ensuring that hazardous materials are packaged, labeled, documented, and transported safely and in compliance with regulatory requirements. Here's an overview of the shipper responsibilities for the transportation of dangerous goods:

- **Classification and Identification:**
 - Shippers are responsible for accurately classifying hazardous materials according to their properties and associated risks. This involves determining the proper class, division, and packing group of the hazardous material based on regulatory requirements.
- **Packaging and Containment:**
 - Shippers must ensure that dangerous goods are properly packaged and contained to prevent leaks, spills, or other incidents during transport. This includes using approved containers, drums, tanks, or other packaging materials that meet regulatory standards.
- **Labeling and Marking:**
 - Shippers are responsible for labeling and marking packages containing dangerous goods with the appropriate hazard symbols, class labels, and other required markings as specified in the Transportation of Dangerous Goods Regulations. Proper labeling and marking provide essential hazard communication for transporters, handlers, and emergency responders.
- **Documentation:**
 - Shippers must prepare and maintain accurate shipping documents, including dangerous goods shipping documents, shipping manifests, and emergency response information. These documents provide essential information about the hazardous materials being transported and facilitate compliance with regulatory requirements.
- **Placarding:**

- Shippers are responsible for determining whether placarding of transport vehicles is required based on the quantity and class of dangerous goods being transported. If placarding is required, shippers must ensure that vehicles are appropriately placarded with the primary hazard class or classes of the materials being transported.
- **Training and Certification:**
- Shippers should ensure that their personnel involved in the transportation of dangerous goods receive appropriate training and certification to handle hazardous materials safely and comply with regulatory requirements.
- **Emergency Response Preparedness:**
- Shippers must develop and implement emergency response plans and procedures to address potential incidents involving dangerous goods during transport. This includes providing training to employees, equipping vehicles with emergency response equipment, and coordinating with emergency response agencies.
- **Compliance and Enforcement:**
- Shippers are responsible for ensuring compliance with the TDG Act and Regulations, as well as any relevant provincial/territorial regulations. Regulatory authorities may conduct inspections and audits to verify compliance with regulatory requirements, and shippers must cooperate with enforcement actions.

Drivers play a critical role in the safe transportation of dangerous goods. Their responsibilities involve ensuring that hazardous materials are handled, transported, and delivered safely and in compliance with regulatory requirements. Here's an overview of the driver responsibilities for the transportation of dangerous goods:

1. **Training and Certification:**
 - Drivers must undergo appropriate training and certification to handle and transport dangerous goods safely. This training covers topics such as the classification of dangerous goods, packaging requirements, labeling and marking, placarding, documentation, and emergency response procedures.
2. **Vehicle Inspection and Maintenance:**
 - Drivers are responsible for inspecting their vehicles before and during transport to ensure that they are in safe operating condition. This includes checking for any leaks, damage, or other issues that could compromise the safety of the transport vehicle or its cargo.
3. **Loading and Securing:**
 - Drivers must ensure that dangerous goods are loaded and secured properly in the transport vehicle to prevent shifting, leaks, spills, or other incidents

during transport. This involves following proper loading procedures and using appropriate securing methods to prevent cargo from moving or becoming dislodged.

4. Transport Documentation:

- Drivers are responsible for carrying and maintaining accurate transport documentation, including dangerous goods shipping documents, shipping manifests, and emergency response information. This documentation provides essential information about the hazardous materials being transported and facilitates compliance with regulatory requirements.

5. Placarding and Marking:

- Drivers must ensure that their vehicles are appropriately placarded and marked with the primary hazard class or classes of the materials being transported, as required by the Transportation of Dangerous Goods (TDG) Regulations. Proper placarding and marking help alert emergency responders and the public to the presence of hazardous materials.

6. Compliance with Regulations:

- Drivers must comply with all applicable regulations and standards governing the transportation of dangerous goods, including the TDG Act and Regulations, as well as any relevant provincial/territorial regulations. This includes adhering to speed limits, route restrictions, and other regulatory requirements.

7. Emergency Response Preparedness:

- Drivers should be familiar with emergency response procedures and know how to respond effectively in the event of an incident involving dangerous goods. This may involve contacting emergency services, evacuating the area if necessary, and following established emergency protocols.

8. Communication:

- Drivers should maintain open communication with their employers, shippers, and other parties involved in the transportation of dangerous goods. They should report any issues or concerns related to the transport of hazardous materials promptly and follow established communication protocols.

The receiver of dangerous goods also holds significant responsibilities to ensure the safe handling and storage of hazardous materials upon receipt. Here's an overview of the receiver responsibilities for the transportation of dangerous goods:

1. Training and Awareness:

- Receivers should be trained and knowledgeable about the hazards associated with the dangerous goods they receive. They should understand proper handling procedures, storage requirements, and emergency response protocols specific to the hazardous materials they are receiving.

2. Inspection and Acceptance:

- Upon receipt of dangerous goods, receivers should inspect the shipments to ensure that they are properly packaged, labeled, and documented in accordance with regulatory requirements. They should verify that the goods match the information provided on the shipping documents and report any discrepancies or damage promptly.

3. Storage and Handling:

- Receivers are responsible for storing dangerous goods in designated areas that meet regulatory requirements for hazardous materials storage. They should ensure that storage facilities are properly equipped, ventilated, and segregated to prevent incompatible materials from coming into contact with each other.

4. Security and Access Control:

- Receivers should implement security measures to prevent unauthorized access to hazardous materials and minimize the risk of theft, vandalism, or sabotage. This may include restricting access to storage areas, implementing surveillance systems, and maintaining records of access to hazardous materials.

5. Emergency Preparedness:

- Receivers should have emergency response plans and procedures in place to address potential incidents involving dangerous goods. They should ensure that employees are trained in emergency response protocols and know how to respond effectively in the event of a spill, leak, or other emergency.

6. Documentation and Recordkeeping:

- Receivers should maintain accurate records of all incoming shipments of dangerous goods, including shipping documents, manifests, and emergency response information. These records provide essential information about the hazardous materials received and facilitate compliance with regulatory requirements.

7. Communication:

- Receivers should maintain open communication with shippers, carriers, and other parties involved in the transportation of dangerous goods. They should

report any issues or concerns related to the receipt of hazardous materials promptly and collaborate with stakeholders to address any potential risks or compliance issues.

Enforcement

In Canada, the enforcement of regulations governing the transportation of dangerous goods is carried out by various federal, provincial, and territorial authorities. These enforcement agencies work collaboratively to ensure compliance with the Transportation of Dangerous Goods (TDG) Act and Regulations, as well as any relevant provincial/territorial regulations. Here's an general overview of the enforcement of transportation of dangerous goods in Canada:

Transport Canada

Transport Canada is the federal regulatory agency responsible for overseeing the transportation of dangerous goods in Canada. It establishes and enforces regulations, provides guidance and training, conducts inspections and audits, and responds to incidents involving dangerous goods at the federal level.

Transport Canada employs inspectors who are responsible for enforcing the TDG Act and Regulations. These inspectors conduct inspections and audits of shippers, carriers, receivers, and other parties involved in the transportation of dangerous goods to verify compliance with regulatory requirements. They may issue warnings, compliance orders, or penalties for non-compliance.

Provincial and Territorial Authorities

Provinces and territories in Canada also have their own regulations governing the transportation of dangerous goods within their jurisdictions. Provincial/territorial authorities are responsible for enforcing these regulations and ensuring compliance with applicable standards for the safe transport of hazardous materials.

Provincial/territorial regulators may employ inspectors or designate enforcement officers who have authority to inspect facilities, vehicles, and shipments of dangerous goods within their respective jurisdictions. They may conduct inspections, issue compliance orders, and impose penalties for violations of provincial/territorial regulations.

Response to Incidents

In the event of an incident involving dangerous goods, enforcement agencies are responsible for coordinating emergency response efforts, conducting investigations, and taking appropriate enforcement actions to address any violations of regulatory requirements. This may involve working with other agencies and stakeholders to mitigate risks, protect public safety, and minimize environmental impacts.

Here in **Ontario**, the transportation of dangerous goods is regulated by several agencies and authorities at both the provincial and federal levels. Here are the main regulators and authorities responsible for overseeing the transportation of dangerous goods in Ontario:

Ontario Ministry of Transportation (MTO)

The Ontario Ministry of Transportation is responsible for overseeing the transportation system in the province, including the safe movement of goods, including dangerous goods, on Ontario's roads and highways. MTO may develop and enforce regulations related to the transportation of dangerous goods within the province.

Ontario Provincial Police (OPP)

The Ontario Provincial Police plays a role in enforcing regulations related to the transportation of dangerous goods on Ontario's highways. OPP officers may conduct inspections of vehicles transporting dangerous goods to ensure compliance with applicable regulations and standards.

Transport Canada

Transport Canada is the federal regulatory agency responsible for overseeing the transportation of dangerous goods across Canada. While Transport Canada primarily operates at the federal level, its regulations and standards apply to transportation activities in all provinces and territories, including Ontario.

Ontario Ministry of Labour, Training and Skills Development

The Ontario Ministry of Labour, Training and Skills Development is responsible for occupational health and safety in Ontario workplaces. While its primary focus is on workplace safety, it may also have a role in overseeing the safe handling and storage of dangerous goods in workplaces, including compliance with relevant regulations and standards.

Ontario Ministry of the Environment, Conservation and Parks (MECP)

The Ontario Ministry of the Environment, Conservation and Parks is responsible for protecting Ontario's environment and natural resources. While its primary focus is on environmental protection, it may also have jurisdiction over certain aspects of the transportation and storage of dangerous goods, particularly with regard to environmental impacts and spills.

The above can search shipments, take samples, make copies of documents and even seize shipments. Inspectors can inspect facilities but most enforcement takes place on the roadways.

Inspectors can check:

1. training certificate
2. shipping document are present and correct
3. products are labeled and marked are correctly
4. correct containers have been used and are in good condition
5. loads are secured