Transportation of dangerous goods

What employers need to know

Some employers whose operations handle and transport small amounts of dangerous goods mistakenly believe they are exempt from rules concerning the transportation of dangerous goods.

Regardless of the size and amount of commodity handled, however, all employers are subject to the *Transportation of Dangerous Goods Act, 1992* ("the TDG Act") and the TDG Regulations.

Classes

There are nine classes of dangerous goods listed in Schedule 1 of the TDG Regulations. Most service vehicles would likely carry a few of these classes:

- Class 2: Gases (compressed, deeply refrigerated, or dissolved under pressure). This class has 3 divisions:
 2.1, 2.2, and 2.3 (refrigerant gases are either a Class 2.1 or a 2.2, depending on the gas, while oxygen and nitrogen are a Class 2.2)
- Class 3: Flammable liquids
- Class 8: Corrosives.

Each dangerous good is assigned a UN number, which includes the letters UN followed by four digits and a shipping name.

Exemptions

Changes introduced by Amendment No. 6 of the TDG Regulations, which came into force in 2008, allowed for small quantities (150 kg gross mass) of these dangerous goods (except for 2.3 gases) and of others to be transported without having to abide by certain parts of the regulations.

The 150 kg Gross Mass Exemption is no longer restricted to personal use. If all conditions are met, anyone transporting dangerous goods

can use this exemption. In fact, a technician driving a service vehicle (both pickup trucks and closed vans) with refrigerants, welding gases, drain-cleaning chemicals, or any other items classed as dangerous goods would be exempt from Part 3 (Documentation), Part 4 (Dangerous Goods Safety Marks), Part 5 (Means of Containment), Part 6 (Training), and Part 8 (Accidental Release and Imminent Accidental Release Report Requirements).

The other common exemption is the "Class 2, Gases, in Small Means of Containment Exemption". The person operating the vehicle would be exempted from Part 3 (Documentation) and Part 6 (Training), if

- the dangerous goods are being transported in no more than five small means of containment (cylinders),
- the gross mass of the dangerous goods is less than or equal to 500 kg, and
- the dangerous-goods safety marks (labels) displayed on the small means of containment can be seen from outside the road vehicle.

These exemptions exempt only the "person" (an individual or an organization) from certain Parts of the TDG Regulations. They do not exempt the person from the TDG Act.

The TDG Act clearly states that no person shall import, offer for transport, handle, or transport any dangerous goods unless

- the person complies with all safety and security requirements that apply under the regulations,
- the goods are accompanied by all documents that are required under the regulations,
- a means of containment is used for the goods that is required or permitted under the regulations,

- the means of containment and means of transport comply with all safety standards that apply under the regulations, and
- the means of containment and means of transport display all applicable safety marks in accordance with the regulations.

For example, the gas cylinders being transported under the "150 kg Gross Mass Exemption" must comply with Part 5 of the TDG Regulations. The cylinder must also be of an approved specification and must be within its prescribed re-qualification interval. The kind of test to be conducted and the frequency of the test vary depending on the gas in the cylinder and the cylinder's construction. Cylinders can be inspected and requalified by only a company that is registered with Transport Canada to do so. Part 5 also states the gas cylinder must be loaded and secured in the vehicle in such a way as to prevent, under normal conditions of transport, damage to the cylinder and to the vehicle that could lead to a release of the dangerous goods.

It is the employer's responsibility to understand exemptions from specific parts of the TDG Regulations when transporting certain types and quantities of dangerous goods. Employers must also ensure that they comply with the parts of the TDG regulations they are still required to follow. Fines for improperly transporting dangerous goods can range from \$500 to \$100,000, plus other penalties.

Do you need training?

The Infrastructure Health & Safety Association is recognized by Transport Canada as a provider of training on the TDG Act and Regulations.

Visit **www.ihsa.ca** or call 1-800-781-2726 to register. **○**