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TDG, Transportation of Dangerous Goods

#### 1.0 <u>INTRODUCTION</u>

The Transportation of Dangerous Goods (TDG) regulations cover the safe and proper handling, shipping, transport, and receiving of dangerous goods within the country of Canada, and across its international borders. The regulations cover all types of transportation: road, rail, air, and water or combinations thereof. They are intended to protect the public and environment from the hazards of an accidental spill or leak.

TDG regulations dictate the responsibilities of the various personnel involved in the handling, shipping, transportation, and receiving of dangerous goods, as well as the potential fines and punishments for those who transgress the intent and practice of the regulations.

The regulations ensure the following:

- A shipping document describes the dangerous goods.
- Safety marks, such as labels and placards, provide visual clues about the hazards of the dangerous goods.
- Safe packaging helps prevent spills and leaks.
- Emergency actions protect people and the environment in case of a spill or leak.

#### 2.0 SCOPE

This standard applies to everyone who handles dangerous goods.

#### 3.0 REFERENCES

The Transportation of Dangerous Goods (TDG) Act and Regulations

#### 4.0 TERMS AND DEFINITIONS

CANUTEC	Canadian Transport Emergency Centre: Call 1-888-226-8832 or 1-		
Chiverne	613-996-6666 for dangerous goods emergencies.		
Cartification Mark	<u> </u>		
Certification Mark	A combination of numbers, letters, and symbols that describes the		
	standards used to construct and test a container.		
Class	One of the nine classes of dangerous goods. Includes further hazard		
	categories and packing groups.		
Classification	A description of the dangerous goods that includes shipping name,		
	class, UN number, packing group, etc.		
Driver (Carrier)	The driver or trucking company that transports the dangerous		
	goods.		
Flash Point	The lowest temperature at which the vapors given off by a liquid		
	will ignite when exposed to an ignition source.		
Handling	Packing, unpacking, loading, or unloading dangerous goods. Also,		
	storing them during transport.		
Initial Boiling Point	The lowest temperature at which a liquid will boil.		
Label	Small diamond-shaped safety mark placed on packages and small		
	containers to indicate the type of dangerous goods.		
Large Container	Capacity greater than 450 liters.		
List	Usually refers to a list of dangerous goods arranged in order of		
	shipping name or UN number.		

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N.O.S.	Not Otherwise Specified, a term used in the list of dangerous goods	
	as part of a shipping name.	
Passenger	An extra person in the vessel, road vehicle, railway vehicle or an	
	aircraft. unless the person is working for the trucking company or is	
	there to accompany the cargo.	
Placard	Large diamond-shaped safety mark used on a vehicle or large	
	container to indicate the type of dangerous goods.	
Primary Class	The main hazard of a product.	
Receiver (Consignee)	The intended receiver of the dangerous goods.	
Safety Marks	Labels, placards, and markings that provide visual clues about the	
	type of dangerous goods.	
Shipper (Consignor)	The person who prepares the dangerous goods for transport, makes	
	arrangements for transport, or imports the goods into Canada.	
Shipping Document	A document that contains detailed information about a dangerous	
	goods shipment.	
Shipping Name	The manufacturer or shipper selects the correct shipping name from	
	a list in the TDG regulations.	
Small Container	Capacity of 450 liters or less.	
Subsidiary Class	The secondary hazard of a product.	
Training Certificate	Indicates that a person has been trained in TDG.	
UN Number	A 4-digit number that identifies the dangerous goods ("UN" stands	
	for United Nations).	

#### **5.0** ROLES AND RESPONSIBILITIES

#### 5.1 **Employer**

- Determine what the TDG training needs are and approve the training program and courses.
- Issue a training certificate to any person who handles dangerous goods and has successfully completed the requisite training.
- Provide documentation to TDG inspectors within 15 days of request.

#### Everyone who handles dangerous goods

- Understands the hazards of each class of dangerous goods.
- Recognizes the hazards shown by labels and placards.
- Carries a valid TDG training certificate.
- Handles dangerous goods according to the appropriate handling procedure to prevent spills and leaks.
- Takes action in the event of a spill or leak.

#### 5.3 **Shipper (Consignor)**

- Determines if the shipment constitutes a dangerous good or not.
- Identifies the classification of dangerous goods.
- Packages the dangerous goods according to their packaging requirements.
- Completes a shipping document.
- Labels and marks the packages.



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• Provides placards, if necessary.

Note: An importer may also be considered a shipper.

#### 5.4 Driver (Carrier)

- Ensures the shipping document is complete.
- Ensures the labels and markings on the containers match the information on the shipping document. Drivers must not accept shipments until the shipping document, labels, and markings are complete and correct.
- Ensures appropriate containers are in acceptable condition
- Attaches placards, if required. Ensures that dangerous goods are loaded and secured properly.
- Carries the shipping document with the dangerous goods.

Note: In some cases, a driver may have the responsibilities of both a shipper and a carrier (e.g., when transporting company goods or picking up freight from an unattended location).

#### 5.5 Receiver (Consignee)

- Understands the hazards of each class of dangerous goods.
- Recognizes the hazards shown by labels and placards.
- Carries a valid TDG training certificate.
- Handles dangerous goods using the appropriate method to prevent spills and leaks.
- Takes action in case of a spill or leak.

#### 6.0 STANDARD

#### 6.1 Enforcement

- Dangerous goods regulations are enforced by government trained TDG inspectors.
   They may be police officers, weigh-scale operators, or other government employees such as Transport Canada inspectors.
- The employer and employees shall cooperate with any reasonable request a TDG inspector makes. TDG inspectors will check to ensure the following:
  - o Training certificate is current and valid.
  - The shipping document is complete and correct.
  - o Dangerous goods are labelled and marked correctly.
  - o The correct container has been used.
  - O Vehicles are placarded, if necessary.
  - o The dangerous goods are loaded, secured, and transported safely.
- Any NB Power worksite may be audited for TDG compliance as well as employee knowledge of TDG related information and procedures.
- Qualified NB Power personnel or external agencies may perform TDG audits.

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#### 6.2 Classification

- Certain products and substances must be classified as dangerous goods as they could become? hazardous during transport, spillage, or leakage.
- It is the responsibility of the shipper to know whether an item is hazardous and to find out how it should be classified under the dangerous goods regulations.
- The driver must not accept a shipment until all the classification details are listed on the shipping document. Emergency responders will need this information if there is an incident during transport.
- The manufacturer of the product or substance is usually the one who conducts the laboratory tests to determine whether the product fits into one or more of the nine classes of dangerous goods. The shipper may find this information by checking the Safety Data Sheet (SDS) or by contacting the manufacturer.

#### 6.3 Shipping Document

- Every shipment of dangerous goods must be accompanied by a shipping document. Some information on the shipping document is for the use of emergency responders.
- The shipping document must be clear, easy to read, and available in English and/or French.
- The shipping document must include the following information:
  - o Date the document was given to the carrier.
  - O Shipper's name and business address.
  - 24-hour phone number of the shipper, or a phone number when the shipper can be reached until the dangerous goods are delivered.
- The shipping document must include a description of the dangerous goods in the following order:
  - o UN number.
  - Shipping name.
  - o Primary class (followed by subsidiary classes, if any, in brackets).
  - Packing group (if applicable I, II, and III).
  - o Any other information required by special provisions.
- The shipping document must indicate the quantity of dangerous goods (the unit of measure must be metric) and number of packages or containers. If the quantity changes, the driver must show the change on the shipping document. A container that is almost empty may be shown on the shipping document with the words "Residue-Last Contained" proceeded by a description of the dangerous goods ("Residue-Last Contained" cannot be used on shipping documents if the dangerous goods are Class 2, Gases in a small means of containment, or Class 7).
- For certain quantities of dangerous goods, the shipper may require a government approved emergency response assistance plan (ERAP). If an ERAP is required, the shipping document must include the reference number of the ERAP and the phone number to activate the ERAP.
- The shipper might be required to include other details on the shipping document for certain dangerous materials, such as:



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- o Radioactive materials (additional details).
- o Unodourized liquified petroleum gas ("Not Odourized").
- o For some toxic substances ("Toxic by Inhalation")
- Dangerous goods may be listed together with non-dangerous goods on the same shipping document if the information about the dangerous goods stands out. It can be:
  - o Listed first, under the heading "Dangerous Goods".
  - o Printed in a contrasting color.
  - Indicated by an "X" in a column headed "DG".
- Shippers of waste dangerous goods may be required to complete a special shipping document to comply with environmental requirements and TDG requirements.
- The shipper, or someone acting on behalf of the shipper, must print their name after the Certification Statement. The statement reads:
  - "I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, are properly classified and packaged, have dangerous goods safety marks properly affixed or displayed on them, and are in all respects in proper condition for transport according to the Transportation of Dangerous Goods Regulations."
- The driver must not accept a shipment until the shipping document is complete and correct.
- A driver who acts as both shipper and carrier (e.g.., transporting company goods or
  picking up freight from an unattended location) may be required to complete a
  shipping document.
- Shipping documents must be carried within the driver's reach.
- When the driver leaves the cab, the documents must be left on the driver's seat, in a pocket on the driver's door, or in an obvious place in the cab.
- If the driver leaves the truck in a supervised area, a copy of the shipping document must be left with the person in charge.
- If the trailer is detached from the tractor or the dangerous goods are unloaded and left in an unsupervised area, the shipping document must be placed in an accessible, identifiable, waterproof receptacle.
- When the driver transfers the shipment, the next driver must be given a copy of the shipping document.
- When the driver delivers the shipment, the receiver must be given a document that identifies the dangerous goods. This does not have to be a complete shipping document.

#### **6.4** Safety Marks (Labels and Placards)

#### **6.4.1** Small Containers

Small containers hold 450 liters or less (about 100 gallons). This measurement is also used for containers not designed to hold liquids.



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- Small containers include drums, pails, cans, cardboard boxes, crates, aerosols, and cylinders.
- A label is usually 100 mm x 100 mm (about 4 inches x 4 inches). If the full-size label can't be used because of the size or shape of the container, a smaller label may be used (e.g.,, on the shoulder of a compressed gas cylinder).
- Labels cannot be reduced in size for Class 7. Labels for all other classes labels may not be reduced to smaller than 30mm x 30mm
- Before handing over the dangerous goods to the driver, the shipper must make sure that each package or small container displays:
  - o A hazard label (for primary and subsidiary classes).
  - The shipping name (and technical name, if required).
  - o The UN number.
- The shipping name appears next to the label for the primary class.
- The UN number may be shown with the shipping name or on the primary class label.
- When the number is printed on the label, the letters "UN" are not included.
- These safety labels are put on at minimum one side of each small container.
- The person who removes the dangerous goods from the container (completely, so no danger remains) must remove or cover the dangerous goods safety labels.

#### 6.4.2 Overpacks

• An overpack is any container used to consolidate one or more small containers. It may be a larger box or even a shrink-wrapped pallet. If the safety labels cannot be seen, the safety labels and the word "OVERPACK" must be shown. If the overpack is larger than 1.8 cubic metres (64 cubic feet or 4 ft x 4 ft) the labels must be shown on opposite sides.

#### 6.4.3 Consolidation Bins

• Boxes, crates, and bins are often used to allow small containers to be removed and added during transport. The bin must indicate each class of dangerous goods it contains. Options may include labels or a list of the classes.

#### 6.4.4 Large Containers

- Large containers can hold more than 450 litres (about 100 gallons). This term is used to describe containers intended to transport liquids, gases, or solids.
- Large containers include:
  - o Transport trailers and rail tank cars.
  - o Portable tanks and bulk tanks.
  - o Bins and hoppers.
- The shipper ensures the large container has placards or that the driver has been given any placards that are required for the shipment of dangerous goods. The



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driver must attach the placards to all four sides of the vehicle before the dangerous goods are loaded.

- If a large container with placards is loaded on a vehicle and the placards are visible, that is acceptable. If not, the vehicle must be placarded as well.
- A placard is usually 250 mm x 250 mm (about 10 inches x 10 inches). If the full-size placard can't be used because of the size or shape of the container, a reduced-size placard may be used. (ex. some portable tanks have small placards).
- The placards must remain in place until the container is completely empty of dangerous goods, at which time the placards must be removed.

#### **6.4.5** Intermediate Bulk Containers (IBCs)

- IBCs are portable tanks with a capacity of over 450 litres and less than or equal to 3,000 litres (e.g., totes and cubes).
- IBC markings must include:
  - Placards and UN Number on two opposite sides or label for each primary and subsidiary class as well as a UN Number. A shipping name may be displayed on two opposite sides of the IBC.
  - If multiple IBCs are placed inside a trailer, then placards and UN numbers for each shipping name must be shown on each side and each end of the trailer.

#### **6.4.6 Placarding Guidelines**

- Vehicles carrying certain types and quantities of dangerous goods, as outlined below, must display primary class placards.
- On occasion, the UN number of the dangerous goods will have to be shown either on the placard or on an orange panel next to the placard.
- General Guidelines for placard use:
  - A shipment of dangerous goods requiring an emergency response assistance plan (ERAP) for liquids or gases in a large means of containment always needs:
    - o Placards and UN number: If a large container is put in a closed trailer, then the trailer must also show placards and the UN number
    - Petroleum Crude Oil that can develop hydrogen sulphide gas (H2S) must have near each placard the words "Toxic by Inhalation" or "Inhalation Hazard- Toxic" (see special provision 23 and special provision 106 in TDG regulations).
    - In the case of an intermediate bulk container (IBC) with a capacity greater than 450 L but less than or equal to 3,000 L,
      - (i) a placard and UN number may be displayed on two opposite sides of the IBC, or
      - (ii) a label for each primary and subsidiary class as well as a UN number and a shipping name may be displayed on two opposite sides of the IBC.



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- When IBCs that have labels or placards on them are inside a road or railway vehicle or, are loaded onto a road or railway vehicle, the requirements of the display of placards on the road vehicle or railway vehicle still apply.
- 2. A truck carrying any quantity of Classes 2.1 that is transported on a vessel, 2.3, 4.3, 5.2 Type B liquid or solid that requires a control or emergency temperature, 6.1 that is subject to Special Provision 23, or 7 that requires a Category III Yellow label needs placards unless guideline 1 applies.
- 3. A truck carrying 500 kg or less of dangerous goods does not need placards or UN numbers unless guideline 1 or 2 applies.
- 4. A truck carrying more than 500 kg of dangerous goods needs placards unless Guideline 1 or 2 applies. This is redundant with #3, need one or the other.
- 5. For a mixed load of over 500 kg of various dangerous goods in small means of containment, the driver could use E class placards or E danger placards (except for dangerous goods to which guidelines 1 and 2 apply or are in one class and more than 1,000kg from one shipper).

#### **6.4.7** Compartmentalized Tanks

- If tank compartments contain dangerous goods, the tank must show:
  - o A placard on each compartment.
  - o A UN number on each compartment.
  - o All placards and UN numbers on each end.
- The UN numbers can be shown on orange panels instead of on the placards.
- Option for same class If all the dangerous goods are in the same class, the tank may be placarded as described above (6.5.6), or it may show:
  - One placard on each side and each end
  - o The UN number on each compartment (on orange panels).
  - All the UN numbers on each end
- Option for flammable liquids If all the compartments contain flammable liquids, the tank may show:
  - A Class 3 placard on each side and each end.
  - Only the UN number of the liquid with the lowest flash point.

#### **6.4.8 Toxic Substances**

- Some dangerous goods can be extremely hazardous if inhaled. Anhydrous ammonia, for example, must have the words on two sides of a large container "Anhydrous Ammonia-Inhalation Hazard". See Special Provision 23 in TDG regulations.
- Petroleum Crude Oil that can develop hydrogen sulphide gas (H2S) must have near each placard the words "Toxic by Inhalation" or "Toxic-Inhalation Hazard". See Special Provision 23 and 106 in TDG regulations.



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#### **6.4.9** Elevated Temperature

- Elevated temperature signs must be displayed on the sides and ends of the vehicle when certain products are transported at a high temperature (e.g., a solid transported at 240°C or more).
- The elevated temperature sign is not required for tar or asphalt.

#### 6.5 Containers

- It is the shipper's responsibility to select the correct container for dangerous goods.
- Shippers must not use (and drivers must not accept) containers unless they are in good condition.
- Some dangerous goods can only be transported in containers built to national or international standards and tested for quality assurance and to laboratory specification.
- Tanks are designed manufactured, tested, and inspected to make sure the contents will not leak during transport.
- A coded certification mark appears on the container to show the standard that applies.
- A container may be reused if its condition meets the accepted national or international quality standard.
- Some containers must be reconditioned before refilling.
- The container should not display any l safety marks not related to the dangerous goods or, marks that are misleading.
- Dangerous goods should not be transported in the same container with other materials that could cause them to spill or leak, or if there is a chance they might mix and react to cause a hazard.
- Dangerous goods travelling to or from the United States are generally permitted in containers that meet U.S. standards (described in the U.S. Code of Federal Regulations, Title 49, or 49 CFR). See Part 9 and 10 of the TDG Regulations.
- The driver must comply with all other transport regulations to make sure the load is secure and does not shift during transport.

#### **6.6** Special Situations

#### **6.6.1** Up to 150 Kilograms

- Dangerous goods are exempt in quantities up to 150 kg per vehicle (gross mass), available to the public and transported by the purchaser, or by the retailer to/from the user/purchaser.
- Each package or container:
  - o Must not exceed 30 kg (except for 2.2 gases for 2.1 and 2.3.)
  - Must be strong and secure enough that it will not spill or leak (container does not require a certification mark unless it is a gas cylinder).
- The 150 kg exemption cannot be used for:
  - o Class 2.1 (Flammable Gases) in cylinders larger than 46-litre capacity.
  - o Class 2.3 (Toxic Gases).



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- Class 4, Packing Group I (Flammable Solids, Spontaneously Combustible, Dangerous When Wet).
- o Class 5.2 (Organic Peroxides) unless they are limited quantities.
- Class 6.1 (Toxic) Packing Group I, liquids.
- Class 6.2 (Infectious).
- Class 7 (Radioactive) that requires licensing by the Canadian Nuclear Safety Commission.
- Dangerous goods that require an ERAP, or a control or emergency temperature.
- The exemption also cannot be used for any explosives (Class 1) except:

E UN0012, UN0014, UN0044, UN0055, UN0105, UN0131, UN0161, UN0173, UN0186, UN0191, UN0197, UN0276, UN0312, UN0323, UN0335 if classified as a consumer firework, UN0336, UN0337, UN0351, UN0373, UN0378, UN0404, UN0405, UN0431, UN0432, UN454, UN0499, UN0501, UN0503, UN0505 to UN0507, UN0509 and UN0510

#### 6.6.2 Up to 500 Kilograms

- Some dangerous goods are exempt from many requirements of the regulations in quantities up to 500 kg per vehicle (gross mass).
- Each package or container:
  - Must not exceed 30 kg, except for drums (no limit for 2.2 gases for 2.1 and 2.3 gases).
  - Must be strong and secure enough that it will not spill or leak (gas cylinders require a certification mark).
  - Must show the shipping name.
  - Must have dangerous goods safety marks and the UN number, unless it already has the marks required by other regulations –(e.g., (Workplace Hazardous Materials Information System) or Pest Control Products Act).
- The shipping document must include:
  - o The word "Class" followed by the primary class of the dangerous goods.
  - The words "Number of means of containment" and the total number of packages or containers (e.g., "Class 3, Number of means of containment 10").
- The driver must have a valid dangerous goods training certificate.
- The 500 kg exemption cannot be used for:
  - o Class 2.1 (Flammable Gases) in cylinders larger than 46-litre capacity.
  - o Class 2.3 (Toxic Gases).
  - Class 4, Packing Group I (Flammable Solids, Spontaneously Combustible, Dangerous When Wet).
  - o Class 5.2 (Organic Peroxides) unless they are limited quantities.



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- o Class 6.1 (Toxic) Packing Group I, liquids.
- o Class 6.2 (Infectious).
- Class 7 (Radioactive) that requires licensing by the Canadian Nuclear Safety Commission.
- Dangerous goods that require an ERAP, or a control or emergency temperature.
- The exemption also cannot be used for any explosives except: E Class 1.4S, E UN 0191, UN 0197, UN 0276, UN 0312, UN 0336, UN 0403, UN 0431, UN 0453, UN 0493.
- Limited Quantities of dangerous goods in small quantities may be exempt from the regulations.
- The maximum kilograms or litres are shown in Column 6(a) of the dangerous goods list. The quantity limit applies to the capacity of each inner container (e.g., for a dozen aerosol cans in a cardboard box, the limit applies to each can. A "0" in the column means that the product cannot be shipped in a limited quantity).
- Each package or container:
  - o Must not exceed 30 kg
  - Must be strong and secure enough that it will not spill or leak (container does not require a certification mark)
- Each package or container:
- Must show the UN number (or numbers) in a diamond shape, the international limited quantity mark, or the international limited quantity mark for air transport.
- If the package or container is in an overpack, in addition to any of the above markings the word "Overpack" must be shown.

#### **6.6.3** Samples

- Dangerous goods that are being sent to a laboratory for analysis may be exempt from the regulations.
- Each package or container:
  - o Must not exceed 10 kg.
  - Must be strong and secure enough that it will not spill or leak (container does not require a certification mark).
  - o Must show the words "test samples".
- The sample must be accompanied by a document that includes:
  - o The shipper's name and address.
  - o The words "test samples".
- This exemption does not apply to explosives, infectious substances or radioactive materials.



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#### 6.6.4 Vehicle Safety

• Dangerous goods such as fire extinguishers carried for the safety of the vehicle and fuel, or batteries used to power the vehicle are exempt from the regulations

#### 6.6.5 Gases in Cylinders

- This is sometimes called the "welder's exemption." It is used by people who carry cylinders of compressed gas.
- The exemption allows a maximum of 5 cylinders with a total gross weight of up to 500 kg without a shipping document. The driver is not required to have a training certificate.
- The cylinders must be properly labelled and the labels must be visible from outside the vehicle.

#### **6.6.6** Permits for Equivalent Level of Safety

- Permits provide exemption from some dangerous goods requirements, but only if all the conditions of the permit are complied with (e.g., an employee may not need a shipping document if they carry a copy of the permit).
- Permits for equivalent level of safety are issued to companies or organizations for specific activities.

#### **6.6.7** Local Restrictions

• Drivers should use dangerous goods routes through towns or cities. In some areas, there are roads or tunnels where dangerous goods are prohibited.

#### **6.6.8 Trans-Border Shipments**

- Canadian importers, exporters and drivers carrying dangerous goods to or from the U.S. might be subject to additional requirements.
- For example, to transport dangerous goods from Canada into the U.S., drivers must:
  - o Produce a valid training certificate.
  - Have emergency response information for the dangerous goods being transported and know what to do in case of an emergency.
  - Make sure the 24-hour number on the shipping document is accessible from the U.S.
- Drivers may have to comply with certain provisions of the U.S. Code of Federal Regulations, Title 49 (49 CFR). See Part 9 and 10 of the TDG Regulations.
- Additional security requirements may also apply. The shipper and driver may have to:
  - o Register with the U.S. Department of Transportation.
  - o Have a written security plan.
  - Provide in-depth security training for Canadian drivers who carry dangerous goods into the U.S.

#### 6.6.9 Other Modes of Transit

• Dangerous goods that are transferred to or from a plane, vessel or rail car may also have to meet the requirements of other regulations:



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- Air International Air Transport Association (IATA) Dangerous Goods Regulations – based on rules of the International Civil Aviation Organization (ICAO).
- Marine International Maritime Dangerous Goods (IMDG) Code based on rules of the International Maritime Organization (IMO) and Marine Transport – Transportation of Dangerous Goods Regulations.
- o Rail Canada Transportation Act and Railway Safety Act

#### 6.7 Emergency Reporting

- Handlers must report immediately to a supervisor:
  - o If there is a spill or leak exceeding the amount shown in the Reporting Quantities Table (see Appendix A).
  - If the release or potential spill or leak will or could endanger public safety, the authorities listed in the Authorities to Notify in An Emergency Table (see Appendix B) must be immediately notified.
  - o If there could be a spill or leak exceeding the amount shown in the Reporting Quantities Table (see Appendix A).
  - o If Dangerous goods are lost or stolen.
  - o If Dangerous goods are interfered with.
- Supervisors must report immediately to NBP's Environmental Department and complete E-form #590 Environmental Incidents.
- Specific agencies must be notified; refer to the Authorities to Notify in An Emergency Table (see Appendix B).
- If the release or anticipated release of dangerous goods results in:
  - The death of a person.
  - o The treatment of a person's injuries by a health care professional.
  - o An evacuation or shelter in place.
  - o The closure of a facility, road, main railway line, main waterway.

#### Or:

- Damage to a means of containment has occurred resulting in its integrity being compromised.
- The center sill or stub sill of a tank car is broken or has a crack in the metal of at least 15 cm (6 in).
- The report for the above release or anticipated release report road, rail or marine is to be submitted to:
  - o Canutec at 1-888-226-8832, 613-996-6666 or \*666 for a cell phone.
  - The shipper.
  - If dangerous goods are included in Class 7, the Canadian Nuclear Safety Commission
  - For a vessel, a Vessel Traffic Services Centre, or a Canadian Coast Guard radio station.
- The emergency report should include:
  - o Reporter's name and contact information.
  - o The date, time and location of the release or anticipated release.

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- o The mode of transport.
- The shipping name or UN Number.
- o The quantity before the incident and the amount released.
- o A description of the incident (collision, rollover, derailment, fire etc.).
- An estimate of the number of people evacuated or sheltered in place, killed, or injured.
- Emergency responders will use this information to determine how to deal with a spill or leak and they will be able to look up the dangerous goods in the Emergency Response Guidebook. Using the information provided will help them respond effectively and safely.
- If an accident, spill, leak or imminent spill or leak involving dangerous goods, is reported, NBP must send a follow-up report to Transport Canada within 30 days.
- NBP will need to provide additional details for the 30-day report.

#### 6.8 Incident Reporting

If the release or anticipated release of dangerous goods results in:

- o The death of a person.
- o The treatment of a person's injuries by a health care professional.
- An evacuation or shelter in place.

The incident must be reported to the supervisor and a Form 145 must be completed and submitted as per standard HSSE-03-03 Incident Reporting Notification and Investigation.

#### 7.0 TRAINING

#### **Training**

- All employees involved with the handling or transportation of dangerous goods must be trained and achieve a pass grade as a minimum on NB Power's internal course: S045 (e-Learning): Transportation of Dangerous Goods
- The training covers the TDG Act, regulations, and other references and is valid for three years from date of training.
- The level of training must be specified on the TDG card issued to the employee upon passing the course examination. This is the responsibility of the employer. The TDG card is not transferable outside of NB Power.
- The certificate of training shall be kept with or near employees. It must be produced at the request of a TDG inspector.
- Additional training is required for employees who handle explosives or radioactive materials.
- Employees must keep informed of any changes and amendments to the legislation by reviewing and updating their copy of the TDG Act and regulations.
- There could be a temporary situation where a person without a valid TDG certificate of training is required to handle dangerous goods. This is only permitted under the direct supervision of someone who is TDG certified. The TDG certified employee is responsible for the actions of the uncertified employee.

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#### Records

- Shippers and drivers must keep a copy of each dangerous goods shipping document for two years. The document could be an electronic copy.
- This requirement also applies to importers, who may be considered shippers under the TDG Regulations.
- Training records are kept in NBP's LMS

#### 8.0 APPENDIX

Appendix A - Reporting Quantities Table

Appendix B - Authorities to Notify in An Emergency Table

Director of Total Health &

Safety

#### **DOCUMENT APPROVAL/REVISION RECORD**

Revision #	Date yyyy/mm/dd	Revision Summary	Author	Reviewed By	Approved By
New	2019/01/30	New Standard	Ian Case	Nancy Allen Melinda Mallery Shelley Parker Kim Gordon	Robin Condon
1	2022/03/22	Complete Rewrite	Matt Parks	TH&S	Robin Condon



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### Appendix A - Reporting Quantities

REPORTING QUANTITIES TABLE			
Class	Packing Group or Category	Quantity	
1	II	Any quantity	
2	Not applicable	Any quantity	
3, 4, 5, 6.1, 8	I or II	Any quantity	
3, 4, 5, 6.1, 8	III or without a packing group	30 L or 30 kg	
6.2	A or B	Any quantity	
7	Not applicable	A level of ionizing radiation greater than the level established in section 39 of the "Packaging and Transport of Nuclear Substances regulations, 2015"	
9	II or III, or without a packing group	30 L or 30 kg	



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### Appendix B - Authorities to Notify in An Emergency

YOU MUST IMMEDIATELY NOTIFY:			
Alberta	911 (or local police) and relevant provincial authorities (1-800-272-9600) or		
	Canadian Coast Guard (1-800-889-8852)		
British Columbia	911 (or local police) <b>and</b> Provincial Emergency Program (1-800-663-3456)		
	or Canadian Coast Guard (1-800-889-8852)		
Prince Edward	911 (or local police) or Canadian Coast Guard (1-800-565-1633)		
Island			
Manitoba	911 (local police or fire department) and Department of Conservation (204		
	945-4888) <b>or</b> Canadian Coast Guard (1-800-889-8852)		
New Brunswick	911 (or local police) or Canadian Coast Guard (1-800-565-1633)		
Nova Scotia	911 (or local police) or Canadian Coast Guard (1-800-565-1633)		
Ontario	911 (or local police) or Canadian Coast Guard (1-800-265-0237)		
Quebec	911 (or local police) <b>or</b> Canadian Coast Guard (1-800-363-4735)		
Saskatchewan	Local police, Spill Control Centre (1-800-667-7525) or Canadian Coast		
	Guard (1-800-889-8852)		
Newfoundland	911 (or local police) and Canadian Coast Guard (1-800-563-9089)		
and Labrador			
Nunavut	911 (or local police) <b>and</b> relevant authorities (867-920-8130)		
Territory			
Nunavut	Canadian Coast Guard (1-800-265-0237)		
Territory and			
arctic waters			
(waters north of the			
Northwest and			
Yukon Territories)			
Yukon Territory	911 (or local police) <b>and</b> relevant authorities (867-667-7244) <b>or</b> Canadian		
	Coast Guard (1-800-889-8852)		
Northwest	911 (or local police) <b>and</b> relevant authorities (867-920-8130) <b>or</b> Canadian		
Territories	Coast Guard (1-800-889-8852)		
CANUTEC	1-888-CAN-UTEC (226-8832), 613-996-6666, <b>or</b> *666 on a cellular phone		
Canadian Nuclear	CNSC duty officer emergency line (613-995-0479)		
Safety			
Commission			
Natural Resources	613-995-5555		
Canada			