ABOUT CANADIAN PACIFIC (CP)

Canadian Pacific (CP), through our subsidiaries, operates a transcontinental railroad in Canada and the United States and provides logistics and supply chain expertise. CP provides rail and intermodal transportation services over a network of more than 12,000 miles, serving the principal business centres of Canada from Montreal, Quebec, to Vancouver, British Columbia, and the U.S. Northeast and Midwest regions.

Our railroad feeds directly into the U.S. heartland from the East and West coasts. Agreements with other carriers extend our market reach east of Montreal in Canada, throughout the U.S. and into Mexico.

We transport bulk commodities, merchandise freight and intermodal traffic. Bulk commodities include grain, coal, fertilizers and sulphur. Merchandise freight consists of finished vehicles and automotive parts, as well as forest and industrial and consumer products. Included in industrial and consumer products is one of our fastest growing markets, energy. Intermodal traffic consists largely of high-value, time-sensitive retail goods in overseas containers and in domestic containers and trailers that can be moved by train and truck.

We are focused on providing customers with industry leading rail service; driving sustainable, profitable growth; optimizing our assets; and reducing costs, while remaining a leader in rail safety.

To learn more about CP visit our website, cpr.ca as well as our HazMat page at cpr.ca/hazmat
COMMUNITY EMERGENCY PLANNING GUIDE

EDITION 3

Distribution and use of this document is intended for public safety or emergency planning agencies and personnel. Any other use is strictly prohibited without the prior written consent of CP.
# TABLE OF CONTENTS

## SECTION 1 - INTRODUCTION

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dedication to safety</td>
<td>9</td>
</tr>
<tr>
<td>Introduction</td>
<td>10</td>
</tr>
<tr>
<td>Railroad safety</td>
<td>10</td>
</tr>
<tr>
<td>Personal safety</td>
<td>11</td>
</tr>
<tr>
<td>Incident scene safety</td>
<td>11</td>
</tr>
<tr>
<td>Stopping a train</td>
<td>12</td>
</tr>
<tr>
<td>Walking near or across tracks</td>
<td>12</td>
</tr>
<tr>
<td>Driving across tracks</td>
<td>12</td>
</tr>
<tr>
<td>Fouling (obstructing) the track or dragging hoses across tracks</td>
<td>12</td>
</tr>
<tr>
<td>Hazardous Materials safety</td>
<td>13</td>
</tr>
<tr>
<td>Environmental policy statement</td>
<td>13</td>
</tr>
<tr>
<td>Customer Handbook</td>
<td>13</td>
</tr>
</tbody>
</table>

## SECTION 2 – EMERGENCY PLANNING INFORMATION

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location and identification of CP rail lines</td>
<td>15</td>
</tr>
<tr>
<td>Canadian crossings and bungalows</td>
<td>16</td>
</tr>
<tr>
<td>Canadian crossing markers</td>
<td>16</td>
</tr>
<tr>
<td>US crossing markers and bungalows</td>
<td>17</td>
</tr>
<tr>
<td>Dangerous goods / Hazardous Materials transported by rail</td>
<td>18</td>
</tr>
<tr>
<td>Requesting information on what CP transports</td>
<td>19</td>
</tr>
<tr>
<td>United States: Traffic density studies – OT 55</td>
<td>19</td>
</tr>
<tr>
<td>Canada: Traffic density studies – Protective Direction 32</td>
<td>19</td>
</tr>
<tr>
<td>AskRail™</td>
<td>20</td>
</tr>
</tbody>
</table>

## SECTION 3 – CP PREPAREDNESS

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparedness</td>
<td>21</td>
</tr>
<tr>
<td>Integrated Contingency Plan</td>
<td>22</td>
</tr>
<tr>
<td>CP HazMat Officers</td>
<td>22</td>
</tr>
<tr>
<td>Coordination with CP staff</td>
<td>23</td>
</tr>
<tr>
<td>CP Police Service</td>
<td>23</td>
</tr>
<tr>
<td>Equipment</td>
<td>23</td>
</tr>
<tr>
<td>Contractors</td>
<td>24</td>
</tr>
<tr>
<td>Canadian Regulatory Requirement for Response Plans (ERAPS)</td>
<td>24</td>
</tr>
<tr>
<td>TRANSCAER™</td>
<td>25</td>
</tr>
<tr>
<td>Emergency training exercises</td>
<td>25</td>
</tr>
<tr>
<td>CP training railcar – CP911</td>
<td>26</td>
</tr>
</tbody>
</table>

## SECTION 4 – RESPONDING TO A RAILROAD EMERGENCY

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response objectives</td>
<td>27</td>
</tr>
<tr>
<td>Population protection</td>
<td>28</td>
</tr>
<tr>
<td>Pre-Emergency identification of at-risk populations</td>
<td>28</td>
</tr>
<tr>
<td>Approaching the scene of the incident – safety first</td>
<td>29</td>
</tr>
<tr>
<td>Responding to a railroad emergency – what to do</td>
<td>30</td>
</tr>
<tr>
<td>Incident Command System</td>
<td>30</td>
</tr>
<tr>
<td>-------------------------------------------------------------</td>
<td>----</td>
</tr>
<tr>
<td>Figure A – Incident Command System</td>
<td>32</td>
</tr>
<tr>
<td>Figure B – Unified Command System</td>
<td>33</td>
</tr>
<tr>
<td>Notification Procedures</td>
<td>34</td>
</tr>
<tr>
<td>Other Right of Way considerations</td>
<td>35</td>
</tr>
<tr>
<td>Bridges</td>
<td>35</td>
</tr>
<tr>
<td>Pipelines or fiber optic cables</td>
<td>35</td>
</tr>
<tr>
<td>Tunnels</td>
<td>37</td>
</tr>
<tr>
<td>Passenger trains</td>
<td>37</td>
</tr>
<tr>
<td>Freight railroad security threat</td>
<td>38</td>
</tr>
<tr>
<td>SECTION 5 – CP RESPONSE RESOURCES</td>
<td>39</td>
</tr>
<tr>
<td>CP response resources</td>
<td>40</td>
</tr>
<tr>
<td>CP resource map</td>
<td>41</td>
</tr>
<tr>
<td>External resources</td>
<td>41</td>
</tr>
<tr>
<td>Fire trailers</td>
<td>42</td>
</tr>
<tr>
<td>Transfer trailers</td>
<td>43</td>
</tr>
<tr>
<td>Summary of incident types, responses and Incident Command</td>
<td>44</td>
</tr>
<tr>
<td>Media interaction</td>
<td>45</td>
</tr>
<tr>
<td>CP media contacts</td>
<td>45</td>
</tr>
<tr>
<td>CP general claims</td>
<td>46</td>
</tr>
<tr>
<td>SECTION 6 – RAILCAR MARKINGS</td>
<td>47</td>
</tr>
<tr>
<td>Recognition and identification of rail car markings</td>
<td>48</td>
</tr>
<tr>
<td>Rail car markings and stenciling</td>
<td>48</td>
</tr>
<tr>
<td>Tank car specification stencil</td>
<td>49</td>
</tr>
<tr>
<td>Authorizing agencies</td>
<td>49</td>
</tr>
<tr>
<td>Tank Specification</td>
<td>49</td>
</tr>
<tr>
<td>Delimiter letter</td>
<td>49</td>
</tr>
<tr>
<td>Tank test pressure</td>
<td>49</td>
</tr>
<tr>
<td>Weld type</td>
<td>49</td>
</tr>
<tr>
<td>Fittings</td>
<td>50</td>
</tr>
<tr>
<td>Placarding and Hazard classes</td>
<td>50</td>
</tr>
<tr>
<td>Hazard classes and divisions</td>
<td>51</td>
</tr>
<tr>
<td>Numbered classes and divisions</td>
<td>51</td>
</tr>
<tr>
<td>1. Explosives</td>
<td>51</td>
</tr>
<tr>
<td>2. Gases</td>
<td>51</td>
</tr>
<tr>
<td>3. Flammable liquids</td>
<td>51</td>
</tr>
<tr>
<td>4. Flammable solids and reactive solids/liquids</td>
<td>51</td>
</tr>
<tr>
<td>5. Oxidizers and organic peroxides</td>
<td>51</td>
</tr>
<tr>
<td>6. Poisonous (toxic) materials and infectious substances</td>
<td>51</td>
</tr>
<tr>
<td>7. Radioactive materials</td>
<td>51</td>
</tr>
<tr>
<td>8. Corrosive materials</td>
<td>51</td>
</tr>
<tr>
<td>9. Miscellaneous dangerous goods</td>
<td>51</td>
</tr>
</tbody>
</table>
SECTIONS

SECTION 7 – PRODUCTS, CONTAINER VALVES & FITTINGS

Classification of products
  Petroleum crude oil
  Sour crude oil
General purpose low-pressure tank cars
  General purpose low-pressure tank car valves and fittings
  Pressure relief device
General purpose acid tank cars
Pressure tank cars – valves & fittings
Special commodity pressure tank car
  Cryogenic tank cars
  Intermodal tanks

SECTION 8 - DOCUMENTATION

Shipping documents – Train Consists
Shipping papers
  What to know as an Emergency Responder

APPENDICES

Appendix A: Train Consist
  Train Consist (outbound wheel report)
Appendix B: Compressed Waybill
  Train Consist Compressed Waybill
  Intermodal Consist
  Intermodal Compressed Waybill
Appendix C: Hazardous commodities document
Appendix D: Emergency response document
  Emergency response document
Appendix E: Tonnage profile
Appendix F: Marshaling messages

COMMUNITY EMERGENCY PLANNING GUIDE

Edition 3: January 2017
Canadian Pacific
7550 Ogden Dale Road SE, Calgary AB T2C 4X9
All Rights Reserved
SECTION 1

INTRODUCTION
DEDICTION TO SAFETY

Maintaining safe operations is a responsibility we take very seriously. CP has been safely operating trains for more than 130 years, in communities all across North America.

Every policy we implement, every task we perform, every operational decision we make is viewed through the lens of safety. We know safety isn’t an abstract concept; it is a condition of employment each and every day. It is also part of the commitment we make to our customers and stakeholders: we will protect our people, the public, our customer’s goods, our communities and the environment.

CP has a comprehensive safety framework that includes broad ranging components such as education, training, auditing, reporting, and response techniques. We are also proudly aiding the railroad industry in the advancement of operational improvements and we continue to invest in technology to enhance our existing safety performance.

INTRODUCTION

CP developed this Community Emergency Planning Guide (Guide) to assist local emergency organizations with their efforts to plan for and respond to incidents involving railroad property or equipment.

The Purpose of the Guide is to supplement local emergency plans. It is designed to cover key information needed by planners and responders should an incident take place involving CP.

Among other things the Guide outlines:

- Emergency phone numbers and points of contact to initiate CP response processes
- Hazardous materials shipping documents
- Protection of the public
- CP’s emergency response organization uses the Incident Command System and Unified Command under a National Incident Management System (NIMS)
- Basic information from CP’s Customer Handbook
- Rail car placarding requirements and sources of additional information on hazardous materials
- Incident response guidelines
- CP resource management during an incident
- Bridge and tunnel incident considerations
- Security planning and preparation
- Training and exercise opportunities available with CP
- How to request a list of hazardous materials transported through a community

This information will assist emergency planners in the evaluation of their capability to respond to an incident involving rail transportation. The information also provides emergency responders access to CP staff to ensure that necessary local and private resources are engaged.
RAILROAD SAFETY

Rule one in any railroad operating rulebook is:

Expect a train or rail equipment to move on any track from either direction at any time and without warning.

This rule is a constant reminder to be alert for trains, cars and equipment. Some of these easy rules can help ensure the safety of all workers.

PERSONAL SAFETY

- Never step on the rail. Step over the rail. The rail can be a slip or trip hazard.
- The walking surface around the rails (ballast) is comprised of angular crushed rock and may be uneven. Care should be used when walking on ballast and the right-of-way. If possible, cross only at a grade crossing, which provides a more level walking surface.
- Never stand between the rails.
- Never climb or walk on the roof of a locomotive.
- If it is necessary to climb rail equipment, use three points of contact at all times. The ladders on rail equipment may curve around the car allowing limited access for your feet. The first step onto rail equipment is typically some distance off the ground. When descending the ladders, face the car and do not jump from the last step. Always face the locomotive going up and coming down.
- If you use a ladder, remember to block the feet and tie off at the top.

INCIDENT SCENE SAFETY

- Contact CP by using our CP Police Communications Emergency Number 1-800-716-9132 and report your emergency. Advise if the train traffic needs to be stopped. See pages 17 and 18 to identify where you are and how to report the emergency.
- Never park emergency vehicles on or too close to the tracks.
- Beware of product(s) which may have spilled from railway equipment.
- Get access to the Train Consist which is a list of the cargo on the train (see Appendix A)
- Review the Train Consist and shipping documents before approaching the scene of an incident (See Section 8 Documentation).
- Consult the Emergency Response Guidebook (ERG) for potential hazards and personal equipment requirements.
- Beware of tipping and leaning equipment.
- Be especially alert for bent and stressed rail which has stored energy and can lash out suddenly.
- Be aware of heavy equipment such as cranes, side booms, bulldozers, and excavators.
- Participate in onsite job briefings where required.
STOPPING A TRAIN

- As a result of the significant weight of trains, stopping requires a long distance. To request a train to stop, contact the CP Police Communications Centre (1-800-716-9132). The Police Communications Centre will assist the local responder in contacting the appropriate train dispatcher. The train may require more than one mile to stop. Plan and prepare in advance for adequate stopping distance. Never foul (obstruct) the tracks until the CP Rail Traffic Control (RTC) Centre acknowledges the train has stopped. Remember to provide lookouts in both directions along the track for protection.

WALKING NEAR OR ACROSS TRACKS

- Perform a job briefing with your employees to review any necessary safeguards for the task to be performed. Confirm with the railroad that the track you will be entering is protected from entry by railroad equipment.
- When near any track, expect a train to move in either direction at any time. Cross tracks at a right angle to maximize the field of vision within the fouling space.
- Before entering a rail yard, be aware that some locomotives are not manned and are controlled remotely. Do not assume the operator of the locomotive can see you. The operator could be up to a half mile away from the locomotive. These remote control locomotives will display flashing red lights when being operated in “remote” mode. Exercise extreme caution and give yourself plenty of room when crossing tracks occupied by a remote control locomotive.
- If you must cross tracks, do so at least 25 feet from the end of railroad cars, locomotives or on-track equipment. Look both ways; be sure no equipment is moving toward you.
- Ensure there is at least 50 feet of clearance between two standing cars, locomotives or on-track equipment before attempting to cross between them.
- Do not cross tracks near switches or any other movable track structure.

DRIVING ACROSS TRACKS

- Cross only at grade crossings; heed all crossing-warning devices.

FOULING (OBSTRUCTING) THE TRACK OR DRAGGING HOSES ACROSS TRACKS

- Never climb over, under, or through rail equipment unless railroad representatives inform you the area has been secured and is being protected by railroad personnel.
- Position your equipment at least 25 feet away from the nearest rail. If you find that you must obstruct the track before fouling, you must contact the railroad (via the CP Police Communications Centre) and receive positive verification from the railroad that it is safe to do so. Bear in mind that rail equipment extends out over the outside limits of the rail.
- Be careful when you must cross more than one track. Parallel tracks may belong to two different companies or be under the control of two different employees of the same company.
HAZARDOUS MATERIALS SAFETY

Railroads continue to be the safest surface mode for transporting hazardous materials in North America. For every billion ton-miles of hazardous materials transported, trucks (which operate over public highways) are involved in more than ten times as many accidents as the railroad. Virtually all of the country’s hazardous material shipments are transported in privately owned rail tank cars, not in railroad-owned equipment. 99.997% of rail industry shipments of hazardous materials reach destination without a release caused by a train incident.

ENVIRONMENTAL POLICY STATEMENT

CP is committed to conducting its operations and activities in a manner that:

- Protects the environmental health and welfare of its employees and other persons who may be affected by its operations and activities;
- Protects the natural environment to meet the needs of today without hindering the ability of society to meet future needs;
- Meets or exceeds environmental requirements of government applicable to its operations and activities; and
- Keeps employees and the public informed about its environmental plans through communications programs.

CUSTOMER HANDBOOK

Our Customer Safety Handbook helps our customers:

- Educate their employees who work on or around railway equipment about the hazards of rail operations.
- Raise their employees’ awareness of situations that may have an impact on safety.
- Reduce the frequency of customer-caused train accidents and personal injuries to CP employees while switching on customer tracks and to prevent Non-Accidental Releases (NAR’s).

The Handbook, available to all customers, includes basic information such as:

- How to operate handbrakes.
- How to secure doors and gates.
- How to move rail cars safely.
- How to work around railway cars and tracks safely.
The Handbook also includes:

- Information on issues affecting the safety of railroad personnel while on customer sidings, such as walking and tripping hazards, clearances, and track maintenance.
- Information affecting the safe operation of trains, such as the effect of imbalanced loads on car performance and the impact of spillage and subsequent wheel contamination on braking capability.
- Emergency contact information.

The Handbook is available online:
SECTION 2

EMERGENCY PLANNING INFORMATION
LOCATION AND IDENTIFICATION OF CP RAIL LINES

It is important for local emergency planners to familiarize themselves with the ownership and location of local rail lines to identify possible access routes for response vehicles.

The best way to identify ownership of rail lines is to communicate with the railroad companies before an incident occurs. As part of a highway-rail intersection public safety program, CP posts an emergency telephone number on crossbucks: 1-800-716-9132. The crossing number is also indicated on the back of the cross-buck in Canada or on the Crossing Marker in the U.S. (see photo).

The emergency call information may also be affixed to a signal bungalow or relay house. If the crossing has a signal mast with only lights, a decal is affixed to the mast. Mile posts may be placed between crossings and will be mounted to a post in the ground. Please note: CP operates thousands of track miles with multiple repetitive mile post numbers. Mile post numbers alone cannot indicate your location.

When speaking to CP, it is also important to inform us of the City, Province/State and location so that the specific road crossing can be quickly identified.

All emergencies on CP rail lines, including situations that may affect PUBLIC SAFETY or the SAFE MOVEMENT of TRAINS, should be reported by calling CP at 1-800-716-9132. Emergencies can include, for example, a stuck or stalled vehicle on a crossing, accident at or near a crossing, or any event or situation taking place where close clearance of train traffic may be a safety factor including malfunctioning traffic control devices.

If a CP train needs to be stopped or slowed, clearly describe the scene and the nature of the emergency to the CP Police Communications Centre officer and remain on the line until you are assured the trains will be halted.
CANADIAN CROSSINGS & BUNGALOWS

Crossbuck  
Signal Bungalow

CANADIAN CROSSING MARKER

Quote the crossing number when speaking to CP so we know where you are
US CROSSING MARKERS AND BUNGALOWS

The United States Department of Transportation (DOT), Federal Railroad Administration (FRA), maintains an excellent website that is particularly useful to emergency planners looking to identify rail lines. The web site is:


All USA national highway rail crossing inventory files are available. Queries can be made by state, county, city, street name, crossing number, railroad, and railroad milepost, etc. Maps, accident history and accident prediction data are also readily available. Emergency response planners can easily obtain milepost designations by railroad, for every grade crossing, in each county and state.
DANGEROUS GOODS / HAZARDOUS MATERIALS TRANSPORTED BY RAIL

The risks associated with dangerous goods/hazardous material varies depending on the hazard class of the material and potential for public or environmental impact. The majority of hazardous materials shipped by rail do not have the potential for impact beyond a small, localized area.

CP is a common carrier and as such is required by law to transport hazardous materials that have been properly prepared and offered for freight rail transportation in accordance with US Federal Department of Transportation and Canadian Transportation of Dangerous Goods regulations.

There are certain ultra-hazardous materials such as toxic inhalation hazards (TIH)/poison inhalation hazards (PIH) (e.g. chlorine and sulfur dioxide) which require a heightened level of safety measures. CP and our customers use all necessary precautions to move all commodities with the highest degree of safety and security.

REQUESTING INFORMATION ON WHAT CP TRANSPORTS

UNITED STATES: TRAFFIC DENSITY STUDIES – OT 55

Information on the types of hazardous materials being transported through a community is useful for local emergency planners in developing an effective and realistic pre-emergency response plan for rail emergencies. A Non-Disclosure Agreement (NDA) form must be signed as per the AAR Circular OT-55 (AAR Recommended Railroad Operating Practices for Transportation of Hazardous Materials). The NDA can be obtained from Community_Connect@cpr.ca and is to be used to request all Hazardous Materials transported by CP through a community in the United States in rank order.

CANADA: TRAFFIC DENSITY STUDIES – PROTECTIVE DIRECTION 36

Within Canada, bona-fide emergency planning officials (EPO) or first responders designated by each municipality can request information regarding the dangerous goods transported through their communities. The information is provided with yearly aggregate information, presented by quarter, on the nature and volume of dangerous goods that CP transports by Rail through that municipality.

EPO and/or first responders are required to provide Transport Canada, through the Canadian Transport Emergency Centre (CANUTEC), the name of its designated Emergency Planning Official by providing the following information:

- Name, Title
- Organization
- Address
- Cell phone number of designated EPO
- Email Address
- Fax Number
- Telephone Number

Section 2: Emergency Planning
This information must be sent to CANUTEC at the following address:

**Canadian Transport Emergency Centre (CANUTEC)**
Place de Ville, Tower C
330 Sparks Street, 14th Floor,
Ottawa, Ontario, K1A ON5
Attention: Director of CANUTEC

or

By email to CANUTEC@tc.gc.ca

CANUTEC forwards this information to CP annually and sends any additions to the list quarterly. We then send the NDA’s to those municipalities we operate through and provide pertinent details per the specifications of Transport Canada.

**ASKRAIL™**

The AskRail™ mobile application serves emergency responders who arrive first to the scene of a rail emergency and need critical information about the contents of a railcar. CP HazMat officers can help local first responders with registration. This invitation only mobile application provides immediate access to accurate, real-time data about individual railcars on a train. This data can help emergency responders make informed decisions about how to respond at the scene of a rail emergency.

**Who are the “people who need to know”?**

The “people who need to know” are emergency responders who will be the first on scene or immediately support the first on scene (firefighters, police, EMS, dispatch centre, EMA, EOC).

**TYPES OF ACCESS**

**Single-car Lookup:** Allows the user to query railcar contents. Any emergency responder who fits the above definition of “people who need to know”.

**Consist-Lookup:** Allows the user to query train contents. Only Department Chiefs, Directors, Chief Officers, Company Officers, and designees of the Chief such as firefighters in charge of a hazmat team may request consist lookup access.

Emergency Responders may download the App from the Apple App store or the Google Play store. Then complete the registration process in the app on your device. You will receive an email notification once your registration has been approved.
SECTION 3

CP PREPAREDNESS
PREPAREDNESS

Emergency preparedness activities, programs and response systems are carefully planned and implemented prior to an incident to enhance incident response. Planning, training for and conducting preparedness exercises are among the activities performed under this phase of emergency management.

CP operates with the objective of moving each shipment in a timely manner from origin to destination safely, and without incident.

In the event of an incident, our priorities are:

1. Protect public, first responders and employees from harm or injury;
2. Safeguard against significant environmental impact;
3. Minimize property damage; and
4. Recover rail operations when it is deemed safe.

An effective state of preparedness is accomplished through good emergency planning and training, comprehensive emergency response exercises, and the performance of regular evaluations of response plans.

CP encourages Local Emergency Planning Committees, emergency management, and response groups to incorporate this Guide into their own plans and take the opportunity to preplan with CP. Local emergency response personnel should familiarize themselves with the layout and operation of our railroad properties in their area.

INTEGRATED CONTINGENCY PLAN

CP’s Integrated Contingency Plan (ICP) is based on the National Incident Management (NIMS) Incident Command System format and is available on CP’s website at www.cpr.ca/hazmat. This one-plan guidance document provides an all-encompassing emergency response plan to guide CP’s actions for any emergency situation. The ICP is organized into three main sections: an introductory section, a core plan and a series of supporting annexes. The introduction section of the plan format is designed to provide CP response personnel, outside responders and regulatory officials with basic information about the plan and the entity it covers. The core plan contains the essential steps necessary to initiate, conduct and terminate an emergency response action: recognition, notification and initial response, including assessment, mobilization and implementation. The annexes are designed to provide key supporting information for conducting an emergency response under the core plan as well as document compliance with regulatory requirements.
CP HAZMAT OFFICERS

CP has dedicated, professional staff available to assist local communities in emergency planning and response. Regional CP HazMat Officers will mobilize to an incident and help coordinate the dangerous commodity/hazardous materials response activities of the railroad with the local fire chief, local and state agencies, environmental experts and shippers’ representatives. We also have a team of environmental officers who will manage longer term site remediation as required.

Our HazMat and Environmental Officers are trained to respond to rail-related incidents and emergencies. These personnel are strategically located throughout CP’s Operating System and are available to assist company personnel and emergency responders in mitigating emergency situations.

COORDINATION WITH CP STAFF

Our HazMat and Environmental Officers have a variety of response tools and resources available for use in an emergency and are here to help. This team will work with other CP company officials, contractors, and the local incident command personnel to ensure safe and efficient handling of an incident and advocate on behalf of local emergency responders.

A high level map of CP’s operating system is included on page 3 of this Guide. CP Emergency Response staff can be contacted 24/7, 365 days a year by calling the CP Police Communications Centre at 1-800-716-9132.

CP POLICE SERVICE

We have our own dedicated railroad police who are often one of the first to attend the scene of an incident. The CP Police Service works closely with communities, other law enforcement and government agencies to promote railway safety and infrastructure security. We have police officers assigned to over 25 field offices responsible for railroad police operations in six Canadian Provinces and 14 U.S. States. Our service operates on the CP rail network as well as in areas where we have non-railway operations.

CP Police Service members have jurisdiction in any place within 500 metres of property that the railroad company owns, possesses or administers. As defined by Section 2 of the Canadian Criminal Code, members have exactly the same powers as every other police officer in Canada. In the United States our members are fully commissioned police officers within the State in which they operate, empowered by that State to enforce the law.

The CP Police Communications Centre is located in Calgary, Alberta and is the centralized dispatch location for all railroad emergencies.

Local emergency responders are encouraged to call 1-800-716-9132 as a first point of contact with us to ensure we respond to you quickly and effectively.
EQUIPMENT

CP has established a 24/7 network of resources, equipment and experts to reduce response time, limit impacts and remediate impacted sites. Fire/foam trailers and transfer trailers have been placed strategically throughout CP’s network and provide CP responders and contractors with the necessary materials and equipment to complement local firefighting resources and provide emergency, leak mitigation, containment, product transfer and initial cleanup of hazardous commodity incidents. Air monitoring capability is also a component of these transfer trailers.

CONTRACTORS

CP has a network of contractors across the system that can assist in responding to a variety of incidents. These contractors are on call 24/7 for Emergency Response Services and have expert personnel and specialized equipment for the purpose of initial product containment, recovery and transfer. Contractors also provide wrecking and reconstruction services after any immediate threat to the public, environment or railroad operations has been addressed.

CANADIAN REGULATORY REQUIREMENT FOR RESPONSE PLANS (ERAPS)

In Canada, Part 7 of the Transportation of Dangerous Goods Act 1992, requires that before a person offers for transport or imports certain dangerous goods, the person must have an Emergency Response Assistance Plan (ERAP) approved by Transport Canada. Part 7 and Column 7 of Schedule I of the Transportation of Dangerous Goods (TDG) Regulations prescribe the dangerous goods and the concentration or quantity for which an ERAP is required.

An ERAP is a plan that describes what is to be done in the event of an incident involving certain higher risk dangerous commodities. The plan is intended to assist local emergency responders by providing them with additional expertise and equipment at the scene of an incident. A plan number along with an activation phone number can be found on all compressed waybills within the train documents. (Per Appendix B)
To better facilitate emergency preparedness activities with local communities, CP is an active participant in the TRANSCAER® (Transportation Community Awareness and Emergency Response Program in both the US and Canada. TRANSCAER® is a nationwide community outreach program designed to address community concerns about the transportation of hazardous commodities through planning and cooperation. The program provides assistance for communities to develop and evaluate their emergency response plans for hazardous commodities transportation incidents.

For information on national TRANSCAER® events and training, please visit the US website at: www.transcaer.org and the Canadian website at: www.transcaer.ca.

For information about TRANSCAER® efforts at the local level, or to obtain information about training opportunities with CP for your community, local planners may contact CP’s Community Connect number at 1-800-766-7912 or email: community_connect@cpr.ca

**EMERGENCY TRAINING EXERCISES**

Training exercises help to facilitate safe and efficient operations during a response. CP offers training on railroad incident emergency response for local emergency responders. Agencies that desire training may contact Community Connect at 1-800-766-7912 or email Community_Connect@cpr.ca who will connect you with your local HazMat Officer.

**CP conducts three levels of emergency preparedness exercises:**

1. **Tabletop exercises** are round table discussions of a potential emergency situation. They are developed to practice elements of the emergency response plan and are structured to meet the specific objectives identified.

2. **Drills** are hands-on activities that test a specific element of the emergency response system, such as facility evacuation. The drills are based on a realistic scenario that could impact the area/terminal/facility. It involves activating part of the emergency response system to handle the described emergency. The group participating will be required to respond to an evolving emergency event run in real time.

3. **Full scale simulations** test the complete emergency response system. An actual incident is “staged” and the complete emergency response organization is mobilized to deal with it.
CP TRAINING RAILCAR – CP911

CP’s training rail car – CP911 – is a DOT111 General Service car that has been converted into a training tank car for First Responders. It allows responders to see firsthand what they may encounter in the unlikely event of a derailment or NAR (Non-Accidental Release). CP HazMat Officers will use CP911 to train responders on the construction, identifiable markings, valves and general operations of a tank car.

CP911 will also complement existing training activities; we can bring First Responders into the rail yards and conduct larger training events using the CP911 tank car to replicate Dangerous Goods incident response.

CP911 is one more resource available to the communities through which we operate in our ongoing commitment to safety.
SECTION 4

RESPONDING TO A RAILROAD EMERGENCY
RESPONSE OBJECTIVES

CP will respond to all incidents that occur on the CP rail network.

In the event of an incident, our priorities are:

1. Protect public, first responders and employees from harm or injury;
2. Safeguard against significant environmental impact;
3. Minimize property damage; and
4. Recover rail operations when it is deemed safe.

POPULATION PROTECTION

In the event of a railroad emergency, the protection of life and health is the first priority. When in doubt, the safest course of action must be taken: decisions to evacuate potentially affected populations should be based upon facts, not fears.

We recommend the following key factors be reviewed when deciding on evacuation:

Site Factors:
- Actual situation and conditions (leak, fire, spill)
- Products involved (physical and chemical properties)
- Hazards of the products
- Condition of the containers
- Ability of the products to migrate off site
- Results of air monitoring or dispersion models

Location Factors:
- Location of the incident and containers
- Size of affected population
- Risks of moving people
- Types of affected population
- Ability to shelter in place

Resource Factors:
- Ability to shelter evacuated populations
- Ability to notify and move the affected population
PRE-EMERGENCY IDENTIFICATION OF AT-RISK POPULATIONS

Local Emergency Planning Committees should, during the pre-emergency planning process, identify facilities such as schools, daycare centres, hospitals, nursing homes, high-rise occupancies, drinking water sources and factories. Meet with your local facility managers and anticipate challenges in advance of an evacuation, as well as the resources needed to move and care for the population in any given facility.

APPROACHING THE SCENE OF THE INCIDENT – SAFETY FIRST

History has taught us there is a significant risk to those first on scene of any hazardous materials incident. The use of tools and training is important to ensure that NO ONE IS PLACED IN HARM’S WAY. CP fully supports the actions of local first responders on scene of a CP incident.

National Fire Protection Association - NFPA 472, Chapter 5 - provides Core Competencies for Operations Response. Section 5.2.1 details how to properly survey a HazMat incident.

The key is to treat every incident as immediately dangerous to life and health (IDLH). No one should rush into a scene without first surveying the area, getting a list of chemicals involved, and using appropriate advanced technology (e.g., breathing apparatus, air monitoring equipment, thermal cameras, etc.).

Don’t count on human senses (sight, smell, sound) to determine if it is safe for our response personnel to approach the scene. Not all chemicals have detectable warning properties (strong odor or eye, nose, throat irritation) such as ammonia or chlorine. Chemicals such as carbon dioxide, vinyl chloride and compressed natural gas do not have an odor at all. If a chemical with poor warning properties is involved in an incident, there could be an immediate danger to life or health (IDLH) situation present. The key is to take the time to assess the situation, make immediate contact with the CP Police Communication Centre, and use standard operating procedures and advanced technologies to survey the area prior to approaching the scene.

Take the time to assess the situation, make immediate contact with CP Police Communications Centre, and use standard operating procedures to survey the area prior to approaching the scene.
RESPONDING TO A RAILROAD EMERGENCY – WHAT TO DO

1. Notify CP – before approaching railroad property, make sure that we have confirmed our understanding that you are there.
2. Locate the train crew. The conductor will have the most up-to-date, complete list of the train’s consist immediately available on the scene. The conductor’s copy of the consist will indicate cars that may have been picked up and/or set off en route.
3. If the train crew is unavailable, use the CP Police Communications Centre emergency number 1-800-716-9132 to establish communication with the railroad.
4. Look for mile posts or grade crossing numbers to confirm your location. This is covered on pages 17 and 18. If you have a smartphone you can advise CP of the GPS coordinates of your location.
5. If the train Consist is not available from the conductor, the Consist is also available from the CP Police Communications Centre emergency number 1-800-716-9132. They are able to send you the train Consist by email or fax. Remember, you can also use your AskRail mobile application for support.
6. Secure the area. The incident may span a large distance and securing this area may require a large number of personnel.
7. Establish the proper hazard zones.
8. Begin a site assessment from a safe distance, upwind and uphill.
9. Establish contact with the first CP Officer on site to begin site Incident Command. Our CP officers are trained to immediately connect with First Responders when they arrive on scene.
10. Ensure that utility locator services are called immediately and advised of the location of the emergency situation. Be aware of utilities, overhead and buried services that commonly run next to or on the railroad right-of-way.
11. Use all the resources available to you to ensure a safe and efficient resolution to the response.

INCIDENT COMMAND SYSTEM

CP understands and abides by the authority and responsibility of local emergency response officials to assume command of any incident that poses a threat to the health and safety of the general public or the environment.

Accordingly, all CP management personnel recognize that their role is to work with local officials to bring the incident to a safe conclusion.

CP personnel and environmental response contractors on the scene of a hazardous materials incident work in accordance with the National Response Plan and the National Incident Management System, and are covered by the U.S. Occupational Safety and Health Administration (OSHA), 29 CFR (Code of Federal Regulations) 1910.120 “Hazardous Waste Operations and Emergency Response” (HAZWOPER) regulations. In accordance with these regulations, CP uses an Incident Command System (ICS) for its employees and contractors operating within Unified Command System organizational structure as prescribed by the National Incident Management System (NIMS).
The senior CP Officer or their designate is in charge of all CP personnel, contractors and other company resources. This senior CP Officer, who will be wearing a lime green and orange safety vest, will coordinate all activities with the local emergency response official in charge.

**CP’s Role**

- We work with CANUTEC (Canada), CHEMTREC (USA), chemical shippers and manufacturers to ensure you have all the information about the materials you may be dealing with.
- CP’s HazMat Officers work through Incident Command. These railroad responders are personnel that have been specifically trained to respond to hazardous materials incidents involving hazardous spills from railroad equipment.
- CP’s Environmental Officers will work with provincial and federal environmental regulators. The long-term site remediation is handled by CP’s Environmental Department.
- CP’s Operating and Safety Rules will be strictly adhered to during all incident recovery or emergency operations.
- The senior on-site CP Officer is fully responsible for the enforcement of the rules and the conduct of all employees, whether CP or contractor personnel.
- Only fully trained and qualified individuals will be permitted to conduct offensive, hands-on, technical response activities. Specialized contractors working at the scene are covered by these regulations and are considered “specialized” CP employees.
- No CP official may commit any resources to any task that would violate local, provincial, state, or federal laws or pose an unreasonable risk or safety hazard to personnel working for CP, first responders or the public.

Railroads are prepared to function in any capacity within any ICS Structure. Typically two scenarios for Incident Command occur:

1. Under an incident command system the Incident Commander is the Fire Chief or designate of the Authority having Jurisdiction (AHJ). The senior CP Operations Officer or his designate at the incident is the On Scene Response Coordinator (OSRC) for CP to interface with the AHJ Incident Commander through the Operations Section. (Figure A)

2. Under a Unified Command System the Senior Operations Officer or his designee will operate in a unified command structure as the Railroad IC with the lead agency Incident Commander. (Figure B)
INCIDENT COMMAND SYSTEM

(FIGURE A)
UNIFIED COMMAND SYSTEM

(Figure B)
NOTIFICATION PROCEDURES

EMERGENCY RESPONSE GUIDELINES FOR TRAIN INCIDENTS

Governed by section 8 CP General Operating Instructions (GOI) and CP incident reporting policy

EMERGENCY RESPONSE GUIDELINES FOR TRAIN & YARD INCIDENTS

YARD INCIDENT (On Track)

TRAIN INCIDENT (On Track)

RTC notified of emergent situation

CP POLICE COMMUNICATIONS CENTER notified of emergent situation

OC Director

TRAIN CREW

CP POLICE 1-800-716-9132

Ensure track protected

Monitor train movements

Notify municipal (Local) Emergency Response forces

Provide ongoing site security

Level 1, 2 & 3

Trainmaster

Superintendent Operations

GM Operations

Level 3 Only

SVP Operations

Exec VP Operations

Corporate Crisis

President & COO

Level 3 Only

Notify On Scene Response Coordinator

Environmental Services Duty Officer (DC and ENV incidents)

On call Communications & Public Affairs

Network Service Center (NSC)

Damage Prevention and General Claims Services

General Claims

Safety, Environment and Regulatory

Sys Mechanical and Engineering

Assistant GM Transportation

AVP Transportation

EVP Operations

Immediate Notifications

Regulatory agencies (TC, FRA, TSB, NTSB, HRDC, TDG (Canutec), national response center, DFO, env, CAN, EPA, parks CAN, Prov, MOE’s)
OTHER RIGHT OF WAY CONSIDERATIONS

There are other considerations that may present challenges in the event of an emergency. As an emergency responder, you need to be aware of the potential hazards and difficulties they could encounter in either of these environments.

BRIDGES

Response to rail incidents on elevated structures creates distinct challenges due to the possibility of excessive heights and lengths along with the various building materials used in the construction of a span. Open, closed or non-existent deck walkways must be navigated with extreme caution, as some structures are not designed for pedestrian traffic.

A bridge may span over populated areas, streets, highways, waterways, or other railroad right-of-ways. Coordination with responders and railroad representatives is imperative.

The following additional factors should be considered when responding to a rail incident on a bridge or an elevated structure:

- Accessibility issues
- The need for the Coast Guard, helicopter, and high angle rescue team
- Impact on area dwellings and places of business
- Whether access routes should be closed or re-routed
- Whether navigable waterway traffic should be closed or re-routed
- The need for specially equipped boats, barges and emergency seafaring equipment
- The need for downstream pollution control measures
- Notify downstream communities of possible impacts
- Notify other rail carriers whose movements may be impacted
- Consider structural damage due to fire or derailed equipment
- Identify utilities present (electric, communications, water, sewer, and pipeline)
- Consider industrial hygiene issues (air monitoring, lead paint on steel structures)

PIPPINES OR FIBER OPTIC CABLES

Many railroad right-of-ways are underlain by underground pipelines and fiber optic cables. These may be in a common right-of-way, in a parallel right-of-way, or actually cross the right-of-way and run under the tracks. Typical pipeline commodities include natural gas, liquefied petroleum gas, gasoline, kerosene, diesel fuel and other petroleum products.

Derailed cars and locomotives can directly impinge on a pipeline. Additionally, loads imposed on a pipeline from a derailed train or cleanup equipment can result in immediate or future failure. The presence of underground pipelines or fiber optic cables should always be considered when responding to a rail incident.

The presence of underground pipelines or fiber optic cables should always be considered when responding to a rail incident.
The following additional factors should be considered when responding to a rail incident, which may be adjacent to a pipeline or cables:

- Look for posted markers and warning signs on posts
- Identify and notify the pipeline owner/operator
- Determine the commodity transported through the pipeline
- Look for pools of liquid, hissing sounds, or odors indicating a release
- Leave the area immediately if a release is discovered
- Do not touch, breathe, or make contact with vapors or liquids
- Do not light a match, start an engine, use a telephone, switch lights on/off
- Notify local emergency responders through 911 systems
- Warn others in the area and restrict access

Pipeline operators have their own emergency response protocols when notified of possible damage to their lines. Immediate identification and notification of the pipeline operator is very important to minimize any release.

For electric power transmission fiber optic cables or other buried communication lines, always check with the railroad’s Engineering department before digging on any right-of-way.

You can get this information from the CP senior officer on site at an incident or call CP’s Signals & Communications department.

Always check with the railroad’s Engineering department before digging on any right-of-way.
TUNNELS

An incident in a tunnel may create a greater risk than one in an open area. Toxic vapors are not readily dissipated and may displace air normally available for breathing. Fire may consume the air available for breathing leading to an oxygen deficient atmosphere.

Extreme care must be taken not to introduce additional hazards into the tunnel. The generation of a hazardous atmosphere from gasoline or diesel powered equipment, welding or burning fumes, chemical agents, and/or illuminating equipment may multiply the hazards already present.

The following additional factors should be considered when responding to a rail incident inside a tunnel:

- Air monitoring — conduct initial survey and continuously monitor during response
- Use of SCBA or respirator as determined by air monitoring results
- Possible high temperatures due to presence of fire
- Structural failure due to initial impact or fire/chemical damage
- Tunnel lining type — stone, timber, steel, concrete or combination
- Access points — portals, ventilation shafts, emergency exits, and inspection man ways
- Variation in track grade may produce a chimney effect
- Tunnel length, curvature, gradient, height and width
- Visibility may be limited or non-existent due to smoke, soot, chemical vapors
- Communications may be difficult or impossible using radios or cell phones
- Communication and lighting devices should be intrinsically safe
- Ventilation units may be beneficial to remove fumes and vapors
- Ventilation units may prove harmful in spreading a plume and fueling a fire
- Foam generators may be an effective tool for fighting a tunnel fire
- Determine presence of electric, gas, water, fiber optic and pipeline utilities
- Establish communication between the ends of the tunnel, especially, to control entry and keep personnel logs of those entering and exiting the tunnel

PASSENGER TRAINS

At some locations, passenger rail entities operate commuter and passenger trains on CP owned and operated tracks. When operating on CP, these trains are under the operational control of a CP train dispatcher. In the event of an emergency involving a passenger train, CP officials will coordinate with the passenger rail entity officials to manage the evacuation of passengers and mitigation of the emergency.

Notifications of the incident will be essentially the same as for other emergency situations. CP, in conjunction with officials from the passenger railroad, will respond to an incident to provide needed services and resources.

Any Passenger Rail incidents should be reported immediately to the CP Police Communications Centre at 1-800-716-9132.
FREIGHT RAILROAD SECURITY THREAT

In the event of a security concern or threat to the railroad, we will take prompt and appropriate action, using trained personnel to protect life, health, the environment and property.

Security incidents are emergencies that contain a very real possibility of danger and must be treated seriously. CP employees are required to report any security concern, security incident, emergency, criminal activity (known or suspected), suspicious happenings and/or suspicious persons on Company premises and property.

Coordination and cooperation with the responsible government agencies and local emergency response units is of the utmost importance.
SECTION 5

CP RESPONSE RESOURCES
CP RESPONSE RESOURCES

In the case of most derailments or spills, local responders may not have the equipment or expertise to handle large spill cleanup or railroad re-railing operations. We recognize our role in providing this specialized expertise and equipment to mitigate an incident.

In addition to CP internal experts in the transportation of goods and emergency response, we maintain standing contracts and agreements with various suppliers of these services.

Examples of these supplier roles include:

- Trained personnel equipped with all levels of protective equipment in close proximity to incident sites, including ability to use leak and spill control equipment to contain product from leaking railcars and containers.
- Industrial hygiene and public health contractors provide technical expertise and equipment to perform on-site and off-site air and water sampling.
- Emergency response contractors who will provide vacuum equipment, pumping equipment, firefighting resources, and cargo tanks for the recovery of spilled products.
- Environmental response contractors provide technical expertise in the on-site remediation or removal of contaminated water, soil, or debris from the incident site.
- Railroad re-railing and wreck response contractors provide heavy equipment such as cranes, off track lifting equipment, heavy earth moving equipment, and the operators and ground crews to lift and re-rail damaged rail cars and locomotives.
- Containers and heavy equipment are available for recovery of solid materials.

These contractors are also used to develop work and exclusion zones, and to document any exposures.
EXTERNAL RESOURCES

There are private and governmental organizations capable of providing emergency response information in the event of emergencies involving hazardous materials:

<table>
<thead>
<tr>
<th>Organization</th>
<th>Telephone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEMTREC</td>
<td>1-800-424-9300</td>
</tr>
<tr>
<td>CANUTEC</td>
<td>1-613-996-6666</td>
</tr>
</tbody>
</table>
FIRE TRAILERS

CP has Fire Fighting Trailers which are equipped with AR-AFFF (Alcohol-Resistant Aqueous Film-Forming Foam), strategically staged at various locations on our rail network. This equipment can be deployed where required on a moment’s notice.

CP does not maintain resources such as water supply equipment, emergency medical personnel, medical transport services, canteens, or large-scale communication equipment. During an emergency operation, CP relies upon local and regional emergency officials to assist in providing these types of resources. The senior or designated CP official will coordinate with the local Incident Commander to obtain these resources should they be required. Local resources will remain under the control of the local authority.

Road clipper model: 16’ TRA/REM fire suppression trailer equipped with AR-AFFF foam

750 GPM Fire Pump – gas engine driven

Easily towable to a location and equipped with lifting lugs to airlift to a remote location

10,000 gallon frameless portable water tank
TRANSFER TRAILERS

The CP transfer trailer provides responder(s) and contractors with the necessary materials and equipment to provide emergency response; leak mitigation, product transfer and initial cleanup of hazardous materials incidents.

The trailer contains fittings, pumps and transfer hoses for a wide variety of hazardous materials shipped. The unit is equipped with sufficient supplies to last approximately 48 hours by which time additional resources can be secured. Protective clothing for level A, B, C and D operations are also contained in the trailer.
### SUMMARY OF INCIDENT TYPES, RESPONSES, AND INCIDENT COMMAND

The following table illustrates the types of incidents involving hazardous materials that may occur and appropriate response roles of various organizations for each type of incident:

<table>
<thead>
<tr>
<th>Incident Type</th>
<th>CP Responders</th>
<th>Local Response Role and Responders</th>
<th>Incident Command System Participants</th>
</tr>
</thead>
</table>
| Leaking intermodal container with no off-site impact, no fire, no injury | • Shipper  
• ER Contractor  
• CP HazMat  
• Local CP Management | • Notification Only | • Local CP Management / HazMat |
| Leaking intermodal container with off-site impact, a fire or injury (small volume) | • Shipper  
• ER Contractor  
• CP HazMat  
• Local CP Management | • Fire / EMS  
• HazMat Team | • Local Incident Commander  
• Local CP Management |
| Ruptured fuel tank on locomotive                             | • ER Contractor  
• CP HazMat  
• Local CP Management | • Fire / EMS  
• HazMat Team | • Local Incident Commander  
• Local CP Management |
| Derailment with no release, no tank damage, upright          | • Local CP Management  
• Re-Rail Contractor | • Notification only | • Local CP Management |
| Derailment with tank overturned, serious tank damage        | • Local CP Management  
• CP HazMat  
• Re-Rail Contractor  
• ER Contractor | • Fire / EMS  
• HazMat Team (Stand-by mode) | • Local Incident Commander  
• Local CP Management |
| Derailment with release                                     | • Local CP Management  
• CP HazMat  
• Re-Rail Contractor  
• ER Contractor | • Fire / EMS  
• HazMat Team  
• State/Provincial/ Federal Agencies | • Local Incident Commander  
• Local CP Management |
MEDIA INTERACTION

CP procedures provide that communications with the media should be addressed through the local Incident Command System (ICS) by a Public Information Officer (PIO). The role of the PIO is to develop and manage the release of information concerning the incident to the news media and the public.

The PIO will or arrange to:

- Develop a communications strategy and oversee the release of information on the incident, response and recovery operations.
- Establish open lines of communications with key stakeholders, including the media, employees, local authorities, special interest groups, government officials and the public.
- Serve as or prepare a company spokesperson prior to media briefings or interviews.
- Advise the On Scene Response Coordinator and other personnel of the public affairs implications of the emergency response operation.
- Coordinate information release with public information officers from other agencies.
- Participate in post incident debriefings.
- Ensure adequate records are maintained.

CP MEDIA CONTACTS

CP protocol provides that communications with the media should be addressed through the local Incident Command System (ICS) by a Public Information Officer (PIO).

If a member of the media requests information from CP, or asks to speak with a CP Public Affairs representative, such requests/queries will be coordinated through CP’s Public Affairs Department, unless the CP Regional Public Affairs representative is already present at an incident site.

<table>
<thead>
<tr>
<th>For</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>24/7 media inquiries</td>
<td><a href="mailto:Alert_MediaRelations@cpr.ca">Alert_MediaRelations@cpr.ca</a></td>
</tr>
<tr>
<td>Public Inquiries</td>
<td><a href="mailto:Community_Connect@cpr.ca">Community_Connect@cpr.ca</a> 1-800-766-7912</td>
</tr>
</tbody>
</table>
CP GENERAL CLAIMS

CP has an internal general claims team to lead action plans around railroad incidents involving third parties including evacuations, crossing and trespasser incidents, floods, livestock loss and property damage.

This group is part of our response team and would be on site to assist the public and set up necessary resources should the incident warrant it. CP General Claims is also responsible for any follow-up with claimants.
SECTION 6

RAILCAR MARKINGS
Rail car initials and number “markings” are one of the most important pieces of information that emergency responders can obtain at the scene of a railroad incident. All information related to the rail car is referenced by use of these car initials and numbers.

Responders should attempt to accurately record and report the markings of any cars involved in a derailment or other emergency situations. Markings are stenciled on both sides of the car (left side when facing the car) and on both ends of the railcar.

**Car Initial and Number** — is unique to each car in North America and should be used to identify any car. Letter prefix often indicates the owner/shipper of the car (e.g. DUPX = DuPont).

**Commodity Name** — the Transportation of Dangerous Goods Regulations and the Federal Railroad Administration regulations requires that certain hazardous/dangerous goods have their name stenciled on the side of the tank car.

**Placards** — tell you that the commodity is hazardous and provides the hazard class of the material. The UN identification number may be on a numbered placard or on an orange panel. Consult the Emergency Response Guidebook for initial information on protocol.
This specification is stenciled on the side of a car. A typical entry could be 111A100W1:

**TANK CAR SPECIFICATION Stencil**

**Authorizing Agencies**

DOT – US DEPARTMENT OF TRANSPORTATION  
CTC – CANADIAN TRANSPORT COMMISSION  
TC – TRANSPORT CANADA  
AAR – ASSOCIATION OF AMERICAN RAILROADS

**Tank Specification**

<table>
<thead>
<tr>
<th>General Purpose</th>
<th>Pressure Tanks</th>
<th>Cryogenic</th>
</tr>
</thead>
<tbody>
<tr>
<td>111, 115</td>
<td>105, 112, 114</td>
<td>113</td>
</tr>
</tbody>
</table>

**Delimiter Letter**

A – No special feature  
S – Equipped with head puncture protection  
T – Thermal protection & head protection  
J – Jacketed with Thermal protection & head protection

**Tank Test Pressure**

Hydrostatic test pressure – the higher the tank test pressure the thicker the tank wall.

**Weld Type**

W – Fusion Welded tank  
If a tank is constructed of material other than carbon steel, this will be indicated by letters AL
Fittings

Indicates allowed fittings, linings, etc., as shown in chart.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Insulation</th>
<th>Bottom Outlet</th>
<th>Bottom Washout</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>111****W1</td>
<td>Optional</td>
<td>Optional</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td>111****W2</td>
<td>Optional</td>
<td>Prohibited</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td>111****W3</td>
<td>Required</td>
<td>Optional</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td>111****W4</td>
<td>Required</td>
<td>Prohibited</td>
<td>Prohibited</td>
<td></td>
</tr>
<tr>
<td>111****W5</td>
<td>Optional</td>
<td>Prohibited</td>
<td>Prohibited</td>
<td>Lined</td>
</tr>
<tr>
<td>111****W6</td>
<td>Optional</td>
<td>Optional</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td>111****W7</td>
<td>Optional</td>
<td>Prohibited</td>
<td>Prohibited</td>
<td></td>
</tr>
</tbody>
</table>

Placarding and Hazard Classes

In Canada, the Transportation of Dangerous Goods Regulation; and in the United States, the Department of Transportation (DOT), generally require that square-on-point shaped and colour-fast placards must be placed on the outside of rail cars carrying dangerous goods/hazardous materials, or contain residues of such materials. Placards must also be placed on the exterior of some intermodal containers carrying amounts of hazardous materials in excess of certain regulatory thresholds.

Placards provide the responder the UN hazard class contained and thus provide a general idea of the hazards present and preliminary response requirements. Keep in mind that many materials possess characteristics of more than one hazard class, and therefore hazard class information should generally not be used independently. Check shipping papers for more details.
HAZARD CLASSES AND DIVISIONS

NUMBERED CLASSES AND DIVISIONS

1. EXPLOSIVES
   1.1. Explosive with mass explosion hazard
   1.2. Explosive with projection hazard
   1.3. Explosive with predominantly fire hazard
   1.4. Explosive with no significant blast hazard
   1.5. Very insensitive explosive; blasting agent
   1.6. Extremely insensitive detonating substance

2. GASES
   2.1. Flammable gas
   2.2. Non-flammable, nonpoisonous (nontoxic) compressed gas
   2.3. Gas poisonous (toxic) by inhalation

3. FLAMMABLE LIQUIDS

4. FLAMMABLE SOLIDS AND REACTIVE SOLIDS/LIQUIDS
   4.1. Flammable solid
   4.2. Spontaneously combustible material
   4.3. Dangerous when wet material

5. OXIDIZERS AND ORGANIC PEROXIDES
   5.1. Oxidizer
   5.2. Organic peroxide

6. POISONOUS (TOXIC) MATERIALS AND INFECTIOUS SUBSTANCES
   6.1. Poisonous (toxic) material
   6.2. Infectious substance

7. RADIOACTIVE MATERIALS

8. CORROSIVE MATERIALS

9. MISCELLANEOUS DANGEROUS GOODS

WORDED CLASSES

COMBUSTIBLE LIQUID (U.S. DOT PLACARD)
ORM-D (OTHER REGULATED MATERIALS)
(Exempt from placarding and labeling in rail transportation, but subject to packaging, marking, and possibly, shipping paper requirements.)
EMERGENCY RESPONSE GUIDEBOOK

The Emergency Response Guidebook contains general emergency response information for dangerous goods/hazardous materials. To use the guides (orange bordered pages), you must know either the UN four-digit identification number (yellow bordered pages), the proper shipping name (blue bordered pages), or the placard affixed to the car. The Emergency Response Guidebook also contains initial isolation and protective action distances (green bordered pages) for some commodities.

This guidebook will assist responders in making initial decisions upon arriving at the scene of a dangerous goods/hazardous materials incident. It should not be considered as a substitute for emergency response training, knowledge or sound judgment. ERG 2012 does not address all possible circumstances that may be associated with a dangerous goods/hazardous materials incident. It is primarily designed for use at a dangerous goods/hazardous materials incident occurring on a highway or railroad.

For the most current Emergency Response Guidebook visit the Transport Canada website at www.tc.gc.ca or the US Department of Transportation website at www.dot.gov.
SECTION 7

PRODUCTS, CONTAINER VALVES & FITTINGS
Hazardous Materials regulations US (49CFR) and the Transportation of Dangerous Goods Regulations in Canada require the shipper to classify and describe the commodity being offered for transport based on the chemical and/or physical properties of the commodity. In the Dangerous Goods / Hazardous Materials Regulations, commodities are divided into nine (9) classes which are further divided into divisions and or packing groups.

**PETROLEUM CRUDE OIL**

Petroleum Crude Oil (UN1267) is a Class 3 Flammable Liquid - a liquid having a flash point less than or equal to 60 °C (140 °F).

Flammable Liquids, including Petroleum Crude Oil, are further divided into Packing Groups. Packing Groups indicate the degree of danger presented by the material based on the material’s properties.

Packing Groups I, II and III represent great danger, medium danger and minor danger, respectively.

Petroleum Crude Oil (UN1267) Packing Groups are divided based on flammability ranges using the products initial boiling point and/or the flash point. Packing Group I is the most flammable and Packing Group III is the least flammable, relatively.

**S173.121 Class 3 Assignment of Packing Group**

<table>
<thead>
<tr>
<th>Packing group</th>
<th>Flash point (closed-cup)</th>
<th>Initial boiling point</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>≤35 °C (95 °F)</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>&lt;23 °C (73 °F)</td>
<td>&gt;35 °C (95 °F)</td>
</tr>
<tr>
<td>III</td>
<td>≥23 °C, ≤60 °C (≥73 °F, ≤140 °F)</td>
<td>&gt;35 °C (95 °F)</td>
</tr>
</tbody>
</table>

Crude oil may be described on the shipping paper under the following United Nations Numbers:

- UN1267; Petroleum Crude Oil, Class 3 (PG I, II, III)
- UN1268; Petroleum Distillates N.O.S (technical name required in parenthesis) Class 3 (PG I, II, III)
- UN1268; Petroleum Products N.O.S. (technical name required in parenthesis) Class 3; (PG I, II, III)
- UN1993; Flammable Liquid N.O.S (technical name required in parenthesis); Class 3 (PG I, II, III)
- NA1993 Flammable Liquid N.O.S (technical name required in parenthesis); Class 3 (PG I, II, III)

**SOUR CRUDE OIL**

The classification of crude oil as “Sour” is not related to the classification described above. The classification of crude oil as “Sour” or “Sweet” is related to the levels of sulphur in the crude, which is an indicator of how much Hydrogen Sulphide (H2S) can be emitted from the crude oil. Hydrogen sulphide is an extremely hazardous, toxic compound. It is a colourless, flammable gas that can be identified in relatively low concentrations, by a characteristic rotten egg odor. There is currently no standardized way of measuring H2S in crude oil for the purpose of transportation.
Industry and regulators are aware of this concern, working on developing a standardized, practical method of measuring H2S in crude oil. Transport Canada and the US DOT have adopted the United Nations classification scheme for the purpose of transporting “sour” crude oil. For the purpose of transportation, sour crude oil must be described as:

- UN3494; Petroleum Sour Crude Oil, Flammable, Toxic; Class 3; Subsidiary Class 6.1; (PG I, II, III)

### GENERAL PURPOSE LOW-PRESSURE TANK CARS

General-purpose tank cars have a tank test pressure range between 60 psi to 100 psi. This type of container is designed to transport liquid commodities. Typically the tank is 7/16 to 1/2 inch thick with capacities of 6,000 to 33,500 gallons and a loaded weight of 263,000 to 286,000 pounds.

**Materials in the following hazard classes may be transported in general purpose tank cars.**

<table>
<thead>
<tr>
<th>Hazard Class Number</th>
<th>Example Commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Petroleum Products, Ethanol</td>
</tr>
<tr>
<td>4</td>
<td>Molten Sulphur</td>
</tr>
<tr>
<td>5</td>
<td>Hydrogen Peroxide 70%, Ammonium Nitrate Solution</td>
</tr>
<tr>
<td>6</td>
<td>Phenol</td>
</tr>
<tr>
<td>8</td>
<td>Sulphuric Acid, Hydrochloric Acid, Sodium Hydroxide</td>
</tr>
<tr>
<td>9</td>
<td>Ethylene Glycol, Coal Tar</td>
</tr>
<tr>
<td>Non-regulated</td>
<td>Syrup, Food, Clay Slurry, Citric Acid</td>
</tr>
</tbody>
</table>
Transporting an array of commodities, general purpose tank cars have many features. General purpose tank car may have:

- Bottom outlets
- Top loading/unloading valves
- Vacuum relief device
- Safety relief vent
- Manway
- Heater coils
- Insulation

**GENERAL PURPOSE LOW-PRESSURE TANK CAR VALVES AND FITTINGS**

Manways are an opening in the car with a lid used to enter the tank car. There are two styles of gaskets used for the final seal on manways. Bolt patterns are either six (6) or eight (8) bolts. A vacuum relief device may be mounted on the man way lid. A vacuum relief device allows air into the car to prevent implosion of the tank car.

The combination housing or “bread basket” is located on top of a general purpose tank car. Inside of this is typically a liquid valve and a vapor valve. The liquid valve is usually the larger of the two valves. Mounted below the liquid valve is an eduction tube to draw liquid from the bottom of the tank car. Other fittings such as a vacuum relief device, gauging device or a thermometer well may be located in this housing depending on the commodity and the car owner.
PRESSURE RELIEF DEVICE

A pressure relief device is used in case of an emergency. During normal transportation the pressure relief device should not activate. There are two basic types of pressure relief devices (PRD); spring or rupture disc. A spring type PRD can be internal or external to the product. Either may be used and both perform the same basic function: relieve pressure in an emergency. Once pressure rises in the car, the spring will collapse and vapors will exit the car. Once pressure is relieved, the spring reseals the tank car. The other PRD is a rupture disc. Rupture discs are used on corrosive cars and do not reseal the car once they have relieved pressure.

Bottom outlets are commonly used valves on general purpose tank cars. There are several different types that are commonly used. The valve body itself is protected by a bottom discontinuity protection system also known as “skid protection”. Typically what you can see from the bottom of the valve is a series of reducers for off-loading purposes. When in transportation the valve handle must be in the closed position, pinned in place so the valve does not vibrate open, and all caps or plugs must be tool tight.
GENERAL PURPOSE ACID TANK CARS

Corrosive commodities are shipped in a general-purpose tank car with a different type of valve arrangement. To fill the car there is a fill hole, which is typically a three or four bolt arrangement. For off-loading there is a liquid line and an air line. It is very common for a corrosive car to be shipped with blank flanges instead of valves. Lastly, there is a pressure relief device. Acid cars usually have a rupture disc but may have an external-type spring pressure relief device.

Hydrochloric Acid Valve Arrangement
1. Liquid line assembly
2. Pressure Relief Device: rupture disc type
3. Fill Hole

Sulphuric Acid Valve Arrangement
1. Fill Hole
2. Pressure Relief Device: Rupture disc type
3. Liquid line assembly
Pressure tank cars have a tank test pressure ranging from 100 psi to 500 psi and are used for the transportation of liquefied compressed gases (class 2 commodities) or the over-packaging of liquids. This car is identified by the characteristic feature of a single protective housing on top of the car where all the valves and other devices are located. Typically the tank is 11/16 to 1-1/4 inches thick with capacities up to 33,500 gallons and a loaded weight of 286,000 pounds. The following commodities are typically found in a pressure tank car.

<table>
<thead>
<tr>
<th>Hazard Class Number</th>
<th>Example Commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Butane, Propane, Ammonia, Chlorine, Vinyl Chloride</td>
</tr>
</tbody>
</table>

Transporting such a wide variety of commodities within the Class 2 family requires a variety of features that may be found on a pressure tank car. The following features may be found on a pressure tank car depending on the commodity being transported:

- Top loading/unloading valves
- Safety relief device(s)
- Insulation
- Thermal protection
- Sample valve
- Thermometer wells
- Magnetic gauging device
VALVES

The valves on a pressure tank car are designed for a wide variety of commodities. All valves are required to be equipped with a shipping plug that is installed tool tight when in transportation. Most pressure cars will have a two-inch NPT outlet. Mounted under the valve is a check valve or excess flow device. This is designed to slow the flow of product if the valve is sheared off the car. The check valve comes in a variety of sizes depending on the weight of the commodity.
PRESSURE RELIEF DEVICE

The pressure relief device (PRD) will be different sizes depending on the commodity being transported. The larger a valve is, the more cubic feet per minute (CFM) of vapor the valve can release from the car. The size of the valve is no indicator of when it is set to discharge. The spring of the valve will be set to discharge at a given pressure.

**Pressure relief device:**
A spring type valve is used on pressure tank cars. The spring can be internal to the product, or external to the product.

SAMPLE VALVES

Sample valves are used to take a sample of the commodity for purity or specification testing and during emergencies can be used to attach pressure gauges to monitor changes in tank pressure. The sample line is open to the product in the car so it has a check valve or excess flow device in the eduction tube.

Internal Spring

External Spring

Sample valve

Sample valve

Sample valve
THERMOMETER WELL

The thermometer well is a sealed system and closed to the product. The tube will be filled with antifreeze liquid. There is no thermometer in the well, only a location to take the temperature.

Gauging Device

The Gauging device is a device used to measure the level of liquid or vapor space in a tank car tank, which may be a fixed gauge bar / outage scale or T-bar attached to the top of the tank (in non-pressure tank cars), or a slip-tube, magnetic-ball, fixed-length (telltale) tube, or an electronic device.
THERMAL PROTECTION

Thermal protection is required on some tank cars depending on the commodity being transported. Thermal protection is made of a ceramic fiber material and is applied to the outside, directly against the tank. The standard times for protection from a fire are 90 minutes in a pool fire and 30 minutes in a torch fire.

Fiberglass insulation is applied to protect the commodity from ambient temperature.

A 1/8-inch steel jacket is applied over the thermal protection and fiberglass insulation for protection from the weather.
Carbon Dioxide (CO2) tank cars are different from a typical pressure tank car. This protective housing will have several pipes protruding from it. Each pipe will be marked with its function. Venting of the product from the regulating valve is a normal function and it will be marked on the protective housing by the regulating valve pipes.

Chlorine service tank cars use a standard valve arrangement. There are two liquid valves with excess flow devices and two vapor valves without excess flow devices. The valves are one inch outlets.
Chlorine pressure relief devices are known as combination devices. There is either a break pin assembly or a rupture disc mounted below the external spring valve. This variation is to protect the spring from the corrosive properties of chlorine.

Next generation chlorine service cars use a different valve arrangement and a new type of valve. The housing is larger than the current housing and there is only one vapor valve. The valve does not use an excess flow device but a spring-type flow device.
CRYOGENIC TANK CARS

Cryogenic tanks are designed as a tank within a tank. The inner tank is a stainless steel or nickel metal rated for -130°F and colder. The outer tank is carbon steel. Between the tanks is insulation and a vacuum is applied. Tank test pressures range from 60 to 120 psi.

All valves are in ground level cabinets that will be in the centre of the tank car on either side or opposite corners on either side of the tank car. Vent pipes must direct any product up and away from the cabinet or tank.

It is important to remember that these commodities are extremely cold and proper protective equipment is required to handle cryogenic emergencies.

The valve arrangement may vary from car to car on cryogenic tank cars.
Intermodal tanks are used in all modes of transportation and are interchanged between countries. The tank is mounted in a supporting frame. Intermodal tanks can be put into three separate types: Pressure, non-pressure, and cryogenic. Most are made of stainless steel.
### Intermodal tank type

<table>
<thead>
<tr>
<th>Intermodal tank type</th>
<th>Maximum Allowable Working Pressure (MAWP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1 (IM101) – Non-pressure Tank</td>
<td>25.4 – 100 psi</td>
</tr>
<tr>
<td>Type 2 (IM102) – Non-pressure Tank</td>
<td>14.5 – 24.5 psi</td>
</tr>
<tr>
<td>Type 5 (Spec 51) – Pressure Tank</td>
<td>100 – 500 psi</td>
</tr>
<tr>
<td>Type 7 – Cryogenic Tank</td>
<td>Varies by commodity</td>
</tr>
</tbody>
</table>

Typical equipment may include top servicing equipment such as a liquid and vapor valve, man way, pressure relief device and a vacuum relief device. A bottom outlet may be located on one side in the bottom corner. Unlike a tank car valve there is an internal spring valve and an outer valve. A remote shut off should be located on the right side of the tank as you face the valve.

Type 5 (Spec 51) is pictured above. The tank has a smaller capacity at 5,000 gallons. These tanks are designed for liquefied gases such as LPG or ammonia. The pressure relief device is mounted on top and is recessed into the tank. The off load valves are located on the bottom corner in a protective housing. A remote shut off should be located on the right side of the tank.
SECTION 8

DOCUMENTATION
Conductors on each train are required to carry train documentation which contains all or some of the following sections:

<table>
<thead>
<tr>
<th>Document Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outbound Wheel Report (Train Consist)</strong></td>
<td>This lists each car in the train by initial and number beginning with the engine(s) followed by the first car in the train listed as numerical position 001. Any cars containing hazardous materials are indicated with special instructions of “dangerous” and list the UN or NA number for that railcar. The number of hazardous railcars is also tallied at the beginning of the Outbound Wheel Report. (See Appendix A)</td>
</tr>
<tr>
<td><strong>Compressed Waybills</strong></td>
<td>A compressed waybill is generated for a single car and/or multi-cars for each series of cars that are in sequential order on a train. This document contains the shipment information for hazardous / dangerous goods commodities. It includes the position in train, the proper shipping description that includes the proper shipping name, hazard class, name of the shipper and receiver of the shipment as well as the Standard Transportation Commodity Code (STCC), weight, UN number. Also includes emergency 24 hour contact numbers. (See Appendix B)</td>
</tr>
<tr>
<td><strong>Hazardous Commodities Document</strong></td>
<td>This document lists the position on the train where the dangerous goods/hazardous materials are located. This document is updated if cars are lifted and set off enroute. (See Appendix C)</td>
</tr>
<tr>
<td><strong>Emergency Response Document</strong></td>
<td>This document describes the Emergency Handling Precautions for cars listed as dangerous on the Outbound Wheel Report. Emergency Response information provided is intended as a supplement to the Emergency Guide book. It is not a required document for train movement. (See Appendix D)</td>
</tr>
<tr>
<td><strong>Tonnage Profile</strong></td>
<td>This document lists each car in the train by initial and number beginning with the engine(s) followed by the first car next to the engine (listed as 001). Each position of every car is listed and all cars that are Hazardous are listed as “DANG” or “DGXU” (Canadian Special Dangerous Commodity). Also displayed are the total number of loaded and empty cars, total weight of their contents, tare weights of the railcars and the length of the train. (See Appendix E)</td>
</tr>
<tr>
<td><strong>Marshaling Messages</strong></td>
<td>This document provides the train handling information for the crew. (See Appendix F)</td>
</tr>
</tbody>
</table>
WHAT TO KNOW AS AN EMERGENCY RESPONDER

**Car Initials and Numbers:** One of the most important pieces of information to obtain in order to access information on contents of a railcar.

**Package Type:** This will describe how the commodity is packaged. This could be a tank car, hopper car or a non-bulk package such as drums, totes and bags.

**Quantity:** The shipping paper will indicate how much product is being shipped.

**Load or Empty:** The shipping paper will indicate if the car is loaded or contains a residue. Placards do not indicate the load or residue status on rail cars.

**Shipper and Consignee:** Shipper area will show who shipped the car and where it originated; Consignee area will show who is receiving the shipment and the destination.

**Identification Number:** Indicates the four-digit UN (United Nations) or NA (North American) identification number.

**Proper Shipping Name:** Name of the dangerous goods/hazardous materials.

**Hazard Class:** Shows the appropriate hazard class or division number of the product. There are nine major hazard classes:

1. Explosives
2. Gases
3. Flammable liquids
4. Flammable solids
5. Oxidizers and organize peroxides
6. Poisonous and infections substances
7. Radioactive materials
8. Corrosives
9. Miscellaneous hazardous substances (refer to page 34).

A secondary hazard class must be shown if required.

**Packing Group (PG):** A grouping of dangerous goods indicating relative severity of a material within its hazard class. This is required except for classes 2, 7 or ORMD’s.

- (PG) I or I [shown using roman numerals] great danger;
- (PG) II or II, medium danger;
- (PG) III or III, minor danger.
**Marine Pollutant:** Will indicate when the release of the product into a waterway will harm the environment.

**Limited Quantity (LTD QTY):** A term used to indicate a hazardous material shipment which is allowed an exception to certain regulatory requirements because of the small amount of the material in a package.

**Poison Inhalation Hazard / Toxic Inhalation Hazard (P.I.H. / T.I.H.):** Indicates certain gases or liquids that may cause health problems if inhaled.

**Reportable Quantity:** The letters “RQ” where required indicate that the material is also classified as a hazardous substance and that a release of the dangerous good, over a specified amount, necessitates notifying the National Response Center.

**Emergency Response Phone Number:** 24 hour phone numbers supplied by the shipper.

**Emergency Response Assistance Plan (ERAP):** 24 hour phone numbers and assistance plan supplied by the shipper.

**Standard Transportation Commodity Code (STCC):** A number assigned by railroads for the specific product being shipped. Dangerous goods STCC's begin with the numbers “48” or “49”

**Transport Canada Temporary Certificate:** Permits an exception to Transport Canada dangerous goods regulations

**One Time Movement Approval (OTMA):** Movement approvals are required for certain types of hazardous material shipments. Three tiers of OTMA’s can be applied for.

<table>
<thead>
<tr>
<th>Other Key Terms:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alert Shipments</strong></td>
</tr>
<tr>
<td>A shipment of a loaded or residue commodity of a specific dangerous good/hazardous material – US Regulations.</td>
</tr>
<tr>
<td><strong>Special Dangerous</strong></td>
</tr>
<tr>
<td>A shipment of a loaded specific dangerous good commodity – Canadian Regulations.</td>
</tr>
<tr>
<td><strong>Key Train</strong></td>
</tr>
<tr>
<td>A train that includes 20 or more loaded tank cars or loaded intermodal portable tanks containing dangerous goods or one or more loaded tank cars of dangerous goods that are toxic by inhalation,</td>
</tr>
<tr>
<td><strong>FAK Shipments</strong></td>
</tr>
<tr>
<td>(Freight of All Kinds) Shipments that have been consolidated and contain a mixture of non-dangerous merchandise. These may also sometimes contain Dangerous Goods/Hazardous Materials.</td>
</tr>
<tr>
<td><strong>Shipper's/Consignee Chopcode</strong></td>
</tr>
<tr>
<td>These are internal chopcodes for the shippers and consignees of the shipments.</td>
</tr>
<tr>
<td><strong>AAR Car Type</strong></td>
</tr>
<tr>
<td>The first letter of the AAR Car Type code describes the type of Rail car being used to transport the shipment. <strong>(i.e.)</strong> T389 = the T is for Tank Car and the numbers describe a further class description.</td>
</tr>
<tr>
<td>C113 = a hopper car.</td>
</tr>
<tr>
<td>F426 = a flat car</td>
</tr>
</tbody>
</table>
APPENDICES
APPENDIX A: TRAIN CONSIST

TRAIN CONSIST (OUTBOUND WHEEL REPORT)

CANADIAN PACIFIC RAILWAY

# K K EEEE E Y Y TTTT RRRR AAA IIIII N N
# K K E E Y Y T R R A A I NN N
# K K K E E Y T RRRR AAAAA I N N N
# K K K E E Y T R R A A I N NN
# K K K EEEE E Y T R R A A IIII N N

THIS TRAIN HANDLING SPECIAL DANGEROUS COMMODITIES
THIS TRAIN CONTAINS THE FOLLOWING "KEY-TRAIN" HAZARDOUS MATERIALS LOADS:

* SET-OUT/PICK-UP
* CRUDE OIL Legacy DOTlll Tank Cars (CRU) [____] [____] [____] [____]
* CRUDE OIL CPC1232 or other Tank Cars 0 (CRU) [____] [____] [____] [____]
* POISON INHALATION HAZARD Tank Cars 0 (PIH) [____] [____] [____] [____]
* POISON INHALATION HAZARD NonTank Cars 0 (PIH) [____] [____] [____] [____]
* CLASS 7 (SNF / HLRW) 0 (RAD) [____] [____] [____] [____]
* HAZARDOUS MATERIALS (HAZ,FG,XA,ESC) 32 [____] [____] [____] [____]
* TOTAL: 42 [____] [____] [____] [____]

THIS TRAIN CONTAINS "ALERT" SHIPMENTS – SPECIAL HANDLING PROCEDURES MAY APPLY

* POSITIVE CHAIN OF CUSTODY RULES APPLICABLE ONLY IN THE UNITED STATES
* THIS SECTION MUST BE FILLED OUT AND FAXED TO CSF WITH CREW PAPERWORK
* IF ANY ALERT LOADS HAVE BEEN DELIVERED /LIFTED/INTERCHANGED

* EQUIPMENT ON BUILT TRAIN:
* SEQ INIT NUMBER CP EMPLOYEE NAME CONTACT-EMPL NAME DATE/TIME/TRACK
  * 010 TILX 304659 _________________________ _________________________
  * 011 GATX 202479 _________________________ _________________________
  * 012 NATX 032200 _________________________ _________________________
  * 013 UTLX 954530 _________________________ _________________________
  * 014 GATX 202953 _________________________ _________________________
  * 056 UTLX 954643 _________________________ _________________________
  * 057 UTLX 951267 _________________________ _________________________
  * 058 TILX 303858 _________________________ _________________________
  * 059 UTLX 954518 _________________________ _________________________
  * 060 TILX 303856 _________________________ _________________________

* EQUIPMENT ON WORK ORDER TO LIFT/FULL:
* TRK INIT NUMBER CP EMPLOYEE NAME CONTACT-EMPL NAME DATE/TIME/TRACK
  * NIL

* UNPLANNED WORK:
* INIT NUMBER CP EMPLOYEE NAME CONTACT-EMPL NAME DATE/TIME/TRACK

* CMRM MESSAGE KEY
  * PIH = POISON/ TOXIC INHALATION
  * XA = CLASS 1.1 OR 1.2 EXPLOSIVES
  * RAD = CLASS 7 SNF / HLRW
  * FG = CLASS 2. FLAMMABLE GAS
  * ESC = ENVIRONMENTAL SENSITIVE CHEMICALS
  * HAZ = OTHER HAZARDOUS MATERIALS
  * CRU = CRUDE OIL

All "Key Trains" will be designated as such to indicate train is carrying 1 PIH &/or 20 or more Dangerous/Hazardous Commodities

Indicates that this train is carrying one or more Special Dangerous commodities

Train summary. At a glance you can see a list of what loaded Dangerous Goods/Hazardous materials this train is carrying

CMRM Car Management Restriction Message Marshaling legend
CARS IN THIS CONSIST COUNT FROM HEAD TO REAR

OUTBOUND WHEEL REPORT FOR TRAIN 123EA04
PRINTED: JUL 03 2014 1055EDT

YOU ARE IN CHARGE OF HANDLING TRAIN 123EA04 FOR OUR VALUED CUSTOMERS

TO MAINTAIN OUR ON TIME PERFORMANCE THIS TRAIN IS SCHEDULED TO DEPART:

MOOSE JAW 11:00 AM

*************************************************************************

CARS IN THIS CONSIST COUNT FROM HEAD TO REAR

CLASS CODE IN THIS TRAIN

<table>
<thead>
<tr>
<th>CLASS CODE</th>
<th>HEAD CAR</th>
<th>REAR CAR</th>
<th>LOADS</th>
<th>EMPTIES</th>
<th>TONS</th>
<th>LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP 009621</td>
<td>CP 003022</td>
<td>0 3</td>
<td>538</td>
<td>202</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CP 5675SH1</td>
<td>CP 475608</td>
<td>475608</td>
<td>525</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEFX 151448</td>
<td>CEFX 151448</td>
<td>1 0</td>
<td>126</td>
<td>58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TTPX 805365</td>
<td>TTPX 804603</td>
<td>2 0</td>
<td>276</td>
<td>147</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TILX 262216</td>
<td>TILX 262216</td>
<td>1 0</td>
<td>141</td>
<td>56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSS 030305</td>
<td>CSS 030305</td>
<td>0 3</td>
<td>360</td>
<td>1817</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AAR L

SEQ INIT NUMBER TYPE E CMDTY TON CLASSCD CONSIGNE LTH FDOL TIME/TRACK

001 CP E009621 D127 E E UNIT 74 NO WAYBILL ENGINE ASSIGNED BY LOCOMOTIVE MANAGEMENT SYSTEM
002 CP E006073 D125 E E UNIT 69 NO WAYBILL ENGINE ASSIGNED BY LOCOMOTIVE MANAGEMENT SYSTEM
003 CP E003022 D313 E E UNIT 60 NO WAYBILL NOT OPERATING FOR MECHANICAL

004 SIRX 475608 C113 E CHARC 30 5675SH1 PRAIRRE 60 5675
005 SIRX 525295 C114 E CHARC 33 5675SH1 PRAIRRE 59 5675
006 SIRX 142327 F426 L PIPE 138 DIMSL ABCWARHO 95 6865

Cushioned Draw Bars
DIMSL W-01-04 SEE PROTECTION NOTICE FOR GENERAL RESTRICTIONS. FILE DL1266032
In Bond
Car LENGTH exceeds 80 feet
Do not Hump or cut off in motion

004 CEFX 151448 C113 L COKE 126 P0363 CDEFORCA 58 6077
005 TTPX 805365 F453 L TUBIN 138 P0360 DONINC 74 6077

Cushioned Draw Bars

006 TTPX 804603 F453 L TUBIN 138 P0360 RYARYBO 74 6077

The first equipment listed on the train consist are the locomotive(s), however they are not assigned a number.

Cars are sequentially numbered front to back with the first car being behind the locomotive(s).

Shippers Chopcode is listed. Dangerous Shipments will have compressed waybills that will give the full name.
Rail Car Number

Status: Load or Empty

UN Number

Special Dangerous
APPENDIX B: COMPRESSED WAYBILL

******************************* DANGEROUS COMMODITIES *******************************

| BRSX001020 | WB 809842 06/26/14 NET MASS 85016 KG 127 FM ENG. |
| TEIX025169 | WB 809995 06/26/14 NET MASS 85282 KG 128 FM ENG. |

| CANADIAN PACIFIC | 7550 OGDEN DALE ROAD SE | T2C4X9 | CA |
| Shipper: | CANADIAN PACIFIC | Address: | 7550 OGDEN DALE ROAD SE |

| Shipment Destination: | Des Moines IA | Shipment Origin: | Hamilton ON |
| To: | GLACIER DISTRIBUTORS | From: | NETWORK REFINERY LTD |
| Address: | 1234 BYRONS WAY W DRIVE STE 65 | Address: | 123 EAST 45TH ST SE |

| 2 TANK CAR STCC 4961619 | UN 1075 | GAS |
| LIQUID PETROLEUM | EMERGENCY 24-HOUR NUMBER 800-800-8000 |
| CLASS 2.1 | CONTRACT HOLDER: CANUTEC |
| SHIP CERT: MARK MARCUS | ERP NO 2-1222-689 |
| BROKER: AB BROKERAGE SERVICES | ERP PHONE 8888001234 |

- Rail car number(s)
- Visual indicator of a Special Dangerous Good
- Shippers Full Name and address
- Car contents product information
- Contact information – to get an MSDS or product specialist

******************************* DANGEROUS COMMODITIES *******************************
### TRAIN CONSIST COMPRessed WAYBILL

<table>
<thead>
<tr>
<th>Rail car number(s)</th>
<th>All Same Origin / Destination &amp; Product</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DANGEROUS COMMODITIES</strong></td>
<td></td>
</tr>
<tr>
<td>TILX316531</td>
<td>WB 300645 10/08/14 NET MASS 192698 LB 002 FM ENG.</td>
</tr>
<tr>
<td>PROX044215</td>
<td>WB 300645 10/08/14 NET MASS 192698 LB 003 FM ENG.</td>
</tr>
<tr>
<td>TILX316264</td>
<td>WB 300645 10/08/14 NET MASS 192698 LB 004 FM ENG.</td>
</tr>
<tr>
<td>NATX310477</td>
<td>WB 300645 10/08/14 NET MASS 192698 LB 005 FM ENG.</td>
</tr>
<tr>
<td>TILX316212</td>
<td>WB 300645 10/08/14 NET MASS 192698 LB 006 FM ENG.</td>
</tr>
<tr>
<td>NATX310475</td>
<td>WB 300645 10/08/14 NET MASS 192698 LB 007 FM ENG.</td>
</tr>
<tr>
<td>TILX316511</td>
<td>WB 300645 10/08/14 NET MASS 192698 LB 008 FM ENG.</td>
</tr>
<tr>
<td>ACFX079386</td>
<td>WB 300645 10/08/14 NET MASS 192698 LB 009 FM ENG.</td>
</tr>
<tr>
<td>NATX310443</td>
<td>WB 300645 10/08/14 NET MASS 192698 LB 010 FM ENG.</td>
</tr>
<tr>
<td>PROX044204</td>
<td>WB 300645 10/08/14 NET MASS 192698 LB 011 FM ENG.</td>
</tr>
<tr>
<td>NATX310484</td>
<td>WB 300645 10/08/14 NET MASS 192698 LB 012 FM ENG.</td>
</tr>
<tr>
<td>NATX310466</td>
<td>WB 300645 10/08/14 NET MASS 192698 LB 013 FM ENG.</td>
</tr>
</tbody>
</table>

| CANADIAN PACIFIC | 7550 OGDEN DALE ROAD SE |
| CALGARY AB | T2C4X9 CA |

<table>
<thead>
<tr>
<th>SHIPMENT DESTINATION</th>
<th>SHIPMENT ORIGIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORTON PA</td>
<td>SANDSTONE ND</td>
</tr>
</tbody>
</table>

| TO: | FROM: |
| JORDAN RAIL COMPANY LLC | NUTRI ICE LLC |
| 56 AVEENO HWY | 451 68TH AVE NW |
| HORTON PA | SANDSTONE ND |
| 16312 US | 58100 US |

| 12 TANK CARS | PETROLEUM CRUDE OIL |
| 1234-567 | CLASS 3 |

| PG I | PETROLEUM CRUDE OIL |

**STCC 4910191**
EMERGENCY 24-HOUR NUMBER 1-800-424-9300
CONTRACT HOLDER: CCN 687212
ERP 2-1234-567
ERP PHONE 8000900800
INTERMODAL CONSIST

Because railroad intermodal cars may carry multiple trailers or containers on one railcar, the train consists for intermodal trains are slightly different from other freight trains. The trailers or containers are listed after the rail car.

**001CP 523115 S635 L 6CDPC 75 9714EX1CP INTER 2309714**
- Articulated
- Do Not Uncouple
- Car LENGTH exceeds 80 feet
- Perishable
- Speed Restrictions Apply Per GOI SEC Item 2.2

**CPPU 231624U288L F.A.K 6 GRITTUTH 539714**
- Dangerous
- Containers

**CPPU 730601U780L FAK 36 JOHNDUAU 539714**
- Dangerous

**CPPU 730860U788LFAK 8 CONSOLID 539714**
- Dangerous

**CPPU 731267U788LF.A.K 8 NESTLEW 539714**
- Dangerous

**HDMU 689650 LFAK 35 CONSOLID 459714**
- Dangerous

**HLXU 607878 LFAK 35 CONSOLID 459714**
- Dangerous

**CPPU 730860U788LFAK 8 CONSOLID 539714**
- Dangerous

**CPPU 731267U788LF.A.K 8 NESTLEW 539714**
- Dangerous

**HDMU 689650 LFAK 35 CONSOLID 459714**
- Dangerous

**HLXU 607878 LFAK 35 CONSOLID 459714**
- Dangerous

Dangerous goods/hazardous materials information can be found on compressed waybills.
INTERMODAL COMPRESSED WAYBILL

<table>
<thead>
<tr>
<th>CPPU731267</th>
<th>WB 375616 10/12/16 NET MASS 17169 KG ___ FM ENG.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CANADIAN PACIFIC</td>
<td>7550 OGDEN DALE ROAD SE</td>
</tr>
<tr>
<td>CALGARY AB</td>
<td>T2C4X9 CA</td>
</tr>
<tr>
<td>SHIPMENT DESTINATION :</td>
<td>SHIPMENT ORIGIN :</td>
</tr>
<tr>
<td>CALGARY IMS AB</td>
<td>VAUGHAN IMS ON</td>
</tr>
<tr>
<td>TO:</td>
<td>FROM:</td>
</tr>
<tr>
<td>CANFIRE SUPPLIES LTD</td>
<td>CAMPFIRE SUPPLIES LTD</td>
</tr>
<tr>
<td>9920 CLOSEWAY RD S</td>
<td>761 STEEPLES AVE E</td>
</tr>
<tr>
<td>LETHBRIDGE AB</td>
<td>TORONTO ON</td>
</tr>
<tr>
<td>T7W7A5 CA</td>
<td>L6T4L5 CA</td>
</tr>
</tbody>
</table>

1 CONTAINER STCC 4950150

| 1 DANGEROUS GOODS AS |
| LISTED BELOW OR SEE SHIPPER SUPPLIED DOCUMENTS, SHIPMENT |
| MAY ALSO CONTAIN NON REGULATED MERCHANDISE. |

3 UNIT STCC 4910142

| 3 UNIT | UN 1139 |
| CONTRACT HOLDER: CANUTEC |
| COATING SOLUTION |
| CLASS 3 |
| PG III |
| NET MASS 16 KGS |

3 UNIT STCC 4918761

| 3 UNIT | UN 1479 |
| CONTRACT HOLDER: CANUTEC |
| OXIDIZING SOLID, N.O.S. |
| [BROMO-CHLORO-DIMETHYLHYDATOIN] |
| CLASS 5.1 |
| PG II |
| NET MASS 5 KGS |

55 CYLINDERS STCC 4905421

| 55 CYLINDERS | UN 1075 |
| CONTRACT HOLDER: CANUTEC |
| LIQUIFIED PETROLEUM GAS |
| (PROPANE) |
| CLASS 2.1 |
| NET MASS 611 KGS |

285 UNIT STCC 4941109

| 285 UNIT | LIMITED QUANTITY |
| CONTRACT HOLDER: CANUTEC |
| LIMITED QUANTITY |
| NET MASS 195 KGS |

I HEREBY DECLARE THAT THE CONTENTS OF THIS CONSIGNMENT ARE FULLY AND ACCURATELY DESCRIBED ABOVE BY THE PROPER SHIPPING NAME, AND ARE CLASSIFIED, PACKAGED, MARKED AND LABELED/PLACARDED, AND ARE IN ALL RESPECTS IN PROPER CONDITION FOR TRANSPORT ACCORDING TO APPLICABLE INTERNATIONAL AND NATIONAL GOVERNMENT REGULATIONS. (NEIL MCKENNA)

Mixed Shipment Containing Dangerous Goods

3 Units UN1479 Net Mass 5 KG

Contact and ERAP information including MSDS or product specialist

80 CP COMMUNITY EMERGENCY PLANNING GUIDE
APPENDIX C: HAZARDOUS COMMODITIES DOCUMENT

Canadian Pacific Railway
Notice of Rail Cars & Intermodal Units Containing Dangerous
Goods Train#: 123CO07    Location: Bridger AB JUL 07 2014
0609EDT

***************************************************************************
I certify that the train document package contains all shipping
documents / compressed waybills for the dangerous goods/hazardous
materials shipments listed below and is complete and accurate at origin.

*Conductor Name (print)  EMPLOYEE NUMBER  SIGNATURE  DATE yy/mm/dd
***************************************************************************

The following rail cars & intermodal units containing dangerous goods are
located in your train. They must be positioned in your train in
accordance with the train placement chart. Revision columns are to be
used to make placement changes enroute.

<table>
<thead>
<tr>
<th>L CONTAINER L</th>
<th>I.D. TRAIN</th>
<th>REVISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>INIT NUMBER E</td>
<td>INIT NUMBER E</td>
<td>COMMENT</td>
</tr>
<tr>
<td>NO.</td>
<td>POSITION 1st 2nd 3rd</td>
<td></td>
</tr>
<tr>
<td>PROX 098476 L</td>
<td>UN1075 002</td>
<td></td>
</tr>
<tr>
<td>FURX 844083 E</td>
<td>UN1942 027</td>
<td></td>
</tr>
<tr>
<td>TCMX 350698 E</td>
<td>UN1942 031</td>
<td></td>
</tr>
<tr>
<td>TCMX 350724 E</td>
<td>UN1942 032</td>
<td></td>
</tr>
<tr>
<td>CP 415790 E</td>
<td>UN1202 039</td>
<td></td>
</tr>
<tr>
<td>NATX 400710 L</td>
<td>UN3295 045</td>
<td></td>
</tr>
<tr>
<td>PROX 035860 L</td>
<td>UN3295 046</td>
<td></td>
</tr>
<tr>
<td>GATX 205699 L</td>
<td>UN1075 057</td>
<td></td>
</tr>
<tr>
<td>CGTX 064418 E</td>
<td>UN1005 059</td>
<td></td>
</tr>
<tr>
<td>PROX 033268 E</td>
<td>UN1005 060</td>
<td></td>
</tr>
<tr>
<td>PROX 033221 E</td>
<td>UN1005 061</td>
<td></td>
</tr>
<tr>
<td>PROX 031243 E</td>
<td>UN1005 062</td>
<td></td>
</tr>
<tr>
<td>PROX 032302 E</td>
<td>UN1005 063</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Conductor updates this section if cars are lifted and set off.
APPENDIX D: EMERGENCY RESPONSE DOCUMENT

IN THE EVENT OF ACCIDENT THESE INSTRUCTIONS MUST PROMPTLY 
BE MADE AVAILABLE TO EMERGENCY, FIRE OR POLICE PERSONNEL

a. FROM ENGINE TILX304659 
b. FROM ENGINE GATX202479 
c. FROM ENGINE NATX032200 
d. FROM ENGINE UTLX954530 
e. FROM ENGINE GATX202953

56 FROM ENGINE UTLX954643  
57 FROM ENGINE UTLX951267  
58 FROM ENGINE TILX303858  
59 FROM ENGINE UTLX954518  
60 FROM ENGINE TILX303856

AMMONIA, ANHYDROUS 4920359  
DIVISION 2.3 (POISONOUS GAS) UN1005  
ENVIRONMENTALLY HAZARDOUS SUBSTANCE (RQ-100 POUNDS (45.4 KILOGRAMS))

ANHYDROUS AMMONIA IS A CLEAR COLORLESS GAS WITH A CHARACTERISTIC ODOR. 
ALTHOUGH IT IS A NONFLAMMABLE GAS, IT WILL BURN WITHIN CERTAIN VAPOR 
CONCENTRATION LIMITS, AND THE FIRE HAZARD WILL INCREASE IN THE PRESENCE OF 
OIL OR OTHER COMBUSTIBLE MATERIALS. IT IS SHIPPED AS A LIQUID UNDER 
PRESSURE. CONTACT WITH THE LIQUID CAN CAUSE FROSTBITE. IT IS SOLUBLE IN 
WATER FORMING A CORROSIVE LIQUID. ALTHOUGH AMMONIA IS LIGHTER THAN AIR, THE 
VAPORS FROM A LEAK INITIALLY HUG THE GROUND. IT WEIGHS 6 
LBS./GALLON. PROLONGED EXPOSURE OF THE CONTAINERS TO FIRE OR HEAT MAY RESULT 
in THEIR VIOLENT RuptURING AND ROCKETING. LONG TERM EXPOSURE TO LOW 
CONCENTRATIONS OR SHORT TERM EXPOSURE TO HIGH CONCENTRATIONS CAN RESULT IN 
ADVERSE HEALTH EFFECTS FROM INHALATION. IT IS USED AS A FERTILIZER, AS A 
REFRIGERANT, AND IN THE MANUFACTURE OF OTHER CHEMICALS.

ENVIRONMENTAL CONSIDERATIONS - AIR SPILL 
APPLY WATER SPRAY OR MIST TO KNOCK DOWN VAPORS 
VAPOR KNOCKDOWN WATER IS CORROSIVE OR TOXIC AND SHOULD 
BE DIKED FOR CONTAINMENT

COMPATIBLE PROTECTIVE EQUIPMENT CONSTRUCTION MATERIALS INCLUDE:
BUTYL RUBBER 
NATURAL RUBBER 
NEOPRENE 
NITRILE RUBBER 
POLYVINYL CHLORIDE

EVACUATION 
IF MATERIAL LEAKING (NOT ON FIRE) CONSIDER EVACUATION FROM 
DOWNWIND AREA BASED ON AMOUNT OF MATERIAL SPILLED, 
LOCATION AND WEATHER CONDITIONS
EMERGENCY RESPONSE DOCUMENT

IF MATERIAL ON FIRE OR INVOLVED IN FIRE SOLID STREAMS OF WATER MAY BE INEFFECTIVE
EXTINGUISH FIRE USING AGENT SUITABLE FOR TYPE OF SURROUNDING FIRE
(MATERIAL ITSELF DOES NOT BURN OR BURNS WITH DIFFICULTY.)
COOL ALL AFFECTED CONTAINERS WITH FLOODING QUANTITIES OF WATER APPLY
WATER FROM AS FAR A DISTANCE AS POSSIBLE
USE WATER SPRAY TO KNOCK-DOWN VAPORS SOLID
STREAMS OF WATER MAY SPREAD FIRE DO NOT USE
WATER ON MATERIAL ITSELF
DO NOT APPLY WATER TO POINT OF LEAK IN TANK CAR OR CONTAINER

ENVIRONMENTAL CONSIDERATIONS - LAND SPILL DIG A
PIT, POND, LAGOON, HOLDING AREA
TO CONTAIN LIQUID OR SOLID MATERIAL DIKE
SURFACE FLOW USING SOIL, SAND BAGS,
FOAMED POLYURETHANE, OR FOAMED CONCRETE
ABSORB BULK LIQUID WITH FLY ASH OR CEMENT POWDER NEUTRALIZE
WITH VINEGAR OR OTHER DILUTE ACID

FIRST AID RESPONSES
MOVE VICTIM TO FRESH AIR; CALL EMERGENCY MEDICAL CARE. IF
NOT BREATHING, GIVE ARTIFICIAL RESPIRATION.
IF BREATHING IS DIFFICULT, GIVE OXYGEN.
REMOVE AND ISOLATE CONTAMINATED CLOTHING AND SHOES AT THE SITE.
IN CASE OF CONTACT WITH MATERIAL, IMMEDIATELY FLUSH SKIN OR EYES WITH RUNNING
WATER FOR AT LEAST 20 MINUTES.
KEEP VICTIM QUIET AND MAINTAIN NORMAL BODY TEMPERATURE.
EFFECTS MAY BE DELAYED, KEEP VICTIM UNDER OBSERVATION.

IF MATERIAL NOT ON FIRE OR NOT INVOLVED IN FIRE KEEP
MATERIAL OUT OF WATER SOURCES AND SEWERS
ATTEMPT TO STOP LEAK IF WITHOUT UNDUE PERSONNEL HAZARD USE
WATER SPRAY TO KNOCK-DOWN VAPORS

PERSONNEL PROTECTION AVOID
BREATHING VAPORS KEEP
UPWIND
WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS AVOID
BODILY CONTACT WITH THE MATERIAL
WEAR APPROPRIATE CHEMICAL PROTECTIVE GLOVES, AND GAS-TIGHT GOGGLES DO
NOT HANDLE BROKEN PACKAGES UNLESS WEARING
APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT
WASH AWAY ANY MATERIAL WHICH MAY HAVE CONTACTED THE BODY WITH
COPIOUS AMOUNTS OF WATER OR SOAP AND WATER
IF CONTACT WITH THE MATERIAL ANTICIPATED,
WEAR APPROPRIATE CHEMICAL PROTECTIVE CLOTHING

ENVIRONMENTAL CONSIDERATIONS - WATER SPILL
NEUTRALIZE WITH DILUTE ACID
USE MECHANICAL DREDGES OR LIFTS
TO REMOVE IMMOBILIZED MASSES OF POLLUTANTS AND PRECIPITATES
APPENDIX E: TONNAGE PROFILE

JUL 07 2014 0655EDT    TRAIN TONNAGE PROFILE

TRAIN: 496EA07    OUT OF LETHBRIDGE
_HEADER POWER: CP 008229 CP 006321 CP 009867
ENGINES IN TOW: NONE
REMOTE POWER: NONE

---------------------------------------------------------------------------------
THIS TRAIN IS DESIGNED FOR MAXIMUM HAULAGE
THE AVAILABLE HP FOR THIS TRAIN IS 10600
FOR MAXIMUM DYNAMIC BRAKING (DB) AND VERIFICATION OF LOCOMOTIVE
THE AVAILABLE HP FOR THIS TRAIN

---------------------------------------------------------------------------------
TRAIN TOTALS: 34  46  3378  2568  5946  4916

---------------------------------------------------------------------------------
JUL 07 2014 0655EDT

REMOTE POWER:
ENGINES IN TOW:
HEADEND POWER:

TONNAGE TOTALS DO NOT INCLUDE OPERATIVE LOCOMOTIVES

---------------------------------------------------------------------------------
** Bad Order **

014  74 CP 603545 E 59 XXXXX : : : 7325EG1
015  78 SOO 118389 E 57 XXXXX : : : 7325EG1
016  75 EME 311227 E 61 7325EG1
17  86 CIGX 803643 L 58 XXXXXXXXXXXXXXXXXXXXXXXXXXX : 7749SH1
18  90 CIGX 803640 L 58 XXXXXXXXXXXXXXXXXXXXXXXXXXX : 7749SH1
19  94 CIGX 803641 L 58 XXXXXXXXXXXXXXXXXXXXXXXXXXX : 7749SH1
20  98 CIGX 803921 L 58 XXXXXXXXXXXXXXXXXXXXXXXXXXX : 7749SH1
21 102 CEFX 031743 L 57 XXXXXXXXXXXXXXXXXXXXXXXXXXX : 7749SH1
22 106 CIGX 803925 L 58 XXXXXXXXXXXXXXXXXXXXXXXXXXX : 7749SH1
23 110 CIGX 803862 L 55 XXXXXXXXXXXXXXXXXXXXXXXXXXX : 7749SH1
24 114 CIGX 803922 L 58 XXXXXXXXXXXXXXXXXXXXXXXXXXX : 7749SH1
25 118 CIGX 804110 L 57 XXXXXXXXXXXXXXXXXXXXXXXXXXX : 7749SH1
26 122 CIGX 803930 L 58 XXXXXXXXXXXXXXXXXXXXXXXXXXX : 7749SH1
27 126 CRGX 016485 L 60 XXXXXXXXXXXXXXXXXXXXXXXXXXX : 6300MA1
28 130 CIGX 020638 L 60 XXXXXXXXXXXXXXXXXXXXXXXXXXX : 6300MA1
29 134 CIGX 020058 L 60 XXXXXXXXXXXXXXXXXXXXXXXXXXX : 6300MA1
30 138 CRGX 016484 L 60 XXXXXXXXXXXXXXXXXXXXXXXXXXX : 6300MA1
31 142 CRGX 016328 L 58 XXXXXXXXXXXXXXXXXXXXXXXXXXX : 6300MA1
032 146 PLCX 018253 E 60 XXXXX : : : 6300MA1
033 150 PLCX 018476 E 60 XXXXX : : : 6300MA1
034 154 NAHX 005360 E 70 XXXXX : : : 6300MA1
035 158 GACX 052384 E 61 XXXXX : : : 6300MA1
036 152 JIRX 525365 E 59 XXXXX : : : 6300MA1
037 166 TTX 865586 L 80 XXXXXXXXXXXXXXXXXXXXXXXXXXX : 6300MA1
038 170 GACX 010013 E 66 XXXXX : : : 6300MA1
039 174 NOKL 823017 E 58 XXXXX : : : 6300MA1
040 178 NOKL 821666 E 60 XXXXX : : : 6300MA1
041 182 PLCX 012641 E 58 XXXXX : : : 6300MA1
042 186 NOKL 833110 E 61 XXXXX : : : 6300MA1

CP COMMUNITY EMERGENCY PLANNING GUIDE

84
043 190 NOKL 830892 E 60 XXXXXX : : : 6300MA1
044 194 NOKL 833483 E 60 XXXXXX : : : 6300MA1
045 198 NOKL 832102 E 60 XXXXXX : : : 6300MA1
046 202 DMW 002014 E 56 XXXXXX : : : 6300MA1
047 206 CBFX 470488 L 69 XXXXXXXXXXXXXXXXXXXXXXXXX : 6300MA1
048 210 SIRX 490305 E 59 XXXXXX : : : 6300MA1
049 214 NOKL 833451 E 60 XXXXXX : : : 6300MA1
050 218 FLOX 983264 E 42 XXXXX : : : 7300MA1
051 222 TAEK 001647 E 60 DANG XXXXXX : : : 7300MA1
052 226 TTJX 082015 E 74 XXXXXX : : : 7300MA1
053 230 GATX 202489 E 68 XADG XXXXXXXXX : : 7300MA1
054 234 GROX 813215 E 58 XXXXXX : : : 7300MA1
055 238 JTJX 487375 E 60 XXXXXX : : : 7300MA1
056 242 FURX 813246 E 60 XXXXXX : : : 7300MA1
057 250 GROX 813130 E 58 XXXXXX : : : 7300MA1
058 254 NAHX 493349 E 60 XXXXXX : : : 7300MA1
059 258 GROX 060715 E 58 XXXXXX : : : 7300MA1
061 262 SHQX 001961 E 42 XXXXX : : : 4850MA1
062 266 TILX 333434 E 42 XXXXX : : : 4850MA1
063 270 MWCX 300460 E 42 XXXXX : : : 4850MA1
064 274 CEFX 031717 E 57 XXXXXX : : : 4850MA1
  Speed restricted to 50 MPH
065 278 CIGX 803871 E 58 XXXXXX : : : 4850MA1
  Speed restricted to 50 MPH
066 282 CEFX 031993 E 57 XXXXXX : : : 4850MA1
  Speed restricted to 50 MPH
067 286 CIGX 803939 E 55 XXXXXX : : : 4850MA1
  Speed restricted to 50 MPH
068 290 CIGX 803991 E 58 XXXXXX : : : 4850MA1
  Speed restricted to 50 MPH
  Car to be Destroyed/Scrapped Not Safe for Loading
076 322 UNPX 121719 E 52 XXXXXX : : : 4850MA1
077 326 AOXX 493349 E 42 XXXXX : : : 4850MA1
078 330 UTLX 673724 L 59 XXXXXXXXXXXXXXXXXXXXXXXXX : 4850MA1
079 334 HTTX 093352 E 65 XXXXXX : : : 4850MA1
080 338 HTTX 093491 E 65 XXXXXX : : : 4850MA1

TRAIN LENGTH INCLUDING 3% TOLERANCE 5063 FEET
TRAIN LENGTH EXCLUDING LEAD AND REMOTE LOCOMOTIVES 4705 FEET
TRAIN LENGTH INCLUDING LOCOMOTIVES 4916 FEET
GROSS WEIGHT INCLUDING LOCOMOTIVES 6532 TONS
AVERAGE WEIGHT PER CAR 79 TONS

BLOCK CONSIST
BLK DEST POS HEAD CAR POS REAR CAR LDS MTY TONS LENGTH
07698SH 004 AEX 020848 015 FURX 829510 10 2 1396 715
07325EG 016 CP 600054 019 DME 311227 0 4 124 236
07749SH 020 CIGX 803643 029 CIGX 803930 10 0 1368 572
06300MA 030 CRGX 016485 052 NOKL 833451 7 16 1398 1407
07330MA 053 FLOX 983264 063 GROX 060715 0 11 362 654
04850MA 064 SHQX 001961 083 HTTX 093491 7 13 1297 1122

WORK ENGINES: 212
EQUIP IN TOW: 0 0 0 0
CABOOSE: 0 0 0 0
TOTAL: 34 46 5946 4916
APPENDIX F: MARSHALING MESSAGES

CANADIAN PACIFIC RAILWAY  ISSUED: 20140707060928

TRAIN MARSHALLING AND RESTRICTIONS REPORT FOR TRAIN: 123-04

9046707 6674 9703 D R371 07 07 0530 3710  UL M  1173 8 00 671YS

6  *******************************************************
6  ***** TRAIN IS CARRYING SPECIAL DANGEROUS COMMODITIES *****
6  *******************************************************
6  ****  MESSAGE NUMBER 003  *******************************************************
6  ***** TRAIN HANDLING EMPTY 112J TANK CAR(S) ******
6  ***** MESSAGE NUMBER 031  *******************************************************
6  ***** TRAIN HANDLING CAR(S) 42 FEET OR LONGER WITH ******
6  ***** TIMETABLE RESTRICTIONS MAY APPLY ******
6 6  *********************** START OF DANGEROUS COMMODITY MARSHALING MESSAGES **********
6  PROX098476 2114GP C NEXT TO OPEN TOP --- LADING MUST NOT PROTRUDE002FE
6 FURX844083 2112GP C NEXT TO LOADED FLAT CAR. ***** REMARSHAL ****027FE
6 TCMX350698 2114GP C NEXT TO OPEN TOP --- LADING MUST NOT PROTRUDE031FE
6 CP 415790 2114GP C NEXT TO OPEN TOP --- LADING MUST NOT PROTRUDE039FE
6 GATX205699 2118GP C NEXT TO REEFER CAR --- MOTOR MUST NOT OPERATE057FE
6 GATX205699 2114GP C NEXT TO OPEN TOP --- LADING MUST NOT PROTRUDE059FE
6 GATX205699 2118GP C NEXT TO REEFER CAR --- MOTOR MUST NOT OPERATE059FE
6 9998 ********** VIOLATION FOUND. REMARSHALL.**********
6 6  *********************** END OF DANGEROUS COMMODITY MARSHALING MESSAGES **********

6 6 LENGTH OF TRAIN EXCLUDING LOCOMOTIVES AND REMOTES  4266 FT. **

6 6 *CDA* TRAINS MOVING IN CANADA MARSHALLING MESSAGES ******
6 6
6 6 ***** START OF DANGEROUS COMMODITY MARSHALLING MESSAGES *****
6 PROX098476 2114GP C NEXT TO OPEN TOP --- LADING MUST NOT PROTRUDE002FE
6 FURX844083 2112GP C NEXT TO LOADED FLAT CAR. ***** REMARSHAL ****027FE
6 TCMX350698 2114GP C NEXT TO OPEN TOP --- LADING MUST NOT PROTRUDE031FE
6 CP 415790 2114GP C NEXT TO OPEN TOP --- LADING MUST NOT PROTRUDE039FE
6 GATX205699 2118GP C NEXT TO REEFER CAR --- MOTOR MUST NOT OPERATE057FE
6 GATX205699 2114GP C NEXT TO OPEN TOP --- LADING MUST NOT PROTRUDE059FE
6 GATX205699 2118GP C NEXT TO REEFER CAR --- MOTOR MUST NOT OPERATE059FE
6 9998 ********** VIOLATION FOUND. REMARSHALL.**********
6 6 *CDA* END OF DANGEROUS COMMODITY MARSHALLING MESSAGES *****

86 CP COMMUNITY EMERGENCY PLANNING GUIDE
USA: Trains Moving in the U.S. Marshalling Messages

***** Start of Dangerous Commodity Marshalling Messages *****

- PROX098476 4014GP D Next to open top --- Lading must not protrude
- PROX098476 0005GP D Near engine - 5 Buffers reqd if length allows
- PROX098476 0005GP D Near engine - 5 Buffers reqd if length allows
- GATX20569 4018GP D Next to reefer car --- Motor must not operate
- GATX20569 4014GP D Next to open top --- Lading must not protrude

*USA* End of Dangerous Commodity Marshalling Messages

***** Train Area Marshalling Messages *****

**Log Key**

- **Train Type** - Mixed Conventional
- **Weight per Operative Brake** - 103 tons
- **Dynamic Brake - Apply DB Instructions for a Conventional Train**
- **Cars or Platforms:**
  - On Train: 67
  - On Train with Cushioned Drawbars: 30
  - CD Over: 0 Rear 25%
    - WGT: 0%
    - No: 0%
    - Max Block: 0 tons

- **Part 2 - Caution Messages**
- No Caution Messages

- **Part 3 - Marshalling Violations**
- No specific violations for this area

- **CD Rule 1 - No Cushioned Drawbar Restrictions**
- No Violations that apply to all areas
- **Area 1*****
- No specific violations for this area
- **Area 2*****
- No specific violations for this area
- **Area 3*****
- No specific violations for this area

- **Area 4*****
- Insufficient weight for AGWZ if 24 eq driving axles: 01 cars
- CP 601327

- **Area 5*****
- Insufficient weight for AGWZ if 24 eq driving axles: 01 cars
- CP 601327

- **Area 6*****
- No specific violations for this area

- **End Train Area Marshalling Messages*****