

TRANSPORTATION OF DANGEROUS GOODS: Take 4 Steps to Comply with the ERAP Requirements



The [Transportation of Dangerous Goods Act](#) (TDGA) sets requirements for transporting dangerous goods to minimize the risk of a release or spill that could endanger the environment, workers and others. 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. So the [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 help local authorities respond to an incident involving dangerous goods, such as by furnishing emergency response advice, specialized equipment or response teams. Here are four steps to take to ensure that your company complies with the ERAP requirements, if applicable.

WHAT THE LAW SAYS

Each province and territory has its own TDG Regulations that adopt the federal TDG Regulations, including the ERAP requirements. As a result, the ERAP requirements contained in the federal TDG Regulations apply across Canada.

In the wake of the tragedy in Lac-Mégantic, Québec on July 6, 2013, in which a train carrying 72 cars of crude oil slipped

downhill, derailed and exploded, ERAPs have gotten new attention. In fact, an investigation of that tragedy resulted in changes to the ERAP requirements. So let's look at what the TDGA and TDG Regulations now say about ERAPs.

TDGA

Part 7 of the TDGA, which contains the basic ERAP requirements:

- Requires a person who offers for transport or imports specified quantities or concentrations 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 Transport (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 on various grounds, such as if the company hasn't made requested changes to the ERAP or if he believes the ERAP is no longer capable of being implemented or being effective.

In addition, Sec. 7.1 permits the Minister to direct or authorize a person with an approved ERAP to implement the plan in response to an actual or anticipated release of dangerous goods. Sec. 7.2 addresses compensation for a person who's so authorized to implement an ERAP.

TDG Regulations

The requirements spelled out in Part 7 of the TDGA are fleshed out in detail in Part 7 of the TDG Regulations. 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;
- What it means when an ERAP approval is revoked;
- How to request a review of a decision to revoke or refuse an ERAP;
- Compensation for authorized implementation of an approved ERAP; and
- ERAPs for emergency response contractors.

We'll discuss the TDG Regulations' ERAP requirements in detail below.

Insider Says: Transport Canada's website has [a section devoted to ERAPs](#), which provides general information on the ERAP requirements as well as a generic ERAP and a sample ERAP application.

TAKE 4 STEPS

As EHS coordinator, you'll likely play a leading role in ensuring that your company complies with the ERAP requirements. To do so, take the following steps:

[learn_more caption="Step #1: Determine If an ERAP Is Required"]

In general, the TDG Regulations require a person to have an approved ERAP before offering for transport or importing certain dangerous goods above a quantity specified in column 7 of Schedule I of the regulations (the 'ERAP Index'). How the quantity is expressed depends on the form of the dangerous good, such as kilograms for solids, litres for liquids and net quantity for explosives. If there's no number or reference to a special provision in column 7, an ERAP isn't required. If a

number *does* appear in column 7, then refer to Section 7.1 of the TDG Regulations.

Note that 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 a *single* means of containment exceeds the ERAP Index. An ERAP may also be required for dangerous goods in *more than one* means of containment, depending on the total quantity in all the means of containment, the class of dangerous goods and how they're being transported.

Insider Says: In response to Lac-Mégantic, Transport Canada issued [Protective Direction No. 33](#) to require shippers to develop ERAPs for crude oil, gasoline, diesel, aviation fuel and ethanol when even just a single tank car contains one of these designated flammable liquids. In Dec. 2014, the government published [amendments](#) to the TDG Regulations, which incorporate Protective Direction 33 and include additional ERAP requirements for petroleum sour crude oil and Alcohols N.O.S. [/learn_more]

[learn_more caption="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 potential problems that could 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 must be included in the application you submit for ERAP approval and should include:

- A general analysis of how an accidental release of dangerous goods could occur;
- A general description of the potential consequences of an accidental release of dangerous goods; and

- A description of the action you expect to take in the event of an accidental release or an imminent accidental release of dangerous goods.

You'll also need to determine whether you'll use in-house resources or emergency response contractors for response or a combination of the two. If your company will rely to any extent on an emergency response contractor, confirm that the contractor is capable of providing the required response, depending on the dangerous goods and means of containment.

Ensure that the ERAP you develop addresses the following basic elements of emergency response:

Hazard identification and analysis. Include the results of your potential accident analysis discussed above.

Roles and responsibilities. The roles and responsibilities of key personnel must be described in the plan, including senior-level management (for authorizations), technical advisors, team leaders, response team members, and specialized resources that are critical to the response (such as media relations or medical resources).

Resources. The plan must include internal and external resources required for response, including response contractors, technical advisors and resources for specialized tasks, such as vent and burn.

Third party agreements (if applicable). You must provide any signed third party agreements between your company and the primary response contractor as well as any agreements between the primary response contractor and the subcontractors, describing the product(s) to which the subcontractors will respond and the resources they must supply.

Emergency response procedures. The heart of the ERAP is the written procedures for critical tasks, such as product transfer, containment, etc.. Those procedures may be in a

different document if they're referred to in the ERAP and provided with the application.

Contact lists. The plan must contain a contact list for internal and external resources that are required to support the response, including response contractors, suppliers, poison control centres, air or marine charters., etc.

Records. You must maintain records for training and exercises related to the plan, equipment maintenance and ERAP activation. And you must make these records available to TDG Inspectors upon request. It's also recommended that you document accident response debriefs. In addition, you have to maintain a listing of emergency response activities related to response to products requiring an ERAP, including a brief description of the remedial actions taken.

Plan activation. The ERAP must specify the steps necessary for its activation in an emergency, including procedures to notify key response personnel.

Response actions. The plan must describe the response actions that can be implemented to support a response, such as containment, confinement, transfer and neutralization.

Situation assessment. A situation assessment is required to help responders define critical objectives and priorities for response. This assessment must be re-evaluated continuously and address the following:

- The specific nature of the emergency, such as product, releases or potential for release, fire, etc.;
- Modifying conditions, such as weather, location and topography;
- Potential threats to life, property and the environment;
- Appropriate protective and corrective strategies; and
- Re-evaluation of the situation on a continuous basis.

Resource mobilization. The plan must address mobilization of

response resources, including identification of persons with the authority to mobilize resources. Mobilization options must be appropriate for the geographical area of coverage and mode of transport.

Damage assessment. The ERAP must address the assessment of damage to the means of containment to determine the best course of action , such as product transfer, depressurization, etc. Identify resources with expertise in damage assessment and the criteria or methodology used to conduct a damage assessment in the plan.

Training and exercises. Response personnel identified in the ERAP must be trained on critical aspects of the response plan, including product transfers, air monitoring, containment options, incident command system, etc. Include a training matrix in your ERAP.

Equipment availability and maintenance. The plan holder or contractor must identify how the response equipment identified in the ERAP is:

- Adequate;
- Available from a geographic perspective;
- Able to be used in a timely manner; and
- Able to serve its purpose.

You must also inspect and maintain this response equipment in a state of readiness. Retain inspection and maintenance records and make them available to a TDG inspector upon request.[/learn_more]

[learn_more caption="Step #3: Apply for ERAP Approval"]

Your ERAP must be approved before the dangerous goods enter the transportation system. Submit an ERAP application to the Minister (or another designated person) in writing by postal mail or email. Sec. 7.2 specifies the information your application must include. (Use [this checklist](#).)

Once you've submitted an ERAP application for approval, a Remedial Measures Specialist (RMS) will be assigned to review your file. The RMS may contact you to verify the application's contents and request changes or additional information. The timeframe for the review of the initial application is typically 15 business days if the information submitted is complete. Once the RMS has completed the evaluation of the application, he or she will make a recommendation for its approval or rejection.

If the ERAP is approved, an official approval letter will be issued to you. Note that product may *not* be shipped until the approval letter has been received confirming plan approval. A unique ERAP registration number will be assigned to your company. This number will have to appear on the shipping documents along with the activation phone number.[/learn_more]

[learn_more caption="Step #4: Renew or Revise ERAP as Necessary"]

ERAP approvals are issued for a specified period of time. You'll have to re-apply before to the plan's expiration.

In addition, you may need to revise an ERAP, such as if key personnel leave the company or the plan now includes additional dangerous goods. You should also update the ERAP after practice exercise and any incidents (see the box below). And you may need to apply for approval to revise the ERAP, explaining how the proposed revision will ensure that the ERAP is capable of being implemented and will be effective in responding to an accident that occurs while the dangerous goods are being transported.[/learn_more]

BOTTOM LINE

ERAPs are generally required for dangerous goods that are particularly harmful and may present wide-spread hazards in the event of an accidental release. In addition, the response to an emergency involving these goods may require special

equipment, such as fully encapsulated chemical response suits, or specially trained and qualified personnel. That's why it's critical to prepare in advance for potential accidental releases. Having a well-designed ERAP will help mitigate the damage to the environment and human health.

[box]

Conduct ERAP Exercises

Like other emergency plans, you can't create an ERAP, get it approved and then just toss it a drawer, hoping you never need to actually use it. Your company must train employees'particularly the emergency response team'on the ERAP and their respective responsibilities under it. You should also test the ERAP 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. Tabletop exercises 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.[/box]