Hazardous Substances: How to Comply with TDGA Emergency Response Plan Requirements
So-called “dangerous goods” pose the greatest risk to health, safety and the environment when they're transported by truck, rail, ship or air. Each Canadian jurisdiction has laws that set requirements for transporting dangerous goods to minimize the risk of an accidental release. But despite your best efforts, dangerous goods may still be released into the environment if, say, a train derails or a trucks gets into a collision.

Bottom line: The ERAP requirements contained in the federal TDG Regulations apply across Canada. So let’s look at what the federal Transportation of Dangerous Goods Act (TDGA) and TDG Regulations say about ERAPs. Part 7 of the TDGA is devoted to ERAPs and it:

- Requires a person who offers for transport or imports any quantity or concentration of designated dangerous goods to have an approved ERAP that outlines what the company will do if there’s an incident in transporting such goods;
- Says the Minister of the Environment (or another person designated by the government) may approve an ERAP if he believes “on reasonable grounds” that the ERAP is capable of being implemented and will be effective in responding to an accidental release of dangerous goods;
- Allows for interim approval of an ERAP pending final approval; and
- Permits the Minister (or another designated person) to revoke approval of an ERAP if the company hasn’t made requested changes to the ERAP or if he believes the ERAP is no longer capable of being implemented.

The requirements outlined in Part 7 of the TDGA are fleshed out in Part 7 of the TDG Regulations, which was amended effective Feb. 20, 2008. The TDG Regulations cover:

- When an ERAP is required;
- How to apply for ERAP approval;
- What happens when an ERAP is approved or “refused”;
- How to apply for approval of a renewal or revision of an ERAP;
- What happens when a renewal or revision is approved or refused;

The federal Consolidated Transportation of Dangerous Goods Regulations (TDG Regulations) require companies that transport or import certain dangerous goods to have emergency response assistance plans (ERAPs) to control and address any accidental releases that may occur. The intent of an ERAP is to help local authorities respond to an incident involving dangerous goods, such as by furnishing emergency response advice, specialized equipment or response teams.

The federal TDG Regulations’ ERAP requirements were revised in 2008. We’ll explain the updated requirements and give you five steps to take to ensure that your company complies with the ERAP requirements. There’s also a chart showing the ERAP requirements in each province and territory.

ONLINE RESOURCE: Click here to download a checklist that will help you ensure that your application for ERAP approval (which we’ll explain below) is complete.

WHAT THE LAW SAYS

Each province and territory has its own TDG regulations that adopt the federal TDG Regulations, including the ERAP requirements. Ontario imposes one additional requirement: Companies that are required to have ERAPs must carry at least $2 million in liability insurance for each motor vehicle they use to transport dangerous goods.
What it means when an ERAP approval is revoked; and How to request a review of a decision to revoke or refuse an ERAP.

ONLINE RESOURCE: Click here for Transport Canada’s page devoted to ERAPs. This page provides general information on the ERAP requirements as well as a generic ERAP and a sample ERAP application.

HOW TO COMPLY

As safety coordinator, you’ll likely play a key role in ensuring that your company complies with the federal TDGA ERAP requirements. To do so, take the following steps:

Step #1: Determine If Company Needs an ERAP

ERAPs aren’t required for all dangerous goods—only the ones listed in Column 7 of Schedule 1 of the TDG Regulations. In general, the goods on this list are more harmful than others and may present wide-spread hazards in the event of an accidental release. Examples: explosives, toxic and flammable gasses and infectious substances, such as the Ebola virus. In addition, the response to an emergency involving these dangerous goods may require special equipment, such as fully encapsulated chemical response suits or specially trained and qualified personnel.

Even if the dangerous good is listed in Column 7 of Schedule 1, you don’t need an ERAP unless the quantity being transported in one means of containment exceeds the “ERAP Index”—that is, a quantity limit depending on the form of the good, i.e., solid, liquid or gas. The ERAP Index is expressed in:

- Kilograms for solids;
- Litres for liquids;
- The capacity of the means of containment for gases; and
- Net explosives quantity for explosives.

For example, the ERAP Index is 75 for weapons cartridges, 500 for chlorine and 1,000 for stabilized hydrogen cyanide.

In addition, an ERAP is needed if:

- A quantity of dangerous goods is contained in one or more means of containment, each of which has a capacity that’s greater than 10% of the ERAP Index, and the total quantity of dangerous goods in all the means of containment exceeds the applicable ERAP Index;
- A quantity of dangerous goods in Class 1 (Explosives), 3 (Flammable Liquids), 4 (Flammable Solids), 5.2 (Organic Peroxides) or 6.1 (Toxic Substances) is offered for transport by road vehicle or railway, is in one or more means of containment and the total quantity in all the means of containment exceeds the applicable ERAP Index;
- Dangerous goods with UN numbers UN1202, UN1203 or UN1863 are in a single train of 34 or more rail tank cars and: a) two or more of the tank cars are interconnected so that the loading or unloading of one can be done from the first or last interconnected car; or b) the tank cars are on average 70% full; or
- The dangerous goods are certain designated Class 6.2 (Infectious Substances), such as Lass and Marburg viruses, regardless of the quantity.

Step #2: Develop the ERAP

If you’ve determined that your company imports or offers for transport a dangerous good under circumstances for which an ERAP is required, you’ll need to develop an appropriate ERAP. Conducting a “potential accident assessment” is the starting point for developing the ERAP. Such an assessment will help you identify
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potential problems that may be encountered during transportation and determine which resources would be needed to minimize the impact of an incident. In fact, the results of this assessment are part of the application you submit for ERAP approval and must include:

- A general analysis of how an accidental release of dangerous goods could occur;
- The physical and chemical properties and characteristics of the goods involved;
- A general description of the potential consequences of an accidental release;
- The actions the company expects to take in case of an incident; and
- A general description of any agreements entered into for assistance in responding to the incident.

Based on the results of your assessment, develop an ERAP that covers the following areas:

- The company’s structure;
- Its emergency response policy;
- The purpose of the ERAP;
- The ERAP’s geographical scope;
- A list of those dangerous goods covered by the ERAP;
- A discussion of incidents that may occur during transportation and measures to prevent such incidents;
- The resources needed to mitigate the effects of an incident;
- The potential harmful effects of an incident with respect to health, safety, property, infrastructure and the environment; and
- Standard operating procedures for notification, alert and mobilization, including specific procedures to be followed for, say, decontamination and recovery or neutralization of spilled materials.

Step #3: Apply for ERAP Approval

In order to comply with the TDG Regulations, your ERAP must be approved before the dangerous goods enter the transportation system. You must submit an ERAP application to the Minister (or another designated person) in writing by postal mail or email. In general, the application must provide sufficient information so that a fire department responding to an incident would have an appropriate understanding of how a dangerous goods release could occur, how these materials could react under the circumstances and what actions can be taken to remedy the situation.

ONLINE RESOURCE: Click here to download a checklist of all the information that your ERAP application must include.

Remedial Measures Specialists with Transport Canada will evaluate the ERAP. They will conduct a comprehensive audit of the plan based on a review of the written plan, interviews with key personnel, inspections of response equipment, records of training, discussions of previous incidents and full scale exercises and tests of various aspects of the plan, including the emergency telephone number to activate the plan. They will assess the ERAP from the standpoint of:

- Potential accident assessment;
- Activation;
- Response;
- Resources; and
- Preparedness.

Transport Canada will approve an ERAP if it’s satisfied that the plan is capable of suitably responding to emergency situations for those dangerous goods listed in the plan. Approval may be given on an interim basis if the application contains all the required information and
there’s no reason to suspect that the plan isn’t capable of being implemented. If the ERAP is approved, Transport Canada will issue a reference number. You must display that reference number and the activation telephone number on the shipping document accompanying the dangerous goods covered by the plan.

If Transport Canada “refuses” the ERAP application, it will notify the company in writing. The company then has 30 days to request a review of the refusal. The request must be in writing and include the reasons why the refusal decision should be reversed.

*Insider* Says: Even if Transport Canada approves your ERAP, approval can be revoked if the agency requested changes to the ERAP that weren’t made or if circumstances change and it reasonably believes that the ERAP is no longer capable of being implemented.

**Step #4: Conduct ERAP Exercises**

Like other emergency plans, you can’t create an ERAP, get it approved and then just toss it in a drawer, hoping you never need to actually use it. The company must train its staff, particularly the emergency response team, on the ERAP and their respective responsibilities under the plan. The company should also test its ERAPs at least annually, simulating the conditions of an actual incident. Testing can be done in stages, starting with telephone activation testing and moving to tabletop exercises, which help identify deficiencies in the ERAP without the time and expense of simulations. Finally, the company should conduct a full-scale field exercise, using realistic and probable worst case scenarios.

In addition, the company must be able to work with first responders, other emergency responders and emergency managers if there’s an incident. Thus, participation from local authorities and responders in the ERAP exercises is invaluable. Depending on the situation, you may also want to include federal, provincial and municipal participation in the exercise to help clarify the roles of everyone involved.

**Step #5: Renew or Revise ERAP as Necessary**

Finally, you should implement a formal process for updating the ERAP and informing all relevant parties of any changes. Some changes will be simple and minor. For example, changes to the names and telephone numbers of key personnel may need to be updated if those workers leave the company. In addition, the ERAP should be updated after each exercise and any incidents. Any significant changes, such as those to activation telephone numbers or the geographical area of coverage of the ERAP must be communicated to Transport Canada. A new application is required if additional dangerous goods are included in the ERAP.

**Conclusion**

ERAPs are like insurance policies: You invest the time and money in developing them in the hope that you never need to actually use them. But if there is an incident involving the transportation of a dangerous good, having a well-designed ERAP will help mitigate the harm to human health and the environment. So it’s important that you understand the ERAP requirements and ensure that your company complies with them. By doing so, you’ll not only ensure that the company and local authorities are able to deal effectively with an incident involving
dangerous goods, you’ll also protect the company from liability.