



# Emergency Preparedness & Response

## Dangerous Goods Incidents



# Outline

- Reporting a Dangerous Goods (DG) incident
- Emergency Response Guidebook (ERG)
- CANUTEC
- Shipping Document
- Emergency Response Assistance Plan (ERAP)
- Remedial Measures Specialist (RMS)
- Incident Management System
- Protective Direction (PD) 36
- Additional resource: AskRail
- Best practices
- Contacts
- Related links

# Reporting a DG incident

When a DG incident occurs, the person who has possession of the DG at the time of the incident should call (if applicable<sup>1</sup>):

- The appropriate authority (9-1-1)
- CANUTEC at \*666 on a mobile phone, 613-996-6666 or 1-888-CANUTEC
- The 24-hour number found on the shipping document
- The ERAP telephone number found on the shipping document

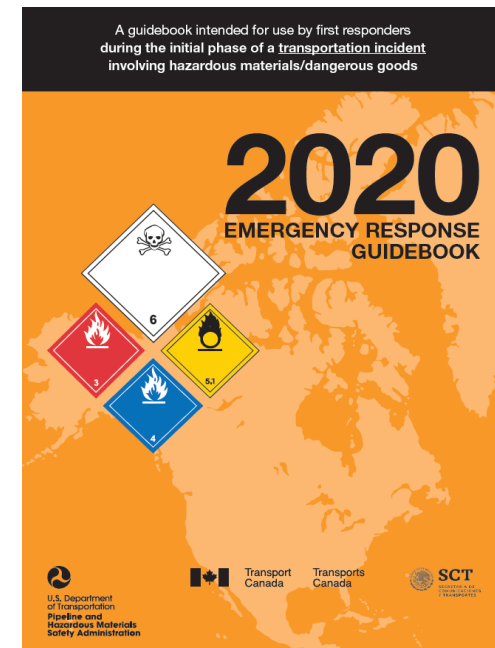
<sup>1</sup> Part 8 (Reporting Requirements) of the *Transportation of Dangerous Goods Regulations* (TDG Regulations) specifies the requirements when a release or anticipated release occurs.

# Emergency Response Guidebook (ERG)

When First Responders arrive at the site of a DG incident, they should refer to the ERG to determine safe distances and secure the scene.

The ERG is developed by TC (CANUTEC), the United States, Mexico and Argentina. The guide will also provide First Responders with:

- Quick identification of the hazards of the materials involved in the DG incident.
- Information on how to protect themselves and the general public.



For more information on the ERG:

<https://tc.canada.ca/en/dangerous-goods/canutec/2020-emergency-response-guidebook>

# CANUTEC

When First Responders arrive at the site of a DG incident, they should also contact CANUTEC for assistance.

- CANUTEC is the Canadian Transport Emergency Centre, a branch of the TDG Directorate.
- Bilingual scientists work at CANUTEC on a 24/7 basis, are trained in emergency response and are ready to assist during a DG incident.
- CANUTEC's role is to provide advice during a DG incident but also to bring together all the players involved in the DG incident.



# CANUTEC

**CANUTEC is the TDG emergency call center providing technical advice to first responders at an incident, 24/7**

- Chemical, physical and toxicological properties of DG
- Immediate public safety actions
- Isolation and evacuation distances
- Potential health effects
- Protective clothing requirements and decontamination
- Instability and incompatibility of products
- Mitigation techniques for DG
- Basic plume / dispersion modeling analysis



# Shipping Document

In addition to observations of the scene from a safe distance, the shipping document is an important piece of information, if it can be safely retrieved. It may be in the form of a paper or an electronic copy and it will include the following information:

- The shipping name (and nature) of the DG
- The amount of DGs being transported
- The 24-hour telephone number for technical information about the DG
- The ERAP telephone number (if applicable) for technical and/or emergency response advice

More information on shipping documents can be found in Part 3 (Documentation) of the TDG Regulations and in the TDG Bulletin on shipping document:

<https://tc.canada.ca/en/dangerous-goods/transportation-dangerous-goods/tdg-bulletin-shipping-documents>

# What is an ERAP?

- For the transportation of certain higher-risk dangerous goods, the *Transportation of Dangerous Goods Act, 1992* (TDG Act) requires an ERAP to be in place.
- An ERAP describes what to do in the case of a release or anticipated release of certain higher-risk dangerous goods while they are in transport.
- ERAPs list specialized personnel and equipment needed for responding to an incident, as well as give examples of response actions these resources will be used for.





# Who requires an ERAP?

- Persons who have ERAPs are involved in the transportation (shipping, receiving or transporting) of certain DG above the quantity specified in the TDG Regulations.
- They are often producers, manufacturers or distributors of DG.



# Purpose of an ERAP

- A person with an approved ERAP uses the plan to assist emergency responders.
- ERAPs may be used along with emergency response plans from other organizations (for example, carriers and local or provincial authorities).
- An incident management system ensures coordination between the ERAP and other emergency response plans, in order to:
  - Ensure public safety
  - Ensure that specialized assistance is available to local responders
  - Minimize consequences



# Components of an ERAP

- ERAPs are approved by TC following the conditions indicated in Part 7 of the TDG Regulations.
- Each plan is specific to certain:
  - dangerous goods
  - modes of transport (air, rail, road, marine)
  - means of containment (containers or packaging)
  - geographical area in which the dangerous goods will be transported
- Only certain dangerous goods in specified quantities, means of containment or modes of transport need an ERAP.

# When are ERAPs implemented?

- ERAPs are implemented to respond to a release or anticipated release of the DG that are part of the plan.
- Often, the person who has the ERAP is contacted through the ERAP telephone number. Once reached, this person determines the actions they will take to respond to the release or anticipated release.



# What is an ERAP telephone number?

- Every ERAP must have an ERAP telephone number.
- When a consignment requires an ERAP, this number is found on the shipping document.
- Persons calling the ERAP telephone number will be connected with someone who can implement the plan. That person will:
  - provide technical and/or emergency response advice promptly
  - monitor the response
  - send ERAP emergency response resources, if required



# Who can implement an ERAP?

- Anyone can call the ERAP telephone number for assistance.
- Only the persons who have the ERAP are responsible for implementing it. Any other person or organization cannot implement an ERAP.
- When necessary to protect public safety, section 7.1 of the TDG Act allows TC to:
  - Direct a person with an approved ERAP to implement their plan in order to respond to a release or anticipated release.
  - Authorize a person with an approved ERAP to implement their plan, if it is unclear who is required to have an ERAP for the DG involved in an incident.

# ERAPs: What can you expect?

## Shipping document

### ERAP / PIU 2-XXXX-(YYY) and telephone number

#### Assistance for dangerous goods with an approved ERAP

Over the phone

- Technical or emergency response advice
- Assistance is provided within 10 minutes of the initial request

On site\*

- Response personnel with appropriate equipment
- Assistance provided may vary based on the nature, the severity of the incident or the assistance required

\*When an ERAP is implemented, persons having the ERAP are required to exercise due diligence and respond within a reasonable time frame, given the site location, weather conditions, accessibility or other circumstances.

# Remedial Measures Specialist (RMS)

- A scientist trained and specialized in emergency response
- An ERAP specialist
- A designated TDG Inspector under the TDG Act



## Role of the RMS, ERAP Specialist:

- Review ERAP applications and evaluate if the plan can be implemented and will be effective at responding to an actual or anticipated release of DG that endangers or could endanger public safety.
- Conduct oversight activities such as site assessments and exercise attendance to confirm the response capabilities identified in the ERAP.
- Promote awareness of the ERAP program by participating in and presenting at various events across the country.



# Remedial Measures Specialist (RMS)

## Role of the RMS at a dangerous goods incident site

- ✓ Provide advice and make recommendations to the Incident Commander in a command structure
- ✓ Conduct their own site assessment and inform the Incident Commander and TC
- ✓ Monitor and assess industry's response (carriers, consignors/shippers, person with an approved ERAP or response contractors)
- ✓ Direct or stop actions, if required, to protect public safety and personnel on site
- ✓ Report on the effectiveness of an ERAP to ensure its implementation is timely, appropriate, safe and coordinated (TASC)



# Incident Management

An efficient Incident Management System is a standardized on-site management system that integrates a combination of:

- Facilities;
- Equipment;
- Personnel;
- Procedures; and
- Communications

And operates within a common organizational structure.

# Incident Management

## Incident Commander

The Incident Commander is the person in charge at the incident site and is appointed by the Authority Having Jurisdiction (AHJ).

The Incident Commander is responsible for:

- Establishing command
- Ensuring responder safety
- Assessing incident priorities
- Determining operational objectives
- Developing and implementing an incident action plan
- Developing an organizational structure
- Managing incident resources
- Coordinating the activities of outside agencies

# Incident Management

As incidents can involve many different participating agencies, having an Incident Management System in place will help first responders to deliver a coordinated response to complex and/or large scale incidents by:

- Clearly understanding respective roles and responsibilities;
- Operating in a unified command structure;
- Recognizing one incident commander assigned by the AHJ;
- Building trust and networking ahead of crisis with planning and targeted exercises; and
- Prioritizing public safety over enforcement operations until such time as public safety is secure.

# Protective Direction (PD)

A Protective Direction is issued under Section 32 of the TDG Act to cease an activity or to conduct other activities to reduce any danger to **public safety**.

## PD 36

- Directs any company who transports DG through a jurisdiction (municipality) **by rail**, to provide the municipality's Emergency Planning Official (EPO) with information on the **nature** and **volume** of DG it transports through the municipality;
- Directs Canadian Class 1 Rail Carriers to publish an annual report containing DG information on their website; and
- Requires railway companies to provide in writing to CANUTEC, contact information of the person who will liaise with a municipality's EPO.

# Protective Direction

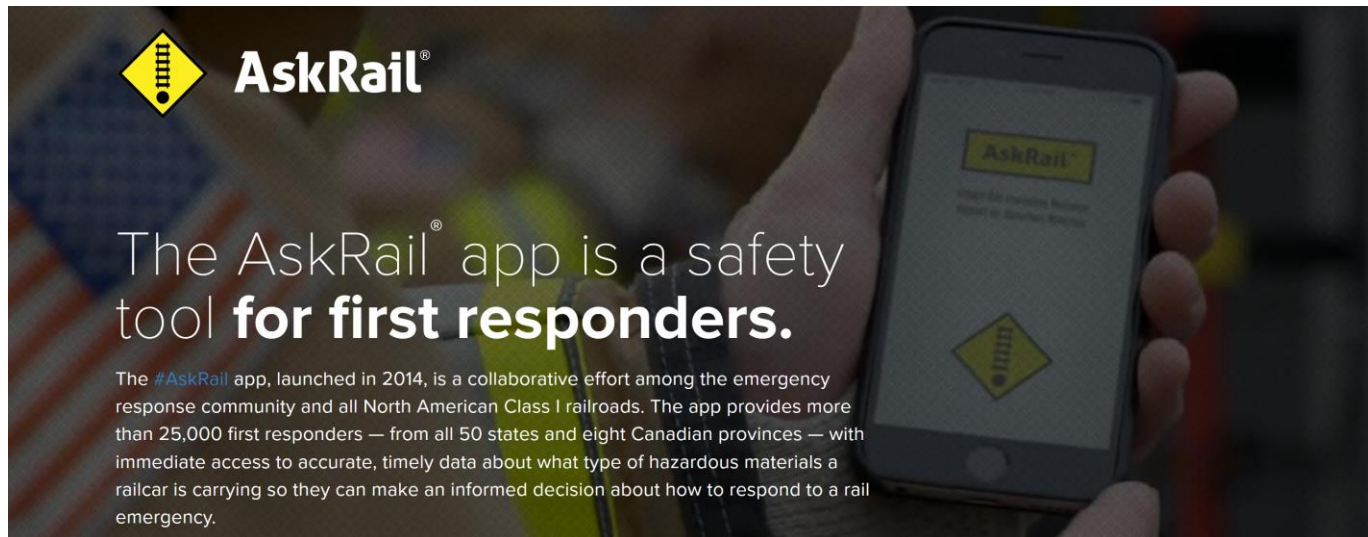
## PD 36

### Benefits for municipalities

- Raise awareness on the DG being transported by rail within their boundaries
- Helps municipalities plan and prepare their emergency response plan (ERP) accordingly

TC strongly encourages municipalities' EPOs to register with CANUTEC in order to receive information on the **nature** and **volume** of DG being transported by rail through their municipality.

# Additional resource: AskRail™



- ✓ Use a simple railcar ID search to see whether a railcar on a train is carrying DG.
- ✓ View the contents of the entire train.
- ✓ View emergency contact information for all Class I railroads (CN Rail & CP Rail) and available shortlines.

# Additional resource: AskRail™

## Key points:

- All North American Class I railroads are using the app
- The AskRail™ app is a collaborative effort among all North American Class I railroads, the Association of American Railroads, Railinc Corp. and the Transportation Technology Center, Inc.
- At this time, the app concentrates on single-car information on participating regional railroads
- AskRail™ is available in English and French in the U.S., Canada and Mexico





# Additional resource: AskRail™

## Request the application

For security reasons, only qualified emergency responders who have completed rail emergency training sponsored by one of the Class I freight railroads or at the Security and Emergency Response Training Center (SERTC) can download and use the AskRail™ app. In addition, railroads can offer the app to known emergency responders along their routes.

Visit their website: <http://www.askrail.us/>

or

Rail Association of Canada (RAC):  
<http://www.railcan.ca/>

# Best practices

## To better prepare for DG incidents, municipalities should:

- Review their Emergency Response Plan (ERP) template to include response to DG incidents
- Take advantage of PD 36 during the planning of their ERP to receive information on DGs transported by rail
- Identify industries and DGs transiting their cities
- Identify the equipment required by First Responders when responding to an incident
- Test their ERP by organizing training and exercises, including participants from other organizations to evaluate interoperability
- Register for the online TDG Newsletter for valuable information on the transportation of dangerous goods

<https://tc.canada.ca/en/dangerous-goods/tdg-newsletter>

In Canada, there are about 30 million dangerous goods shipments every year, 99.998% reaching their destination without incident.

# TDG Directorate Contacts

**General TDG information:** [TDG-TMD@tc.gc.ca](mailto:TDG-TMD@tc.gc.ca)

**Response Operations Team (ERAP Program):**

[TC.ChiefResponseOperations-ChefOperationsDeReponse.TC@tc.gc.ca](mailto:TC.ChiefResponseOperations-ChefOperationsDeReponse.TC@tc.gc.ca)

**Safety Awareness Team:**

[TC.TDGSafetyAwareness-SensibilisationalasecuriteduTMD.TC@tc.gc.ca](mailto:TC.TDGSafetyAwareness-SensibilisationalasecuriteduTMD.TC@tc.gc.ca)

**For emergencies (24 hours a day, 7 days a week) dial:**

- **1 888 CANUTEC,**
- **(613) 996-6666 or**
- **\*666 on a mobile phone (in Canada only)**

**Website:** <https://tc.canada.ca/en/dangerous-goods/canutec>

# Contacts

<b>TDG Regional Offices</b>		
<b>Region</b>	<b>Telephone Number</b>	<b>Email address</b>
Atlantic	1-866-814-1477	<a href="mailto:TDG-TMDAtlantic@tc.gc.ca">TDG-TMDAtlantic@tc.gc.ca</a>
Quebec	1-514-633-3400	<a href="mailto:TMD-TDG.Quebec@tc.gc.ca">TMD-TDG.Quebec@tc.gc.ca</a>
Ontario	1-416-973-1868	<a href="mailto:TDG-TMDOntario@tc.gc.ca">TDG-TMDOntario@tc.gc.ca</a>
Prairie & Northern	1-888-463-0521	<a href="mailto:TDG-TMDPNR@tc.gc.ca">TDG-TMDPNR@tc.gc.ca</a>
Pacific	1-604-666-2955	<a href="mailto:TDGPacific-TMDPacifique@tc.gc.ca">TDGPacific-TMDPacifique@tc.gc.ca</a>

# Related links

**Dangerous Goods information:** <https://tc.canada.ca/en/dangerous-goods>

Including:

- [Transportation of dangerous goods in Canada](#)
- [ERAP Program](#)
- [CANUTEC](#)
- [TDG publications](#)
- [Rail safety and dangerous goods](#)