

# **Transportation of Dangerous Goods**

A decision about whether or not hazardous or dangerous goods are allowed to use an international crossing is up to the owner/operator of the specific crossing. Since the Detroit River International Crossing (DRIC) study is still in the environmental assessment phase, no decision has been made yet on this issue. However, the study team is considering this issue as part of the environmental assessment study. This document summarizes the current situation for the transportation of dangerous goods at the Windsor-Detroit border crossings and the regulations that apply to the transportation of dangerous goods.

## **Current Situation**

The transportation of dangerous goods is regulated in both Canada and the United States. Under Michigan state law, trucks carrying classes 1, 3, 6 and 7 dangerous goods, which include corrosive, explosive, radioactive and flammable loads, are prohibited from the Ambassador Bridge and Detroit-Windsor Tunnel. As a result, trucks carrying dangerous goods must use the Detroit-Windsor Truck Ferry to cross the Detroit River. Approximately 100 trucks per

day use the Detroit-Windsor Truck Ferry.

The nearest alternative border crossing for trucks carrying listed dangerous goods is the Bluewater Bridge at Sarnia-Port Huron, which can add an additional two hours of travel time for trucks destined for western or southern United States. Most trucks that use alternate crossings do so because of the markets they serve, and not as an alternative to using the ferry service.

# Regulations Controlling Dangerous Gods Transport

In 1974, the Government of Canada developed a uniform set of standards to promote public safety in the handling and transportation of dangerous goods for all modes of transport. These standards are reflected in the current federal *Transportation of Dangerous Goods Act* and associated regulations.

Ontario passed the *Dangerous Goods Transportation Act* in 1981. Regulations under the Act adopt the on-highway requirements of the federal regulations.

### **Transportation Requirements**

Trucks carrying dangerous goods are permitted to use both highways and municipal streets to deliver goods to and from user locations. Most loads of dangerous goods being transported must meet the following requirements:

- The load must be accompanied by a shipping document, which includes specific information.
- Containers must display appropriate safety marks and placards.
- The driver must be a trained person or be under the direct supervision of a trained person. The trained person must have been issued a training certificate by their employer and have it in their possession when transporting dangerous goods.
- The goods must be transported in a "prescribed" means of containment. The means of containment must be designed, closed, secured and maintained so that under normal conditions of transport there will be no accidental release of dangerous goods that could endanger public safety.

#### **Inspection and Enforcement**

The Government of Canada is responsible for inspection and enforcement of off-highway shippers and manufacturing processes. On provincial highways such as Highways 401 and 3, these responsibilities belong to the Ministry of Transportation and the Ontario Provincial Police.

### Dangerous Goods:

**Class 1** - Explosives, including explosives.

Class 3 - Flammable and combustible liquids within the meaning of the Explosives Act.

**Class 6** - Poisonous (toxic) and infectious substances.

Class 7 - Radioactive materials and radioactive prescribed substances within the meaning of the Atomic Energy Control Act. Ministry of Transportation Enforcement Officers and police officers receive comprehensive training necessary to ensure that the regulations are properly enforced.

# **Design Objectives and Public Safety**

Intersections and entrances onto roadways increase accident potential. As a result, the introduction of a controlled access highway from Highway 401 to a new river crossing location would reduce accident potential. In addition, measures such as electronic messaging to warn drivers of unusual conditions and speed transition zones at the approach to the plaza area can also be included in the roadway design to enhance safety.

# **Other Safety Measures**

The DRIC study team is working closely with emergency service providers to ensure that potential risks posed by accidental release of hazardous materials are considered in the environmental assessment and can be incorporated into the highway design. Access to accident locations and the ability to contain spills within the corridor will be important design requirements.