

CN Railway Derailments, Other Accidents and Incidents

Prepared by Railroaded – Updated March 17, 2014

This is a small sample of the thousands of CN derailments, spills, fires and other accidents. The Transportation Safety Board of Canada, Railway Association of Canada and past CN employees indicate that CN intentionally does not report hundreds of derailments and other accidents.

March 16, 2014. Saint-Laurent, Montreal, Quebec. A **CN worker was crushed to death** between 2 railway cars after one of the cars on the moving train he was on derailed. ([Montreal Gazette](#) March 17/14)

Feb 24, 2014. Fairbanks, St. Louis County, Minnesota. 50 CN cars plus 2 locomotives derailed. The train had a total of 116 cars. The train was loaded with iron ore pellets and was bound for Two Harbors. 2 engineers on the train were taken to a local hospital. ([Duluth News Tribune](#) Feb 25/14)

Feb 23, 2014. Saint-Henri, Montreal, Quebec. 2 CN locomotives and 2 cars carrying grain fell off the rails on a CN main line close to homes, community organizations and schools. **About 3,500 litres of diesel fuel spilled from one of the locomotives and caused an undisclosed amount of environmental damage.** ([Global News](#) Feb 24/14, [Globe and Mail](#) Feb 23/14)

Feb 9, 2014. New Lenox, Illinois. 3 to 4 CN cars derailed near Lincoln-Way High School and one of the cars hit and damaged a locomotive that was stopped on an adjacent track. One of the derailed cars was carrying plastic; the others were apparently empty. Traffic was blocked and had to be rerouted. This particular area is contentious among New Lenox residents because when CN bought the former EJ&E tracks, they announced plans to quadruple the number of freight trains. Local officials tried to get CN to build an overpass at one of the major crossings to mitigate the additional train traffic, but CN refused. ([CBS Chicago](#) Feb 10/14)

Jan 31, 2014. Outside New Augusta, Mississippi. 19 CN cars fell off the tracks, **spilling 50,000 gallons of crude oil, 17,000 gallons of fertilizer and 10,000 gallons of petroleum distillate. Other hazardous goods reported spilled included undisclosed volumes of fuel oil, methanol and ethanol.** Most of the hazardous goods spilled from 3 of the derailed tank cars, although other derailed cars were also spilling hazardous products. About 50 nearby Perry County residents were evacuated for over 2 days and sheltered in a special Red Cross facility set up for those affected by the derailment. About 100 railroad employees and 50 government officials, firemen and police officers were on site assisting with clean up efforts which were estimated to take about a week to complete. The extent of environmental damage was not disclosed. ([The Republic](#) Jan 31/14, [Hattiesburg American 1](#) Jan 31/14, [Hattiesburg American 2](#) Feb 4/14)

Jan 28, 2014. Mundelein, Illinois. A CN freight train derailed and forced Metra commuters on the North Central Services to make other transportation plans for at least a day. The cold hampered CN from repairing the tracks and moving the derailed cars, one of which was carrying plastic pellets. Several other CN freight trains were halted on the single track and had to be moved before the Metra service could be restored. ([Daily Herald](#) Jan 28/14)

Jan 26, 2014. Saint-Basile, Edmundston, New Brunswick. 5 CN freight cars jumped the tracks; 3 were carrying automobiles, one was carrying clay and the 5th car was carrying flammable liquefied petroleum gas. The cars tipped over and were lying on their side in a ditch. A local farmer had warned CN last summer that repairs were required at the site of the derailment. This was the second derailment on the same farmer's property. About 15-20 years ago, fuel cars derailed and were upside down in the local brook, spilling hazardous product. ([CBC News 1](#) Jan 27/14, [CBC News 2](#) Jan 28/14)

Jan 16, 2014. Crystal Springs, Mississippi. A CN train hauling coal caught fire. 2 men were able to escape from the locomotive which sustained major damage from the fire. ([WJTV](#) Jan 17/14)

Jan 15, 2014. Edmonton, Alberta. 3 moving CN trains collided. 3 locomotives, 2 tank cars loaded with dangerous goods and 1 empty flat car fell off the tracks. **One of the locomotives leaked an undisclosed amount of diesel fuel.** CN told the Edmonton Journal they did not know what dangerous goods were in the derailed tank cars, whereas CN contacted Edmonton Fire Rescue about 1 of the derailed tank cars possibly containing propane. Municipalities across Canada are concerned because CN and other rail companies are not required to provide municipalities with "real time" information on what dangerous goods are travelling through their communities and when. ([Edmonton Journal](#) Jan 16/14)

Jan 11, 2014. Burnaby, British Columbia. 7 cars loaded with coal from a 152-car CP train operated by a CN crew went off the CN tracks. **3 of the cars tipped over and spilled an undisclosed amount of coal into a creek which is sensitive fish habitat.** Local observers said the creek turned black. Washed out ground under the CN tracks may be the cause of the derailment, as heavy rains had fallen in the area. Local residents were quick to denounce plans to expand coal export at the Neptune Terminals. They pointed to this derailment as proof that the recent decision by the port authority to expand coal exports was a poor one. ([Vancouver Sun](#) Jan 11/14, [Globe and Mail](#) Jan 11/14)

Jan 7, 2014. Near Plaster Rock, New Brunswick. A 122-car CN train derailed, with 19 cars and an unmanned locomotive falling off the tracks. A cracked wheel and an emergency brake application likely contributed to the derailment. 9 of the derailed cars were loaded with hazardous goods – 5 with crude oil and 4 with propane. **A significant fire resulted with huge clouds of orange smoke and flames billowing into the air. Fires continued burning 4 days following the derailment. About 50 households (150 people) were forced to evacuate within a 2-kilometre radius of the fire, and 4 days following the derailment were still not permitted to return to their homes.** Firefighters, police, ambulances and a hazardous materials team were dispatched to the site. The volume of hazardous product spilled and the extent of environmental damage were not provided by CN. An earlier derailment near Plaster Rock unreported by CN was one of 2 unreported incidents that prompted the TSB to seek a summons in 2006 ordering CN to turn over all of its accident records. **A subsequent in-depth CBC investigation in 2013 uncovered that CN did not report to authorities more than 1,840 derailments and other accidents over a 6-year period, including 44 on main rail lines.** ([Edmonton Journal](#) Jan 8/14, [CBC News](#) Jan 7/14)

Dec 5, 2013. Two Harbors, Minnesota. Three crew members were injured when a 107-car CN train carrying iron ore derailed as it entered the Two Harbors rail yard, sending

76 cars off the tracks. Another 17 cars parked next to the moving train were also pushed off the tracks. Trains were unable to operate in that portion of the yard for some time, interrupting shipment of iron ore. The attorney representing the 3 injured CN crew members blamed the incident on CN's failure to remove snow and ice from the tracks. He said CN had been informed earlier in the day of unsafe snow and ice conditions between the Highland siding and Waldo and the 4-mile descent into the Two Harbors rail yard. The same day, another runaway train had been reported on the same track, but fortunately that train's crew was able to regain control of the train. The attorney was quoted as saying, "*The railroad had advance knowledge of the storm and information from knowledgeable railroaders about conditions. If attempts were made to clear the snow, they were inadequate. As a consequence, these guys were not going to be able to control that train. The railroad knew it, but they kept sending the train on the track with deep snow.*" He said CN's decision-making did not reflect a regard for the well-being of its employees. "*When you put profits over safety, this is what happens*", he said. Neighbouring business operators said they had never seen a train pileup of this magnitude, and a retired CN engineer said the derailment was one of the 2 most serious train-related incidents he had seen since he started working on railroads in 1974. ([Lake County News Chronicle](#) Dec 15/13, [Northlands News Center](#) Dec 6/13)

Nov 18, 2013. Near Tisdale, Saskatchewan. A CN crew member was killed during switching operations. CN would provide no further details, other than to suggest that CN's safety record is good (which is their standard response lately, following a recently heightened interest by Canadians in rail safety). ([Reuters](#) Nov 19/13)

Nov 11, 2013. Near Fort Frances, Ontario. A 184-car CN train derailed, spilling grain all over the tracks. A total of 39 freight cars fell off the tracks. It took several days for the spilled grain to be cleaned up and for the rail cars to be removed. ([Fort Frances Times](#) Nov 12/13)

Nov 9, 2013. Near Asquith, Saskatchewan. Six CN cars carrying lumber jumped the tracks. Nearby residents expressed concern not only about derailments close to their homes, but also about challenges getting compensation from CN for damages incurred by CN-started fires. ([Global News](#) Nov 10/13)

Nov 3, 2013. Near Peers, Alberta. 13 CN cars derailed. 12 of the derailed cars were loaded with lumber and 1 was carrying sulphur dioxide. CN rail traffic along its main line was shut down while mangled rail cars and spilled broken lumber were cleaned off the tracks. ([CTV News](#) Nov 3/13)

Oct 19, 2013. Gainford, Alberta. A 134-car CN train carrying crude oil and liquefied petroleum gas (propane) derailed about 90 km west of Edmonton, causing explosions and a massive fire. 9 of the 13 derailed tank cars were carrying propane and 4 carried crude oil. 1 of the cars carrying propane exploded and 3 others also caught fire. The amount of petroleum product spilled and the extent of environmental and property damages were not disclosed. A state of emergency was ordered for the entire area. All 100 Gainford residents and another 25 people living within 2 km of the derailment site were evacuated for 4 days due to the fear of additional explosions, fires and noxious fumes. The intensity of the fire was so severe, firefighters were forced to let the fire burn itself out, which took 4 days. The main east-west highway (Yellowhead No. 16) and the main east-west rail line (Trans-Continental) through western Canada were closed for 5 days. ([Chicago Tribune](#) Oct 19/13, [CBC News](#) Oct 19/13, plus additional sources)

Oct 16, 2013. Sexsmith, Alberta. 4 CN tank cars carrying anhydrous ammonia derailed. One of the derailed tank cars was leaning and sinking. Anhydrous ammonia is a dangerous good. In the absence of receiving any information from CN, Sexsmith fire resources ordered an evacuation of about 150 homes. ([Calgary Herald](#) Oct 16/13)

Oct 7, 2013. Brampton, Ontario. The last 4 cars of a 73-car CN train derailed, sending one CN employee to the hospital with minor injuries. A CN public relations spokesperson suggested to the media there were no injuries, whereas the Peel Emergency Services reported the CN employee suffered minor injuries. The 4 derailed tank cars carried jet fuel residue. (Rail tank car "residue" can consist of up to several thousand gallons of dangerous goods per tank car. Rail companies erroneously refer to these cars as being empty.) The derailment held up numerous Kitchener GO trains. ([Toronto Star](#) Oct 7/13)

Oct 2, 2013. North Battleford, Saskatchewan. 3 CN tank cars derailed; 2 of the cars contained crude oil and the other contained asphalt. Human error likely caused the derailment when a wrong switch was aligned while connecting rail cars together. CN waited 5 hours before notifying North Battleford emergency crews about the derailment. Mayor Ian Hamilton says he was angry the City wasn't notified right away by CN. ([Global News](#) Oct 3/13)

Sept 25, 2013. Near Landis, Saskatchewan. 17 of 130 CN cars carrying oil, condensate, ethanol and mixed freight derailed. 1 tank car leaked an undisclosed amount of oil, and the derailment sparked a grass fire. The Landis school was evacuated for a day as a precaution. The extent of environmental damage was not disclosed. ([Toronto Star](#) Sept 25/13)

Sept 16, 2013. About 60 km south of North Bay near South River, Ontario. 11 CN freight cars derailed, of which 1 carried methanol, 3 carried sulphuric acid residue, and 7 were hauling general merchandise and consumer goods. The tracks were closed for about 2 days. ([The Nugget](#) Sept 17/13)

June 2, 2013. Symington Rail Yard, Winnipeg, Manitoba. 6 empty CN lumber cars crashed off the tracks, damaging 2 power poles and knocking power out to 1,900 customers in the Windsor Park area. ([CTV Winnipeg](#) June 3/13)

April 30, 2013. Near Pense, west of Regina, Saskatchewan. 11 CN cars fell off the tracks, blocking a grid road. Fertilizer leaked from some of the cars. ([National Post](#) May 1/13)

April 19, 2013. Near Cedarvale, British Columbia. 5 intermodal CN cars carrying household consumer goods derailed east of Terrace, causing the rail line to be shut down for an undisclosed length of time. ([CJFW](#) April 19/13)

March 30, 2013. Gary, Indiana. 35 cars of a 101-car CN freight train derailed. 3 of the derailed cars carried hazardous materials. The derailment also ruptured a 14-inch industrial gas line. Hazmat responded to the accident and directed that South Shore train service be halted until the gas rupture was cleaned up and the area was determined to be safe. ([WSBT TV](#) March 30/13 & [Chicago Sun-Times](#) March 30/13)

March 25, 2013. Kenner, Louisiana. 14 cars of a 141-car CN train derailed. 2 of the derailed cars carrying coal tipped over and another 5 leaned, looking close to toppling

over. **An undisclosed amount of coal was spilled.** The derailment blocked Farm Avenue and Morey Street in Kenner. ([The Times-Picayune](#) March 25/13)

March 16, 2013. Near Hatfield, Wisconsin. 19 CN cars loaded with sand plowed off the railway, spilling sand across the area. County Road K remained closed for at least a day. ([La Cross Tribune](#) March 17/13)

March 7, 2013. Winnipeg, Manitoba. A CN locomotive and 1 intermodal car derailed in a rail yard, blocking traffic on the East Perimeter Highway for over 4 hours. It appeared that 2 CN trains collided, causing the derailment. ([Metro Winnipeg](#) March 7/13)

Feb 22, 2013. McComb Subdivision, Jackson, Mississippi. 18 CN cars derailed – 17 were loaded with grain and the other was empty. Some track was damaged and will need to be replaced. Rail traffic between Jackson and New Orleans was expected to be shut down for most of the day. As of April 4, 2013, 11 tons of the wheat spilled during the derailment was rotting and emitting a foul odour at the Hinds County Penal Farm in Raymond where it had been piled, and was causing concern to local residents. ([WLBTV](#) Feb 22/13 & other sources)

Feb 9, 2013. Fort Rouge Rail Yard, Winnipeg, Manitoba. About 8 CN cars derailed, 6 of which flipped over on their sides. The cars were carrying household and consumer goods. ([CBC News](#) Feb 9/13)

Feb 7, 2013. Near Biggar, Saskatchewan. A CN locomotive and 17 containers derailed about 5 km west of Biggar. The cars were carrying consumer and household products. ([Leader Post](#) Feb 7/13)

Jan 25, 2013. Kaukauna, Wisconsin. Diesel fuel spilled from a CN locomotive's fuel tank punctured by a portion of track beside the main line that had been pushed up by frost. **At least 1,200 gallons of fuel spilled for about a mile along the track.** Options considered for clean up included using a chemical that consumes fuel oil and excavating beneath the railroad bed to remove any contaminated soil. The extent of environmental damage was not disclosed. ([Post-Crescent Media](#) Jan 28/13)

Jan 24, 2013. Blackfoot Subdivision, near Paynton, Saskatchewan. A CN train carrying crude oil crashed into a road grader on a public crossing, killing the driver of the grader. A locomotive and 16 tank cars loaded with crude oil derailed. **At least 2 of the tank cars toppled over on their sides and spilled an undisclosed amount of crude oil.** (Each tank car can carry up to 650 barrels of oil.) The extent of environmental damage was not disclosed. ([Canadian Press](#) Jan 24/13, TSB Investigation R13E0015)

Jan 6, 2013. Decatur, Illinois. 6 cars derailed on a dead end siding. Cars rammed through the end of the track, ending up in a heap and partly toppled down a steep embankment. 4 cars contained soybean oil, 1 was loaded with limestone and 1 tank car carried residue of an undisclosed product. ([Herald & Review](#) Jan 8/13)

Jan 3, 2013. South of Pemberton, British Columbia. 3 empty wood pellet hopper cars derailed while crossing a bridge, 1 toppling off the bridge and closing Highway 99 for about 2 hours. ([Globe & Mail](#) Jan 3/13)

Dec 26, 2012. Wainwright Subdivision, near Clover Bar Station, NE Edmonton, Alberta. **3 CN contractors were injured** when they were hit by a CN freight train as they were clearing snow off rail switches. 2 were in critical condition, while the third man had relatively minor injuries. It appears the "Safety Watch" protocol was not followed. ([Edmonton Journal](#) Dec 28/12, TSB Investigation R12E0182)

Dec 19, 2012. The Canadian Transportation Agency ruled today that both Canadian National Railway and Canadian Pacific Railway exceeded revenue caps for the movement of western grain for the 2011-12 crop year. Both railways must pay the amount by which they exceeded their 2011-12 caps plus a penalty to the Western Grains Research Foundation. ([Canada News Centre](#) Dec 19/12)

Dec 17, 2012. Williams Lake, British Columbia. 2 locomotives derailed as they entered a rail yard. ([Got News Network](#) Dec 17/12)

Nov 28, 2012. About 180km north of Fort St. John, British Columbia. Workers were switching cars on and off a train in a rail yard when a **fuel tank car derailed and rolled onto a CN conductor, killing him.** ([Canadian Press](#) Nov 30/12)

Nov 19, 2012. A new Canadian National Railway "Quiet Zone" restriction in Naperville and Warrenville, Illinois will take effect today. **CN trains will not be allowed to sound their horns in this quiet zone unless deemed necessary for safety purposes.** Naperville and Warrenville join Aurora and DuPage County in successfully pressing for the quiet zone after residents complained about the excessive horn use by CN on the rail line they took over from Elgin, Joliet & Eastern Railway in January 2009. 33 communities along the former EJ&E Railway main line have been battling with CN over their concern about CN's aggressive approach to the EJ&E takeover. Communities have been concerned about increased rail traffic, increased noise and diesel exhaust pollution, adjacent property devaluation, and increased traffic jams at many rail crossings which have very significant impacts on emergency vehicle response times. ([Beacon-News](#) Nov 15/12)

Nov 8, 2012. North of Squamish Terminals, British Columbia. **A 6-axle CN locomotive had its fuel tank punctured by a broken piece of track, causing about 5,700 litres of diesel fuel to spill onto the track and into the Squamish Estuary.** Containment booms were used to try to limit migration of the diesel fuel in the sensitive estuary ecosystem. Concerns were expressed by local residents because the herring spawning season was close to starting and herring eggs are very sensitive to environmental contamination. About 50 feet of rail track were also torn up and the subsurface soil dug up in an attempt to remove some of the diesel fuel. A local former B.C. Rail employee placed part of the blame on CN using large 6-axle locomotives on the line whereas when B.C. Rail was operating the same line it used smaller 4-axle locomotives. He indicated the 6-axle units can't make the turns on that section of track without placing too much stress on the track. ([Squamish Chief](#) Nov 14/12)

Nov 1, 2012. Ontario's Superior Court gave the go-ahead today for a multi-million dollar lawsuit against CN Rail and Via Rail on behalf of most of the passengers of a fatal train derailment February 26, 2012 in Burlington, Ontario. The train was traveling 4 times faster than the speed limit while changing tracks. Arguments for the class-action lawsuit to proceed included that **CN Rail and Via Rail were negligent in the derailment that killed 3 Via employees, injured 1 Via employee and injured 45 passengers.** Altogether, 68 of

the 75 passengers have joined the lawsuit. ([Toronto Sun](#) Nov 1/12, [CBC News](#) Oct 26/12)

Oct 11, 2012. Waterloo, Ontario. 4 tank cars derailed in uptown Waterloo. CN failed to notify the Region of Waterloo, which was a violation of an agreement between the 2 parties. A Waterloo Chronicle news article read, *“The incident has left Waterloo residents worried, as the train was bound for the Chemtura chemical manufacturing plant in Elmira.”* ([Waterloo Chronicle](#) Oct 24/12)

Sept 7, 2012. Battle Creek Yard, Michigan. About 8 cars loaded with grain derailed and ripped up about 700 feet of track and a switch. ([Railroadfan.com](#) Sept 8/12)

June 26, 2012. Near Poser, west of McBride, British Columbia. 8 loaded coke cars went off the tracks. ([250 News](#) June 26/12)

May 26, 2012. Hixon, British Columbia. 8 empty freight cars derailed and toppled over. ([250 News](#) May 28/12)

May 15, 2012. Outside Oakville, Manitoba. Train derailed when it made an emergency stop. The rear wheels of 1 of the cars carrying wheat went off the rails. Sparks from the derailment started a grass fire, causing nearby piles of old rail ties to also catch fire. Highway 13 in Oakville was closed throughout the night due to the accident. (CN often leaves old discarded rail ties by the track, which creates a fire hazard.) ([CTV Winnipeg News](#) May 16/12)

May 9, 2012. Just outside Collins, Mississippi. About 2 dozen loaded coal cars derailed on the CN main line. A significant amount of coal was spilled. Rails and a bridge were damaged. The train consisted of 105 cars, all loaded with coal. The Collins Fire Department Chief said, *“There have been multiple derailments over the years, but nothing of this magnitude or this size.”* ([WDAM](#) May 9/12)

April 26, 2012. Between Valemont & Blue River, British Columbia. A locomotive and up to 15 cars derailed due to a washout. At least 2 container cars fell into the North Thompson River. A contamination containment boom was set up on the river in an attempt to contain what was described as a chemical slick on the surface of the water. Crews were still cleaning up debris from the derailment over 2 weeks later. The extent of environmental damage was not disclosed. ([Castanet News](#) May 12/12, [CFJC TV](#) May 13/12)

April 1, 2012. Near Searchmont, Ontario. 11 of 34 cars derailed – 5 tank cars carrying residue and 6 cars carrying steel products. Damaged rail cars and rolls of steel were scattered in the surrounding bush. ([The Sault Star](#) April 3/12)

March 20, 2012. SE Calgary, Alberta. 4 cars and 1 engine derailed in CN’s Ogden Rail Yard. A conductor was reported to have suffered injuries when he jumped from the train. A fuel tank on the engine was punctured and an undisclosed amount of fuel spilled onto the ground. ([CBC News](#) March 20/12)

March 15, 2012. 35km east of Melville, Saskatchewan. 22 empty cars derailed on CN’s main line. ([Leader-Post](#) March 16/12)

March 6, 2012. Saint John, New Brunswick. 12 CN cars derailed. 4 of the cars carrying potash flipped on their sides, **spilling potash on the ground**. ([CBC News](#) March 6/12)

Feb 26, 2012. Oakville Subdivision, near Aldershot Station, Burlington, Ontario. **Three Via Rail engineers were killed and 46 other people were injured** when the Via Train 92 locomotive and 5 cars derailed on track owned, operated and maintained by CN Rail. The train was switching from one track to another when it flew off the tracks and collided with a building, destroying the locomotive that the 3 deceased crew members were in. The locomotive's fuel tank was punctured and about **4,300 litres of diesel fuel spilled**. The train was traveling 4 times faster than the speed limit while changing tracks. A lawsuit was later initiated against CN and Via Rail by passengers who are seeking compensation for physical and emotional injury, damage to property and loss of income as a result of the derailment and crash. An Orangeville Citizen editorial read, **"There should be no need to await the safety board's final report on the crash before replacing such wholly inadequate switching, something that would likely have happened many years ago had the CNR not had such a cavalier attitude toward safety."** The TSB slammed Transport Canada and the railway industry for not having voice recording included in locomotive data recorders, a recommendation made repeatedly by the TSB since 2003. The TSB said, **"Voice recordings allow investigators to understand the environment in which crews operated and the decisions they made leading up to an accident. The lack of this information in rail investigations deprives the TSB of a key tool it needs to help make Canadians safer."** The federal NDP said a positive train-control system, mandatory in the U.S. since 2008, would have prevented the accident, and having mandatory voice recorders in trains would have allowed investigators to know exactly what happened. **Emile Therien, past Canada Safety Council President, said Transport Canada has relinquished its regulatory control to individual rail companies, making it more perilous to ride the rails. He said it's time for rail companies to stop monitoring themselves and for the federal government to step up to its on-the-track oversight responsibilities.** ([Orangeville Citizen](#) March 1/12, TSB Investigation R12T0038)

Feb 21, 2012. 12km east of Smithers, British Columbia. 46 coal cars went off the track, **spilling coal** and damaging rail cars and rail tracks. One nearby resident said, **"My property is a hell of a mess. I have property on both sides and they've made a mess of everything."** ([Houston Today](#) March 3/12)

Jan 21, 2012. Tumbler Subdivision, 50km NE of Prince George, British Columbia. 13 CN cars loaded with coal derailed. ([250 News](#) Jan 22/12)

Jan 21, 2012. Near Fabyan, Alberta. 31 cars hauling grain derailed as a CN train crossed the Fabyan Bridge on the Wainwright Subdivision main track. The outside rail in a curve at the end of the bridge rolled over, causing the derailment. About 1,760 feet of track were destroyed, 17 of the derailed cars fell into the Battle River valley far below, rail cars were destroyed or sustained major damage, and there was significant damage to the bridge itself. The TSB found that loose and broken lag screws securing the track led to the derailment. **As an example of the misleading information often provided by CN public affairs staff, both Julie Senecal and Warren Chandler of CN had told Star News that all 137 cars in the train were grain cars. Shortly following the derailment, a TSB investigator informed Star News that CN's information was not correct; there were only 74 cars that contained grain, while 31 tank cars contained dangerous goods residue (up to several thousand gallons in each car), 19 were empty, 5 were auto carriers, 2 carried pulp and 4 cars carried steel pipe.** ([Star News](#) March 2/12, [TSB Report R12E0008](#))

Jan 20, 2012. Near Hay Lakes, Alberta. 18 cars hauling plastic pellets and other general merchandise derailed. ([CBC News](#) Jan 20/12)

Jan 18, 2012. 16km north of Prince George, British Columbia. 11 cars in a CN train carrying lumber and pulp products went off the tracks. ([250 News](#) Jan 22/12)

Jan 18, 2012. Grande Cache Subdivision, Hanlon (between Hinton & Grande Cache), Alberta. CN train with 6 locomotives, 91 loaded coal cars and 1 empty car had a number of problems that eventually resulted in 13 loaded coal cars from the 13,620-ton train being left unattended on an incline with hand brakes improperly applied. The 13 loaded cars ran away uncontrolled for about 3 miles and plowed into a stationary CN train on the main line, causing 9 loaded cars and 3 locomotives to derail. 7 of the derailed cars were destroyed and the 3 derailed locomotives were extensively damaged. 1 locomotive flipped on top of another locomotive, with 2 locomotives ending up on their side. 1 crew member was seriously injured and taken to hospital by helicopter, while 2 crew members sustained minor injuries. At least 2,800 litres of fuel and 740 tons of coal spilled, resulting in undisclosed environmental damage. About 250 feet of track were damaged. ([Canadian Press](#) Jan 18/12, TSB Report R12E0004)

Dec 21, 2011. Near Caribou, British Columbia. 19 CN rail cars carrying coal derailed on the main track after a wheel gave out and caused emergency braking. The TSB criticized CN and reiterated to Transport Canada to put regulations in place for wheel safety inspections on rail cars. The American Association of Railways has set a threshold of 90,000 pounds of impact for rail operators in the U.S. to pull the train and replace wheels. Unfortunately, Transport Canada has no threshold in place even though on Dec. 1, 2011 the TSB called on Transport Canada to establish one. A similar CN derailment of 36 coal cars occurred along the same line near Fort Fraser, B.C. February 12, 2011. ([Canadian Press](#) Jan 22/13, TSB Report R11V0254)

Oct 29, 2011. Near Meharry, Manitoba. A CN freight train and a Via Rail passenger train approached one another on the same track, without either of the crews being aware, until it was almost too late. The trains were able to come to emergency stops within 1,500 feet of one another. An October 17, 2012 TSB investigation report determined that the rail near-miss resulted when short-cuts were made to railway operating rules and procedures. The redundancy and safeguards built into the rules are often compromised when short-cuts are taken, which increases the risk of accidents. The investigation also highlighted one of many outstanding issues on the TSB's Watchlist – the need for video and voice recorders on locomotives. The absence of such recorders has hindered many TSB investigations of rail accidents and rail near-misses, including this one. ([TSB News Release](#) Oct 17/12, TSB Report R11V0057)

Oct 21, 2011. Three Hills Subdivision, near Alix Junction, Alberta. A too-long freight train over 2 miles long consisting of 3 locomotives and 87 loaded cars derailed in a curve on the main track near the Ardley Bridge over the Red Deer River. The train consisted of 62 loaded double-stack intermodal cars (140 platforms) and 25 mixed freight cars. The TSB investigation found that 7 loaded double-stack intermodal flat cars (13 car bodies) derailed over a mile behind the locomotives when a sudden catastrophic failure of a rail occurred likely due to an existing defect in the rail. Several of these cars rolled down a bank and came to rest upside down. One derailed 3-unit intermodal flat car was carrying paint, paint products, sodium hydroxide, phosphoric acid and other dangerous goods. About 900 litres of phosphoric acid were spilled and 470 feet of track were destroyed.

The extent of environmental damage was not disclosed. The TSB criticized CN by indicating that their ultrasonic rail tests did not identify all the transverse defects in the older vintage rail. ([TSB Report R11C0118](#))

Sept 24, 2011. Near Point-Saint-Charles, Quebec. A train exceeded the authorized speed limit at a switching crossover, causing a derailment on the main track. The TSB found that side-to-side force due to excessive speed and the sudden application of brakes caused the wheel of one of the cars to lift, leading to the derailment of 6 cars. About 650 feet of track and several track turnouts were damaged. (TSB Report R11D0075)

July 14, 2011. Near Waterfall, Ontario. 11 multi-platform intermodal cars carrying 86 containers derailed on CN's Bala Subdivision main track. About 6,800 feet of track were damaged or destroyed including a siding switch. The TSB reported that the derailment resulted from the combined effects of weakened track structure, worn car components condition and strained cornering behaviour of double-stack cars. ([TSB Report R11T0162](#))

July 14, 2011. Kingston Subdivision, near Durham Junction, Ontario. 2 CN workers were repairing a section of track when a Via Rail train travelling on a track next to the track the workers were repairing hit and **killed one of the workers**. The TSB indicated the inappropriate use of the "Safety Watch" protocol was considered the primary factor in the fatality. The minimum required sight line at the accident location was 2,200 feet, whereas the actual sight line was less than 800 feet. **The TSB criticized CN for improper or no training regarding the "Safety Watch" procedure, and criticized Transport Canada for lax implementation of its overall responsibility for rail safety.** ([TSB Report R11T0161](#))

June 23, 2011. 10km south of Anzac, south of Fort McMurray, Alberta. CN train derailed and an **undisclosed amount of an undisclosed chemical leaked from 1 or more of the rail cars**. The extent of environmental damage was not disclosed. The Fort McMurray Fire Department, Environment Canada and Alberta Sustainable Resources were all at the scene. Few details were provided by CN officials. ([CHED News](#) June 24/11)

June 23, 2011. Edmonton, Alberta. 1 CN freight train collided with the tail end of a second stationary CN freight train along the main track near 50th Street and the Yellowhead Freeway. The collision resulted in the derailment and toppling of 2 intermodal flat cars and 1 of the locomotives sustaining damage. As well, 6 empty containers and 2 containers loaded with waste paper and metal scrap were damaged. The TSB reported that the moving train was traveling too fast considering the short sight line distance, and that the operating crew was fatigued. ([CBC News](#) June 23/11, TSB Report R11E0063)

June 3, 2011. Edmonton, Alberta. A moving CN freight train collided with the tail end of a stationary CN freight train. 2 intermodal flat cars from the stationary train derailed, and the lead locomotive in the moving train was damaged. The crew in the moving train did not have a long-enough clear and direct line of sight and did not reduce train speed accordingly before it collided with the stationary train. The TSB investigation report released October 18, 2012 on the collision read, *"In the absence of additional backup safety defences in signalled territory, when signal indications are not correctly identified or followed, existing defences may not be adequate to reduce the risk of collision and derailment."* The TSB has had an outstanding recommendation for more than a decade

regarding this problem and has identified it as an issue on its Watchlist which is a list of issues “the TSB has determined pose the most serious risk to Canada’s transportation system.” ([TSB News Release](#) Oct 18/12)

May 22, 2011. Sarnia Rail Yard, Ontario. 2 CN trains collided during switching operations in the yard. 6 tank cars carrying dangerous goods, a locomotive and 2 loaded bi-level auto carriers derailed. About 400 feet of track were damaged. Sarnia Fire and Rescue Services were on the scene and remained on site while CN crews cleaned up the mess. The TSB reported that train movement information was not properly communicated between yard coordinators and operating crews. ([The Observer](#) May 24/11, TSB Report R11T0113)

May 17, 2011. SW Strathcona County, near Edmonton, Alberta. A CN-caused wildfire burned several acres of a private conservation area – Bretona ConservAction Area. The Strathcona Fire Department and the landowner had to fight the fire and contain it to prevent the entire 100-acre conservation area from burning. The fire occurred only about 100m from the industrial rail yard built in 2010 as a joint project by CN, Cando Contracting Ltd. and Imperial Oil Ltd. to store 225 petroleum tank cars right next to 2 homes and 2 conservation areas. Had the fire spread into the rail yard, it would have been disastrous. CN has refused to compensate the landowner for damages resulting from the wildfire. ([Railroaded News Release](#) May 18/11)

May 8, 2011. Clover Bar Yard, Edmonton, Alberta. 4 freight cars jumped the tracks. CN did not share information on the contents of the derailed cars. ([CTV News](#) May 8/11)

April 24, 2011. Prince George CN Yard, British Columbia. A locomotive derailed and appeared to have crashed into cars that were full of coal. (250 News April 24/11)

April 22, 2011. Ikea (Sweden’s furniture giant), Tuxedo Yards Development Corp., and Seasons (Winnipeg) JV Corp. are suing CN Rail for unspecified damages to the property where Ikea’s new store was to be built in Winnipeg. More specifically, the suit claims CN has refused to remove fill and materials it dumped on the property over several decades. They also claim that while CN has removed the tracks, it didn’t take away the ballast used to construct the spur track, and it also left underground drainage pipes all over the property. As well, the companies allege that when a building CN built on the site was being demolished, they found the walls contained hazardous levels of asbestos in the vermiculite insulation. The companies claim they asked CN to remove the material, but finally did it on their own when CN didn’t. ([Winnipeg Free Press](#) April 27/11)

March 31, 2011. Symington Rail Yard, Winnipeg, Manitoba. 10 CN cars derailed and 1 of the toppled cars **spilled an undisclosed amount of gasoline.** (Winnipeg Free Press March 31/11)

March 27, 2011. East of Port Hope, Ontario. At least 25 CN cars in a 116-car train derailed. The derailment, considered “significant”, occurred on a main line and included spills of dangerous goods - jet fuel and propane. Booms were required in an attempt to contain the spills. A fire broke out and a “Red Alert” was issued through Emergency Management Ontario. A Red Alert means there is “a major risk to health, safety and security”. Families from 20 houses were forced to flee their homes. The rail corridor was also shut down. About 67,000 litres of spilled aviation fuel were eventually recovered,

while about 133,000 litres made their way into the local environment including the water system, causing undisclosed environmental damage. As with many other CN derailments across North America, CN did not allow the media near the vicinity of the spill to view clean up progress. Fuel spilled during the derailment on the shores of Lake Ontario continued to come up through a swamp area 19 months later. Production on 2 private farm properties was still not back to normal. Not only the farmland near the lake was affected, but the access roadways to them as well. Clean-up has included excavating and hauling away contaminated soil. It is not known whether CN has paid compensation to the farmers for damages. ([Toronto Star](#) March 27/11, [Northumberland Today](#) April 25/11, [Northumberland Today](#) Oct 4/12)

March 15, 2011. A U.S. Federal Appeals Court ruled unanimously that CN must honour conditions imposed by the U.S. Surface Transportation Board on CN's purchase of the Elgin Joliet & Eastern (EJ&E) Rail Line that runs between Illinois and Indiana. The decision means CN must pay \$68 million to cover the lion's share of costs in building 2 underpasses in the Chicago area to mitigate rail crossing traffic jams. CN has been battling with 33 communities along the EJ&E main line that are concerned about CN's aggressive approach to the EJ&E takeover. Communities have been concerned about increased rail traffic, increased noise and diesel exhaust pollution, adjacent property devaluation, and increased traffic jams at many rail crossings which have very significant impacts on emergency vehicle response times. ([Chicago Business](#) March 15/11)

March 11, 2011. A British Columbia Provincial Court convicted CN of an offence under the federal *Fisheries Act*. CN was sentenced to pay \$75,000 for spilling a deleterious substance – diesel fuel - into a fish-bearing river. In January 2009, Environment Canada was notified of a diesel slick near the confluence of Barker Creek and the Fraser River in B.C. Their investigation confirmed that the source was a fuel pumping station at the CN Rail Thornton Yards. ([Daily Commercial News](#) March 14/11)

End of Feb 2011. Kennedy Siding, Pine Pass, British Columbia. CN train carrying 16 propane cars derailed. ([250 News](#) Feb 26/11)

Feb 12, 2011. Fort Fraser, British Columbia. 36 of 104 loaded CN coal cars derailed on the main track. A rail car wheel fractured when a crack, which had been growing over a period of time, reached such a size that the wheel could no longer support normal service loads. 19 loaded CN coal cars went off the tracks on the same line near Caribou, B.C. December 21, 2011. (TSB Report R11V0039)

Feb 7, 2011. Mussey Township, St. Clair County, Michigan. 4 CN cars derailed, spilling ammonia nitrate, which is used as a fertilizer. CN did not disclose how much ammonia nitrate was spilled. ([The Times Herald](#) Feb 7/11)

Jan 6, 2011. Vernon Township, Michigan. A CN train that derailed spilled hydrochloric acid, forcing about 35 nearby residents to evacuate their homes. 12 of about 100 cars came off the tracks, including 4 that toppled over on their sides. 10 tank cars were loaded with toxic hydrochloric acid, 1 carried flammable ethanol and the other was a freight box car. At least 1 tank car with a capacity of 20,000 gallons spilled hydrochloric acid and a cloud of gas drifted into the surrounding area. Hydrochloric acid is toxic and can damage eyes, skin, lungs and other organs. Local authorities monitored air and water quality before lifting the evacuation notice. A CN public relations spokesperson

refused to share information on the health of the train crew, saying it is company policy not to discuss the status of employees. CN also did not disclose how much hydrochloric acid had spilled or the extent of environmental damage. ([Washington Post](#) Jan 7/11)

Jan 2, 2011. 10km west of Tête-Jaune Cache, British Columbia. 33 of 113 loaded CN coal cars derailed at a bend in the track next to the Fraser River, on their way to Prince Rupert. The derailed cars slid onto the riverbank, **spilling an undisclosed amount of coal.** (Each car carries up to 1 million kg of coal.) A small marsh that drains into the Fraser River was directly impacted by the spilled coal. Crews worked several days clearing up the mess and removing all the debris. A veteran CN employee said the derailment could have been caused by any number of rail defects. ([Rocky Mountain Goat](#) Jan 5/11)

Dec 27, 2010. Neenah Rail Yard, Wisconsin. Part of a 99-car CN train - 11 empty freight cars - derailed and 7 of them toppled over on the main line. An undisclosed length of track was damaged. ([Chicago Tribune](#) Dec 27/10)

Dec 21, 2010. The U.S. Surface Transportation Board fined CN \$250,000 for **intentionally under-reporting train blockages at railroad crossings along the EJ&E line between Illinois and Indiana. The decision was the first fine ever imposed on a railroad by the U.S. Surface Transportation Board.** The decision stated that an investigation into Canadian National's reporting of the blockages, *"supports the conclusion that CN has knowingly violated the Board's orders that CN report, on monthly and quarterly bases, the date and descriptive information for each crossing blockage exceeding 10 minutes in duration."* For example, U.S. Representative Judy Biggert indicated that CN had reported only 14 blocked crossings lasting 10 minutes or longer for a particular reporting period, whereas the actual number was 1,457, over 100 times the reported number. TRAC (The Regional Answer to Canadian National) stated, *"The STB decision brings to light a serious flaw in how railroads are regulated."* TRAC has indicated that more needs to be done to ensure that communities across the U.S. are not harmed by CN's lack of respect for U.S. citizens. ([nwtimes.com](#) Dec 21/10, several other sources)

Dec 10, 2010. Prichard, Alabama. At least 10 CN cars loaded with coal derailed and 3 overturned, **spilling an undisclosed amount of coal** and closing Highway 45. ([FELA Lawyer News](#) Dec 10/10)

Nov 27, 2010. Williams Lake, British Columbia. 2 locomotives derailed, disrupting traffic at a public crossing just north of a rail yard. ([Williams Lake Tribune](#) Dec 2/10)

Nov 21, 2010. Scotford Rail Yard, Fort Saskatchewan, Alberta. 14 CN cars fell off the track – 10 tank cars and 4 general freight cars - a short 3 months following a 43-car derailment in the same yard. Another CN derailment in the same yard April 6, 2005 involved a hydrogen peroxide spill. ([Fort Saskatchewan Record](#) Nov 25/10)

Nov 19, 2010. East of Vibank, Saskatchewan. 2 locomotives and 1 empty hopper car derailed, closing Highway 48 for 2 days while CN cleared the derailed locomotives and car, and repaired damages. ([Regina Leader Post](#) Nov 20/10)

Nov 5, 2010. SW Strathcona County, near Edmonton, Alberta. The first petroleum tank cars were moved in to an industrial rail yard joint ventured by Cando Contracting Ltd., CN and Imperial Oil Ltd. Construction of the new rail yard began June 21, 2010 and was

completed by late October. Up to 225 tank cars owned by Imperial Oil Ltd. are to be stored and moved in and out of the rail yard. The rail yard was built only 68m from one home and 163m from another home, and only 30m from 2 conservation areas. This violates minimum set-back distance requirements of the Railway Association of Canada, Federation of Canadian Municipalities and CN's own policy, all of which indicate that new rail yards are not to be built within 300m of any homes. Construction and operation of the rail yard also breaches federal transportation, railway safety and environmental legislation and regulations; Alberta environmental protection and drainage legislation; Canadian Rail Operating Rules; CN environmental policies; CN community relations policies; Imperial Oil environmental policies; and, Imperial Oil community relations policies. ([Railroaded News Release](#) July 21/10, [Railroaded News Release](#) Nov 8/10)

Oct 18, 2010. Kingston Subdivision, near Lancaster, Ontario. CN train derailed 18 cars on the main track, including 6 cars containing dangerous goods. An undisclosed amount of sodium cyanide (solid) was spilled. As a precautionary measure, residents in close vicinity to the accident site left their homes. About 1,000 feet of track were damaged or destroyed. The train consisted of 2 locomotives at the head of the train and 122 cars (59 loaded, 63 empty). It weighed 8,350 tons and was 7,105 feet long. The train derailed due to a rail roll-over partly attributable to improperly assembling the train. (TSB Report R10D0088)

Oct 10, 2010. New Haven, Michigan. About 3,000 gallons of diesel fuel spilled from a CN locomotive, causing undisclosed environmental damage. ([The Voice News](#) Oct 11/10)

Oct 8, 2010. Parry Sound, Ontario. CN train carrying dangerous goods derailed. 19 cars fell off the tracks, 15 of them containing extremely flammable propane and fuel oil. A major emergency response included evacuations, road closures and fire crew deployment. Many rail cars and 1,000 feet of track were damaged. About 40 gallons of fuel oil were spilled. ([Cottage Country Now](#) Oct 8/10)

Oct 2, 2010. Near Newbrook, NW of Edmonton, Alberta. 2 locomotives and 18 cars derailed on the way from Edmonton to Fort McMurray in a 1½ mile long train with 3 locomotives and 162 cars. ([Edmonton Journal](#) Oct 3/10)

Oct 1, 2010. Near Falding, Ontario. CN freight train derailed 21 cars on the main track. The derailed cars included 8 loaded tank cars containing liquefied petroleum gas and 7 loaded tank cars containing fuel oil. A number of homes in the vicinity of the derailment were evacuated. The TSB found that the train was not properly assembled, braking instructions were not properly followed, and the locomotive engineer was fatigued. (TSB Report R10T0213)

Sept 30, 2010. Brimson, North of Two Harbors, Minnesota. 2 CN ore trains collided after one of the trains carrying 116 cars full of taconite ore left a siding and entered the main track before getting permission. It later collided with a CN train with 118 empty rail cars. 3 locomotives and 14 cars derailed, all 5 crew members from both trains were injured, and the derailment resulted in over \$8 million in property damages. The NTSB blamed the collision on the loaded train entering the main line without permission and a lax CN policy on train right-of-way communication on a route without signals. ([Duluth News Tribune](#) Feb 12/13)

Aug 23, 2010. Saint-Maurice Subdivision, near Clova, Quebec. 17 CN cars (16 loaded and 1 empty) derailed and about half of the cars toppled over on their sides on the main track. About 1,300 feet of track were destroyed. The derailment zone covered a distance of about 1,300 feet. The derailed equipment consisted of 10 gondola cars loaded with wood chips, 1 covered hopper car (sodium cyanide residue), and 6 covered cars carrying newsprint. The train was made up of 5 locomotives and 95 cars (90 loaded and 5 empty), it weighed 13,100 tons and was 5,640 feet long. The derailment occurred when a track slid sideways as the train was passing over it. (TSB Report R10Q0037)

Aug 18, 2010. Scotford Rail Yard, Fort Saskatchewan, Alberta. 43 CN tank cars carrying 7 types of hazardous goods including diesel and liquefied petroleum gas derailed, many of them toppling over on their sides. The derailment occurred during switching operations - 1 CN train was shoving 50 loaded and 5 empty cars in the yard when the movement collided with 46 parked empty cars on the track. It is not known whether there were any hazardous products spilled or whether there was any environmental damage, as CN staff made sure no members of the public were allowed near the site. The TSB attributed the derailment to human error and to the poorly lit rail yard during a night time operation. Other CN derailments in the same yard include one April 6, 2005 and another one November 21, 2010 ([Edmonton Journal](#) Aug 19/10, [Railroaded News Release](#) Aug 19/10, TSB Report R10E0096)

July 31, 2010. 15km south of Lytton, British Columbia. A water bomber crashed in the Fraser Canyon while fighting a CN-caused wildfire, **killing the pilot and co-pilot.** ([FireFightersCloseCall.com](#) Aug 1/10)

July 21, 2010. 10km east of Prince George, British Columbia. 16 CN cars loaded with coal derailed.

July 20, 2010. Tk'emlups First Nation Reserve, near Kamloops, British Columbia. A fire investigator is confident that a CN engine in a rail yard ignited a large grass fire on the Tk'emlups First Nation Reserve. In 2009, the City of Kamloops billed CN for \$20,000 for firefighting when sparks from a train ignited a 3-day blaze. **These are just a few examples of the many fires caused annually by CN. Idling and slow-moving locomotives, such as in rail yards, pose particularly high fire hazards.** ([Kamloops Daily News](#) July 23/10)

July 6, 2010. Jasper Yard, Jasper, Alberta. A CN freight train collided with a Via passenger train while passengers were disembarking on the station track. The passenger train was pushed to a 45° angle. The CN locomotive and one of the Via passenger cars were damaged. The TSB attributed the accident to human error – improper communication between the 2 crews. (TSB Report R10E0080)

June 15-28, 2010. Between Sarnia, Ontario and Port Huron, Michigan. About 2,000 rail tank car loads of biodiesel were moved back and forth repeatedly across the Canada/U.S. border without unloading the cars. One CN worker said, *"In 25 years, I'd never done anything like it... The clerk told me it was some kind of money grab. We just did what we were told."* CN made \$2.6 million from the money-making scheme. ([UPI](#) Dec 3/12)

March 30, 2010. Pickering, Ontario. 9 cars of a 149-car CN train stretching 9,383 feet and weighing 12,166 tons jackknifed and derailed at the Pickering GO Station on the

main track. 1 car spilled a load of lumber and the fuel tank of one of the 3 locomotives was punctured and spilled 50 litres of diesel fuel which caught fire. Local residents were concerned about the sixth derailment in as many years along this section of track running from Whitby to Pickering. This is of particular concern to Canadians living next to railways, considering that 12% of all rail traffic carries dangerous goods, according to the Railway Association of Canada. In April 2011, the TSB issued a scathing investigation report faulting the way in which this latest train was assembled. The train was pulled by 3 locomotives, all located in the front of the train, a method the TSB has blamed for a number of other CN derailments involving these too-long and too-heavy trains. Following a similar CN derailment near Brighton, Ontario in 2009, CN had pledged to start building trains over 8,500 feet long by spacing locomotives throughout the train, a technique known as distributing power, which cuts down on in-train forces. The TSB has investigated 10 derailments that involved longer, heavier trains and excessive in-train forces. 9 of these were Canadian National trains. CN has the lowest safety level rating, 1 or 2 on a scale of 5. One of many reasons identified for this poor safety record is the lack of dialogue by CN management with its train operators and the general strained relationship between the railway union and CN management. A “culture of fear” is known to exist within CN, and workers are reluctant to bring safety risks to the attention of their supervisors for fear of reprisal. (TSB Report R10T0056, [The Toronto Star](#) March 31/10, [Financial Post](#) April 15/11, [Consider This](#) April 21/11)

March 2, 2010. Morrisburg, Ontario. CN train derailed 26 cars on the Kingston Subdivision main track. The train comprised 2 locomotives and 121 cars (53 loaded, 68 empty). It was 8,703 feet long and weighed 9,641 tons. About 1,400 feet of track, including 4 crossovers, were damaged. The TSB blamed the derailment on a cracked axle and insufficient inspections by CN. (TSB Report R10T0035)

Feb 25, 2010. St-Charles-de-Bellechasse, Quebec. A Via Rail passenger train on CN track entered a siding track at excessive speed resulting in 2 locomotives and 6 passenger cars derailing on the main track. 2 locomotive engineers and 5 passengers were injured. A house, garage and 6 motor vehicles were destroyed. Via passenger cars and siding track were also extensively damaged. About 3,000 litres of diesel fuel spilled from the derailed train, causing undisclosed environmental damage. The TSB reported the following factors as contributing to the derailment: snow accumulation, poor visibility, misinterpretation of the advance switching signal, and safety deficiencies related to medical testing for employees (slow transfer of medical information for locomotive engineers hired by Via Rail from CN and other railways). When the TSB investigation report was released March 6, 2012, TSB officials said Canadians have reason to fear rail safety because the rail industry and Transport Canada refuse to recognize the necessity of maintaining and in many cases improving rail safety measures. ([CTV News](#) March 6/12, [TSB News Release March 6/12](#), TSB Report R10Q0011)

Feb 9, 2010. MacMillan Yard, Toronto, Ontario. 2 CN cars derailed in the yard during switching operations. 1 of the cars, a tank car, broke into 2 sections and spilled its entire load of about 57,000 litres of ferric sulphate – a hazardous corrosive liquid - along the roadway and adjacent tracks. The extent of environmental damage from the spill was not disclosed. 3 additional cars were damaged. The TSB reported that the tank split in 2 due to a small fatigue crack at a weld seam that should have included a reinforcing pad. (TSB Report R10T0020)

Dec 5, 2009. Rivers Subdivision, near Spy Hill, Saskatchewan. A CN freight train derailed 36 cars on the main track, including 22 tank cars loaded with dangerous goods – liquefied propane, benzene, plastic pellets. An undisclosed quantity of dangerous goods was subsequently spilled, resulting in a fire which initially involved 34 of the cars and burned for 6 days. All residents within a 1.6-kilometre radius were evacuated. About 400 feet of track were destroyed. The extent of environmental damage was not disclosed. The train consisted of 2 locomotives at the head of the train and 168 cars (142 loaded, 26 empty). It weighed 12,423 tons and was over 2 miles long. The TSB determined the probable cause of the accident was the sudden failure of a rail that had persistent surface defects. (TSB Report R09W0252, several additional sources)

Nov 21, 2009. Lac-St-Jean Subdivision, Sainte-Tite, Quebec. A CN train derailed 10 cars (5 loaded and 5 empty) on the railway bridge across des Envies River. About 200 feet of the main track were damaged and one span of the bridge was destroyed. The train consisted of 2 locomotives and 11 cars (5 loaded and 6 empty). It weighed 1,250 tons and was 850 feet long. The derailment was caused by a fatigued rail on the bridge that had developed numerous defects over time. (TSB Report R09Q0047)

Nov 17, 2009. Yale Subdivision, near Komo, British Columbia. A CN freight train consisting of 1 locomotive, 45 loaded cars and 13 empty cars struck a debris slide of rock, mud and trees on the main track that derailed the locomotive and 3 cars loaded with copper concentrate. The train struck the slide, rode up and over it and came down on the other side where the locomotive rolled over onto its side. The first 3 cars behind the locomotive jackknifed and derailed. About 833 gallons of fuel were spilled from the locomotive, which overturned on its side, resulting in undisclosed environmental damage. The locomotive engineer sustained contusions and a laceration to his right leg. The conductor suffered a fractured right thumb and contusions. Both were taken by ambulance to the hospital in Hope. The train weighed 6,394 tons and was 3,519 feet long. (TSB Report R09V0235)

July 17, 2009. Limoilou Yard, Quebec City, Quebec. 5 CN tank cars derailed. A turnout and about 180 feet of track were damaged. Aviation fuel, which is extremely flammable and explosive, leaked from one of the tank cars. A safety perimeter was established around the derailment area. The Dufferin-Montmorency Highway and neighbouring public roads were closed to traffic. The derailment occurred when a track in one of the yard switches rolled over due to the lateral forces exerted by the heavy tank car wheels. (TSB Report R09Q0030)

June 28, 2009. Redditt Subdivision, Jones, Ontario. A CN train collided with the tail end of another CN train which was stopped on the main track. As a result of the collision, the 4 intermodal cars (six platforms in total) from the stationary train and the 3 locomotives from the moving train derailed. The locomotive engineer from the moving train was transported to hospital with injuries. The TSB reported miscommunication between the rail traffic controller and the operating crew of the moving train. (TSB Report R09W0118)

June 19, 2009. Cherry Valley, Illinois. 19 of 74 tank cars carrying flammable ethanol, derailed at a highway railway crossing where cars waited for the train to pass. 13 of the derailed cars were punctured, causing the ethanol to spill which exploded into a huge fireball. The train, hauling a total of 114 cars, was carrying about 2 million gallons of ethanol. One 44-year-old woman waiting at the railway crossing burned to death, and 9 to 11 others were injured (reports vary). The dead woman's husband was burned but

survived and her 19-year-old pregnant daughter was injured and lost her baby. 600 nearby homes were evacuated due to the intensity of the ethanol fire. About 60,000 gallons of ethanol spilled into a creek that flows into the Rock and Kishwaukee rivers, killing a minimum of 72,350 fish, many of which were game species. The Illinois Attorney General found CN Rail responsible for what was characterized as the single-largest fish kill that was not natural in the history of the state of Illinois. Monetary damages were estimated to total \$7.9 million. The NTSB investigation found a washout of the tracks, a failure of CN's emergency communications, and inadequate design of the tanker cars all contributed to the derailment and severity of the accident. The NTSB report released in February 2012 contained many more criticisms of CN. Associated Press research of U.S. statistics revealed that ethanol tank cars have been breached in at least 40 serious accidents between 2000 and mid-2012. An Illinois District County Court ordered CN to pay US\$36 million to settle 2 negligence lawsuits that revealed Canada's largest railway was negligent in the operation, maintenance and supervision of the train and track. ([Associated Press](#) Sept 12/12, [Rock River Times](#) June 6/12, NTSB Report RAR-12-01)

May 22, 2009. CN Walker Yard, Edmonton, Alberta. A fire broke out in the rail yard and was contained within about an hour. Generally, rail yards pose high fire risks because extremely flammable diesel fuel, oil, grease and solvents leak and drip all over the ground from locomotives and rail cars. As well, tank cars carrying flammable products often ignite during derailments and spills in rail yards. ([Edmonton Sun](#) May 23/09)

May 19, 2009. Becancour, Quebec. A stub sill was reported broken on a tank car loaded with chlorine at a chemical plant. (A stub sill is part of the frame which connects the tank cars.) Based on this particular type of fault, the TSB warned, "that tens of thousands of faulty railway cars may be in operation, hauling dangerous goods across Canada". (TSB Report R09W0016)

March 21, 2009. Kingston Subdivision, near Brighton, Ontario. 6 of 137 CN rail cars were ripped off the main track - 3 carrying hazardous materials - after the train, which stretched nearly 2.7km, came to an unexpected and abrupt stop. This forced some of the heavier loaded cars in the back of the train to crash into some lighter empty ones closer to the front, causing the knuckle on the 107th car to break. CN and others have been realizing significant cost savings by increasing the length and weight of their trains, and by improperly assembling them, but at the same time this practice is compromising safety. As a result of the increasing number of derailments of too-long, too-heavy and improperly assembled trains, the federal government launched a 2-year study in an attempt to develop regulations to address the problem. (TSB Report R09T0092)

Feb 13, 2009. Allanwater Subdivision, Robinson, Ontario. A CN freight train derailed 2 locomotives and 29 cars on the main track. The derailed cars included a load of sodium chlorate and 2 loads of propane. The derailed cars struck an 800-gallon wayside propane tank that fuelled a switch heater, puncturing it and igniting an explosion and fire. The fire engulfed most of the derailment site, including approximately 15 of the 29 derailed cars. 2 tank cars of lard and a carload of lumber were consumed in the fire. Several bulldozers and large backhoes were brought to the accident site to contain the fire and to work on restoring the rail line. The heavy equipment spread the damaged rolling stock about the site and covered it in snow in an effort to extinguish the fire, which burned for about 24 hours. The train consisted of 2 locomotives at the head of the train and 94 cars. It weighed 10,386 tons and was 6,061 feet long. The TSB was unable to

determine the cause of the derailment because the wrecking and restoration work had commenced without TSB consent. (TSB Report R09W0033)

Jan 14, 2009. Near Dugald, Manitoba. A faulty stub sill went undetected, allowing a tank car loaded with 51,500 pounds of flammable liquid propylene to separate from the rest of the train before coming to a stop. (A stub sill is part of the frame which connects the tank cars.) In a scathing report issued August 25, 2010, the TSB said the lack of formal protocols to record and report stub sill failures may prevent other broken parts from being found before the next accident. **The TSB warned “that tens of thousands of faulty railway cars may be in operation, hauling dangerous goods across Canada”.** The TSB continued, *“Approximately 41,000 cars within the North American tank car fleet are equipped with this model of stub sills, and approximately 35,000 of them are in dangerous goods service... These numbers are alarming and must not be ignored.”* Adding to the concern, Transport Canada, the regulator, was either unaware of, or had limited information regarding, stub sill failures so the problem has gone undetected. The TSB strongly suggested Transport Canada take the lead in coordinating with the railway industry and other North American regulators on the issue of reporting stub sill failures. (This does not appear to have been done.) **Adding to the risk, the TSB said today’s trains are longer and heavier than ever, making them more difficult to control.** Alarming, stub sills manufactured according to older design criteria may be more susceptible to failure in the current operating environment of longer heavier trains. Prior to the mid-1990’s, an average train in main-track service was about 5,000 feet long and weighed 6,000 to 7,000 tons. Following the privatization of CN in 1995, some of the trains are now over 12,000 feet long and weigh more than 10,000 tons. ([TSB News Release](#) Aug 25/10, TSB Report R09W0016)

Dec 31, 2008. Drummondville Substation, near Villeroy, Quebec. 33 CN cars derailed on the main track - 7 empty tank cars, 6 empty box cars and 20 loaded covered hopper cars. 2 main-track turnouts were damaged. A switch heater gas line was severed, causing about **2,000 gallons of propane gas to leak into the air.** About 500 feet of track were destroyed. The train consisted of 3 locomotives and 115 cars (70 loaded and 45 empty), weighed 10,800 tons and was 7,000 feet long. The local fire department was advised by local residents of the accident, arrived on the scene shortly thereafter, and established a safety perimeter, evacuating about 70 residents from the area as a precaution. The TSB reported that the train derailed when the switch heel block joint failed under the weight of the train, and that a simple wrench test would have detected the loose switch bolts. (TSB Report R08Q0028)

Dec 18, 2008. Edson Subdivision, Peers, Alberta. A CN freight train weighing 9,444 tons and 8,244 feet long derailed 48 of its 147 cars on the main track. The derailed cars included 16 loaded hopper cars, 7 loaded centre beam bulkhead flat cars, 3 loaded box cars, 12 empty covered hopper cars, a loaded gondola, and 9 tank cars carrying residue. The first 6 derailed cars had left the track on the high side of a curve. The following 42 cars were derailed on both sides of the track. About 1,715 feet of main track were damaged. The TSB reported that, as the train was travelling through the curve, the high rail likely broke under the 21st car or one of the adjacent cars due to heavy loads and in-service forces. (TSB Report R08E0150)

Oct 21 & 22, 2008. Symington Yard, Winnipeg, Manitoba. 3 CN cars derailed in the yard on October 21. On October 22, a CN mechanical crew was cleaning up the derailment site. While one of the clean up crew members was monitoring a crane that was lifting a

derailed car, the employee was struck by a locomotive that was in switching operation right next to the derailment work site. **The employee, who suffered a broken wrist, a facial laceration and a bruised knee, was taken to the hospital.** The TSB questioned why CN decided to resume normal switching operations so quickly and so close to the derailment site where clean up activities were underway. This resulted in reducing the physical space available to the clean up crew and, therefore, the level of protection. The locomotive struck the employee because the physical space required to conduct re-railing activities was insufficient. (TSB Report R08W0219)

Oct 1, 2008. Near Hamiota, Manitoba. 11 empty cars of a 153-car CN train derailed, causing major damage to both the rail lines and the cars. ([TCRC76](#) Oct 2/08)

July 3, 2008. CN Bedford Subdivision, Halifax, Nova Scotia. A Via Rail train was moving westward exiting a loop track. At the same time a CN train was reversing eastward toward Halifax Ocean Terminals. In an area where sightlines were restricted due to the curvature of the track and a rock cut, the 2 trains collided. As a result of the collision, 2 locomotives, a baggage car and 5 coaches of the Via train were severely damaged. There was also some track damage. (TSB Report R08M0063)

June 23, 2008. Wabamun, Alberta. A stub sill on a tank car completely severed from the car during normal CN train operation. The car was scrapped with, unfortunately, no record of the stub sill failure which could have helped fix the problem on many other tank cars carrying dangerous goods. (A stub sill is part of the frame which connects the tank cars.) Based on this particular type of fault, the TSB warned, *“that tens of thousands of faulty railway cars may be in operation, hauling dangerous goods across Canada”*. (TSB Report R09W0016)

May 2008. Standing Committee on Transport, Infrastructure & Communities released its report on Rail Safety in Canada. The report was particularly critical of CN's carrying out of safety standards and manner of reporting safety issues. The Committee wrote, **“Due to the frequency of rail accidents in Canada in the last few years, notably in British Columbia, Alberta, Ontario and Quebec, there is a concern that the rate of accidents is on the rise. The repercussion from these accidents has been severe in terms of human fatalities and environmental damage.”** The Committee remained concerned about both the increase in main track derailments and the need for better rail safety generally across the country. There is a lack of accountability by both Transport Canada and the railroads with regard to rail safety. Transport Canada is not accountable enough in enforcing safety regulations, ensuring the implementation of safety procedures is more consistent across the country, conducting safety audits and making safety audit results public. Transport Canada needs more resources and needs a more hands on approach to rigorous inspection programs and to enforcing safety regulations. The railways, particularly CN, were criticized for the lack of meaningful management-employee consultations, poor crew training, poor employee fatigue management, and poor prioritizing and carrying out of safety procedures. The Committee also criticized Transport Canada and the railways for the serious delays in implementing the Safety Management Systems, developed 7 years earlier. **On a scale of 1 to 5, with 5 being the optimal level, CN was at level 1 or 2, CP at 3 and Via Rail at 4 in terms of progress to properly implement the Safety Management Systems. CN employees were reluctant to report safety violations, for fear of reprisals from the company, and stated they were working within a “culture of fear”.** The fear of discipline for reporting safety violations was viewed by CN employees as a major deterrent to reporting such violations. The Standing

Committee developed 14 recommendations to address the above-mentioned shortcomings. ([Standing Committee Report](#) May 2008, [Maclean's](#) July 7/08)

Feb 18, 2008. Oakville Substation, Aldershot, Ontario. 20 CN cars derailed including 5 residue tank cars - 3 containing sulphuric acid residue and 2 containing sodium hydroxide residue. There was significant structural damage to a neighbouring industrial building. The train consisted of 3 locomotives and 139 cars (79 loaded, 43 empty, and 17 residue tank cars). It weighed 11,908 tonnes and was 8,027 feet long. The TSB reported that a rail car wheel broke while the train was moving through a curve in the track. The wheel was defective and had been deteriorating for some time. The TSB said without an appropriate quality assurance process for inspecting wheels, derailments will continue. (TSB Report R08T0029)

Oct 30, 2007. Malport, Ontario. A CN freight train derailed while stopping to set off a block of intermodal cars. The train consisted of 4 locomotives at the head of the train and 131 cars (59 loaded and 72 empty), was 7,839 feet long and weighed 7,810 tons. 32 cars derailed and about 2,500 feet of track were destroyed or damaged. The TSB investigation determined that weakened track rolled over, initiating the derailment. The derailment actually consisted of 2 separate derailments, an initial one involving only 2 cars, and then a subsequent one that resulted in other derailed cars continuing to spread rail until the added drag finally brought the train to a stop. (TSB Report R07T0323)

Oct 27, 2007. Edson Subdivision, Peers, Alberta. A CN train did not stop prior to a stop signal on the main track and collided with a second CN train that was entering the siding. As a result of the collision, the locomotives and 22 cars of the train that could not stop derailed; 10 other cars were damaged but did not derail. 5 cars on the train that was hit derailed and 4 other cars were damaged but did not derail. The TSB reported that the locomotive engineer in the train that failed to heed the stop signal was fatigued. **The report said despite previously-acquired knowledge on employee fatigue, the countermeasures that CN had in place were ineffective.** In view of the severity of the accident and the availability of other crews at that location, consideration should have been given to relieving the crew from the train that missed the stop signal. (TSB Report R07E0129)

Sept 17, 2007. Halton Subdivision, MacMillan Yard, Toronto, Ontario. A CN train remotely controlled by Beltpack and consisting of 67 loaded cars and 30 empties side-collided with the tail end of a second CN train. 2 locomotives and 2 cars from the remotely controlled train derailed. 6 cars on the other train derailed and/or sustained damage, including 2 special dangerous goods tank cars containing chlorine gas. Both of these cars were severely damaged. **About 3,785 litres of diesel fuel spilled from the derailed locomotives and seeped into the ground.** About 3,000 litres of diesel fuel were reported to have been recovered and 4 tons of contaminated soil was removed. The extent of environmental damage was not disclosed. The remotely controlled train weighed 9,054 tons and was 5,914 feet long. The TSB reported that the new conductor operating the train by Beltpack remote control had inadequate training and experience for switching long, heavy trains by remote control. **The TSB also indicated that the train was actually too long and too heavy to be operated by remote control at all.** (TSB Report R07T0270)

Sept 17, 2007. 48km east of Terrace, British Columbia. 29 of 99 grain cars derailed on CN's northern B.C. main line. ([Business Edge](#) May 10/07)

Aug 4, 2007. Chetwynd Subdivision, CN Yard, Prince George, British Columbia. During a switching operation in the yard located on the banks of the Fraser River, a CN train remote controlled by a Beltpack and pulling 53 loaded cars struck a second CN train which was entering the yard. The remote controlled train struck a car loaded with gasoline, derailing it as well as the adjacent car also loaded with gasoline. 2 locomotives, a yard slug unit (a car that provides traction and braking effort to a locomotive) and a centre beam flatcar loaded with lumber in the remote controlled train derailed. A massive fire broke out, burning and destroying the 2 tank cars loaded with gasoline, the centre beam flatcar, as well as the 2 locomotives and slug unit of the remote controlled train. About 172,600 litres of fuel (1,600 litres of diesel and 171,000 litres of gasoline) were spilled, some of which was consumed by the fire. Water bombers were called in to help fight the fire. Health officials issued a voluntary evacuation order for nearby residents. An undisclosed amount of gasoline also spilled into the nearby Fraser River as slicks were seen swirling downstream. The extent of environmental damage was not disclosed. The TSB investigation reported that the CN staff operating the train by remote control Beltpack were inadequately trained and had no experience switching long, heavy trains by remote control. ([CBC News](#) Aug 4/07, TSB Report R07V0213)

April 28, 2007. Kingston Subdivision, Cobourg, Ontario. A CN freight train derailed a Herzog track maintenance machine and 21 empty multi-level cars on the main track. During the derailment, the fuel tank on the Herzog maintenance unit was punctured, spilling about 9,084 litres of diesel fuel. The fuel ignited, setting fire to the Herzog unit and about 1,000 feet of track structure, including the Burnham Street level crossing. The local fire department responded and extinguished the fire. The train consisted of 3 locomotives at the head of the train and a mix of 84 empty and loaded cars. It was 9,602 feet long and weighed 9,000 tons. The TSB investigation determined that the marshalling of the train, with placement of a car equipped with non-standard couplers at the head-end of a train with significant trailing tonnage, was a contributing factor to the accident. A quote from the TSB report read, *"CN's train design planning system does not take weight distribution within the train into consideration when the train service plan is produced. In comparison, other Canadian railway companies require that freight trains be made up...with the loads marshalled closest to the locomotives to reduce the probability of undesirable track/train dynamics occurrences."* The TSB also wrote, *"Despite a recent derailment under similar circumstances where Canadian National investigators were made aware of the unique coupler design of the Herzog machine, the machine was allowed to be marshalled in trains without additional restrictions."* (TSB Report R07T0110)

March 29, 2007. North of Huntington, Quebec. A CN freight train derailed 8 cars on the main track. 4 of the derailed cars were tank cars loaded with sulphuric acid (a dangerous good), 2 cars were loaded with wood products and 2 cars were loaded with paper. 6 of the cars, including 3 of the tank cars loaded with sulphuric acid, flipped over on their sides down an embankment. The train consisted of 2 locomotives and 80 cars (78 loaded and 2 empty). It was 4,771 feet long and weighed 10,382 tons. About 1,200 feet of track were damaged. In some places the track had buckled and was forced laterally up to 2 feet. The TSB reported the rail anchoring condition was poor and may have contributed to the derailment. (TSB Report R07D0030)

March 12, 2007. Queen's switch, Kingston, Ontario. CN freight train derailed 32 cars. (Colin Churcher's Railway Pages)

March 7, 2007. Chicago, Illinois. The crew of a CN train left 2 locomotives, which had only air brakes applied, on a grade at CN's Lumber Street interchange. The 2 uncontrolled and unmanned locomotives rolled about 1,789 feet along CN's track and onto Amtrak's track where they collided with the lead locomotive of a standing Northern Illinois Regional Commuter Railroad (Metra) train. About 55 passengers were aboard the eighth Metra passenger car at the time of the collision. The other 7 passenger cars were empty. 7 passengers and the Metra engineer and assistant conductor were transported to area hospitals with minor injuries. The total property damage was estimated to be \$75,766. The NTSB determined the probable cause of the collision was the failure of the CN engineer and conductor to properly secure the CN locomotives before leaving them unattended. (NTSB Report RAB-07-04)

March 3, 2007. Napadogan Subdivision, Juniper, New Brunswick. A CN freight train derailed 18 cars, including 3 dangerous goods tank cars (liquefied petroleum gas residue) on the main track. The derailed equipment consisted of 12 empty covered hopper cars, 2 tank cars that contained non-dangerous goods residue, and 3 tank cars which contained liquefied petroleum gas residue. They had detached from the train and piled up on either side of the main track. 10 of the cars were destroyed. The 3 liquefied petroleum gas tank cars experienced some jacket damage. Rail car wheel sets were strewn about the derailment site. There were more than 50 broken rails in the 14 miles between Juniper and the accident site. Damaged infrastructure included 2 switches, a hot box detector and its associated bungalow, a private crossing for a logging road, as well as 14 miles of track. The train consisted of 3 locomotives and 100 cars (42 loaded, 49 empty, and 9 with residues), weighed 7,600 tons, and was 6,850 feet long. The TSB reported the train derailed following the fracture of a wheel caused by the improper functioning of the car's air brakes due to a stuck slide valve on the service portion. (TSB Report R07M0017)

Feb 13, 2007. Sprague Subdivision, Symington Yard, Winnipeg, Manitoba. A CN train remote controlled by a Beltpack was accidentally made to travel westward during a switching operation when the operator meant to send the train eastward. The remote controlled train sideswiped a second CN train that was outbound. 4 empty covered hopper cars from the remote controlled train derailed. A total of 9 cars were damaged. The first 2 derailed cars were on their side, the third car came to rest at a 45° angle and the fourth derailed car remained upright. On the outbound train, 3 covered hopper cars loaded with grain and 1 empty covered hopper car were damaged. As well, a stationary empty auto rack car, which was stored on an adjacent track, was damaged. The TSB warned that greater care was required by CN operators who control trains in rail yards with remote controls. In this particular case, the operator was sitting in a motor vehicle that was travelling away from the train which made it very difficult to visually monitor the train he was operating by remote control. (TSB Report R07W0042).

Feb 12, 2007. Drummondville Subdivision, near Drummondville, Quebec. 8 of 105 cars in a CN freight train derailed when a knuckle on the 75th car broke. 1 of the derailed cars was a tank car with aviation fuel residue. About 850 feet of track were damaged. The train was pulled by 5 locomotives all located at the front end of the train, was 7,006 feet long and weighed 10,815 tons. The TSB investigation determined that the improperly assembled train (empty cars ahead of loaded cars) contributed to the derailment. CN and others have been realizing significant cost savings by increasing the length and weight of their trains, and by improperly assembling them, but at the same time this practice is compromising safety. (TSB Report R07D0009)

Jan 7, 2007. Montmagny Subdivision, Montmagny, Quebec. A CN freight train derailed 24 cars (19 loaded and 5 empty) on the main track. 4 of the derailed tank cars contained sulphuric acid, a dangerous good. 1 of these cars was damaged which created a risk because it was located on a bridge over a river. The rest of the derailed cars included: 3 tank cars loaded with non-dangerous liquids, 4 centre beam flat cars, 2 automobile carriers, and 11 covered hopper cars. These cars were derailed in an accordion pattern across the main track, the station platform, and into the street behind the station. A workshop trailer owned by CN was destroyed, and the Via Rail station building and 2 inhabited houses were damaged. About 600 feet of track, a main-track turnout, numerous switch parts, the deck and the west span of the bridge over the Rivière du Sud were also damaged. The train consisted of 3 locomotives and 122 cars (72 loaded and 50 empty), weighed 10,587 tons and was 8,384 feet long. The TSB reported that the train derailed when a switch point rail broke under the train. The TSB also suggested that, considering all the derailments in Canada, perhaps there is a need for tracks to be maintained at a level higher than that required by the *Railway Track Safety Rules*. (TSB Report R07Q0001)

Nov 11, 2006. Kingston Subdivision, Moira, Ontario. A spike puller operator on contract to CN was fatally injured while attempting to perform repairs to his Nordco Grabber Model A Spike Puller. The accident occurred when the right side joystick controller of the spike puller was inadvertently activated, causing the right-hand roller frame assembly to drop rapidly onto the machine operator underneath the machine. (TSB Report R06T0281)

Aug 27, 2006. Lac-Saint-Jean Subdivision, Chambord, Quebec. A CN freight train derailed 12 cars, 5 loaded and 7 empty, on the main track. The derailed equipment consisted of 4 gondola cars loaded with wood chips, 1 tank car loaded with a flammable liquid, 4 empty box cars, and 3 empty gondola cars. About 1,400 feet of track were damaged. The train consisted of 2 locomotives and 93 cars (20 loaded, 73 empty), weighed 4,980 tons and was 6,140 feet long. The TSB reported that the derailment was caused by wheel lift on a loaded wood chip car negotiating a curve in the track. As the car ran derailed, it damaged the track, leading to the derailment of 11 other cars. The TSB also reported on asymmetrical loading of car contents as a contributing factor. (TSB Report R06Q0096)

July 14, 2006. Oakville Subdivision, Mimico, Ontario. A CN freight train derailed 7 cars on the main track as it was passing over a switch. Derailed equipment fouled the 3 main tracks. The train derailed at a track buckle in an area of track that had undergone recent upgrades in the form of a new turnout installation and track resurfacing. In addition to the buckled track and damaged turnout, about 650 feet of the 3 main-line tracks were damaged during the derailment. The TSB attributed the derailment to track buckling caused by inadequate rail anchoring. (TSB Report R06T0153)

June 29, 2006. Lillooet Subdivision, near Lillooet, British Columbia. A CN freight train consisting of 1 locomotive and 1 car loaded with lumber derailed after losing control while descending a steep grade near Lillooet. When the crew realized the train was in a runaway situation, the conductor decoupled the loaded lumber car from the locomotive, climbed onto the car and began to make his way over the lumber to apply the hand brake located on the other end of the car. With the connection between the locomotive and the car severed, the 2 began to separate. Having separated from the locomotive by

about 200 feet, the car derailed to the outside of a curve. **The conductor was thrown from the derailed car and was killed.** The lumber car came to rest about 1,000 feet below the rail right-of-way. The locomotive continued to accelerate. At a curve in the track, the locomotive derailed and slid about 800 feet down the mountain. **The trainman was thrown from the locomotive and sustained fatal injuries. The locomotive engineer was thrown off and sustained serious injuries.** The locomotive came to rest about 800 feet below the rail right-of-way. The TSB report contained many criticisms of CN and many recommendations to improve the safety of train travel in steep mountainous terrain. Brake shoe friction fade on the lumber car may well have contributed to the derailment. The TSB expressed concern that Transport Canada and CN had not followed the lead by the Association of American Railroads in improving brake shoe design for heavier cars, and that heavier cars in Canada will continue to be operated using brake shoes designed to an older specification. CN employees had also previously raised concerns about the use of non-Dynamic Brake-equipped locomotives in steep mountainous territory such as Lillooet, but these concerns were not relayed to CN management. **The TSB criticized CN for the failure of its safety management system to identify and mitigate risks in steep mountainous terrain and recommended that Transport Canada require CN to do so.** Many local residents and ex-B.C. Rail employees criticized CN for not becoming better prepared for the added risks of rail travel in mountainous terrain when they bought B.C. Rail in 2004. (TSB Report R06V0136, several other sources)

June 4, 2006. Joliette Subdivision, Charette, Quebec. A CN freight train derailed 14 cars (10 loaded and 4 empty) on the main track, including 7 cars loaded with dangerous goods, while exiting a bridge. The dangerous goods cars included 2 cars loaded with gasoline, 3 cars loaded with fuel oil and 2 cars loaded with sulphuric acid. **About 233,000 litres of hydrocarbons spilled from 3 tank cars and about 160,000 litres flowed down the river valley and into the Rivière du Loup right next to the derailment.** Local fire and police departments; Environment Canada; the Canadian Forest Service; and Quebec Sustainable Development, Environment and Parks responded to the accident. Containment barriers were constructed in an attempt to slow the flow of the remaining hydrocarbons into the river. Skimmers and booms were installed on the Rivière du Loup in an attempt to collect hydrocarbons near the derailment site and downstream near the St. Lawrence River. Because the first responders arrived after most of the hydrocarbons had entered into the Rivière du Loup, only about 73,000 of the 233,000 litres of hydrocarbons were recovered. Spilled liquids continued being collected through the following winter months. The spill negatively impacted the bird and fish life along the Rivière du Loup. The train consisted of 3 locomotives and 142 cars; it was 6,760 feet long and weighed 12,290 tons. The TSB reported that rotting and otherwise deteriorating track ties and a lack of rail anchors were major contributors to the derailment and spill. (TSB Report R06Q0054)

May 21, 2006. Kamloops Yard, Kamloops, British Columbia. A CN train involved in a switching operation in the yard collided with an unoccupied Rocky Mountaineer Vacations (RMV) passenger train moving into the yard. 4 passenger cars derailed and the CN locomotive was heavily damaged. The CN train was 2,600 feet long, weighed 3,952 tons and consisted of 2 locomotives pulling 28 loaded and 13 empty cars. The TSB reported that the speed of the CN train and distance to the RMV train, along with the weight and lack of braking power on the trailing cars, resulted in the CN train being unable to stop before colliding with the RMV train. Although the CN train did not exceed 15 mph, the movement was unable to stop within one-half the range of vision of

equipment as required by Canadian Rail Operating Rule 105. Communications between the rail traffic coordinator and train crews and between the 2 crews involved were inadequate to assist the crews in identifying each other's whereabouts. (TSB Report R06V0111)

May 15, 2006. Lac-Saint-Jean Subdivision, near Lac Bouchette, Quebec. A CN freight train derailed 18 cars (16 loaded, 2 empty) at a curve on the main track. The train consisted of 3 locomotives and 75 cars (72 loaded, 3 empty), weighed 8,780 tons and was 4,750 feet long. The TSB reported that the design and loading of the first 3 derailed cars contributed to the derailment and speculated that there must have been a warp in the track. (TSB Report R06Q0046)

Aug 5, 2005. Squamish Subdivision, north of Squamish, British Columbia. 9 CN Rail cars (1 loaded and 8 empty) flipped off the tracks, **spilling 40,000 litres of toxic caustic soda (sodium hydroxide) into the Cheakamus River.** The chemical compound stripped the river of oxygen and had a devastating impact on the river's fish population. All free-swimming fish occupying the river at the time of the spill were killed. **More than 500,000 adult and young salmon, steelhead, trout and other fish species were killed. Fish died of suffocation from skin burns and gill haemorrhaging. British Columbia Environment staff said the spill decimated the river's fish population.** Angling closures were issued on the Cheakamus and Mamquam rivers and a portion of the Squamish River in an attempt to help fish populations repopulate the sections impacted by the spill. Birds and mammals that relied on Cheakamus River salmon for food were also negatively impacted by the toxic spill. **CN was assessed about \$200,000 for river clean up costs and was charged twice under the federal *Fisheries Act* and 3 times under the B.C. *Environmental Management Act*, which resulted in fines.** The train consisted of 5 locomotives at the head of the train, 144 cars (3 loaded and 141 empty), and 2 locomotives behind the 101st car. It was 9,340 feet long and weighed 5,002 tons. **The TSB blamed the derailment on human error, poor supervision, use of a too-long train and an improperly assembled train.** (TSB Report R05V0141, Canada.com Aug 4/07, several other sources)

Aug 3, 2005. Edson Subdivision, Wabamun Lake, west of Edmonton, Alberta. 43 CN cars derailed along the shoreline of Wabamun Lake, **spilling 1.3 million litres of heavy bunker C fuel oil that quickly spread across the lake.** 100 Wabamun Lake residents blockaded the CN tracks for 5 hours to protest insufficient action by CN to contain or clean up the spill. Oil-slicked birds and other wildlife plus the oil-soaked lake shoreline became instant national news. 4 days later, CN revealed that **700,000 litres of Imperial Pole Treating Oil had also spilled into the lake.** This hazardous chemical contained naphthalene and other polycyclic aromatic hydrocarbons that are highly toxic and linked to cancer. People who lived nearby were forced to evacuate their homes and cottages. Hundreds of oil-soaked birds died. Wabamun Lake is a popular angling lake, and fish were negatively impacted. **CN spent an estimated \$28 million attempting to clean up the mess, with remaining costs covered by insurance. CN was forced into a compensation program for those whose properties were damaged. In May 2009, CN pleaded guilty to 3 charges, one under Alberta's *Environmental Protection and Enhancement Act* for failing to take all reasonable measures to contain and remedy the spill, one under the federal *Fisheries Act*, and a third under the federal *Migratory Birds Convention Act*. Fines issued by the court totaled \$1.4 million, which many Albertans did not think was sufficient, considering the magnitude of environmental damages, and considering it appeared that CN was more concerned about opening their track again than in containing and cleaning up the spilled dangerous goods.** The train consisted of 3 locomotives, 117 loaded cars,

13 residue cars, and 10 empty cars. It was 8,547 feet long and weighed 15,562 tons. The TSB reported that a defective rail caused the train to fall off the tracks. (Wikipedia, TSB Report R05E0059, several other sources)

July 31, 2005. Val-d'Or Subdivision, Val-d'Or, Quebec. A CN freight train derailed 9 cars on the main track. 7 of the derailed cars were bulkhead flat cars loaded with logs, and 2 were gondola cars loaded with copper concentrate. 7 of the derailed cars flipped over on their sides and all 9 derailed cars were damaged. 1 wye track was destroyed, and 450 feet of main and wye track were damaged. The train was powered by 2 locomotives, and was hauling 26 loaded cars, 10 empty cars and 19 residue cars. It was 2,940 feet in length and weighed 3,800 tons. The TSB reported the accident occurred when a 25-year-old roller bearing on one of the bulkhead flat cars that derailed overheated and seized. (TSB Report R05Q0033)

July 13, 2005. Three Hills Subdivision, Sarcee Yard, Calgary, Alberta. A CN freight train derailed 2 cars in the yard, which fouled a switch and resulted in the following loaded tank car being hit by 2 locomotives of another train that was operated by Beltpack remote control. The collision punctured the tank car, spilling about 106,800 litres of aviation fuel onto the ground. Diesel fuel also spilled from one of the remote controlled locomotives' punctured fuel tanks. The extent of environmental damage was not disclosed. The 2 remote controlled locomotives also derailed. There was extensive damage to the 2 derailed locomotives, the 2 derailed cars, and another empty gondola car. Crossover switches, connecting track and about 300 feet of the yard lead track were destroyed. Calgary police and fire services controlled the site and protected against a potential fire hazard. 4 nearby businesses were evacuated as a precaution. The TSB reported that an improperly assembled train with empty cars ahead of loaded cars contributed to the derailment. Because CN did not investigate nor report to the TSB a prior, similar derailment at the same location, an opportunity was lost to review and identify safety deficiencies. (TSB Report R05C0116)

July 10, 2005. CN Yazoo Subdivision, Anding, Mississippi. 2 CN freight trains collided head on. The collision resulted in the derailment of 6 locomotives and 17 cars. About 15,000 gallons of diesel fuel were spilled from the locomotives and resulted in a fire that burned for about 15 hours. 2 crew members were on each train; all 4 were killed. As a precaution, about 100 Anding residents were evacuated. 7 residue tank cars containing hazardous materials were among the cars that derailed. 5 of those cars contained propylene residue, 1 contained isopropylamine residue, and 1 contained carbamate pesticide residue. 1 or more of the propylene tank cars vented due to pressure buildup from the extreme heat of the diesel fuel fire. CN provided the following cost estimates: \$9.6 million for equipment (locomotives and cars); \$65,000 for track and signals; \$316,800 for lading and environmental cleanup; and \$300,000 for wreck clearing. Property damage associated with the accident totaled \$9,665,000. Clearing and environmental cleanup costs totaled \$616,800. The extent of environmental damage was not disclosed. The NTSB determined that the probable cause of the collision was the failure of the northbound train to stop at a red signal, possibly due to crew fatigue. Contributing to the accident was the absence of a positive train control system that would have stopped the northbound train before it exceeded its authorized limits. Also contributing to the accident was the lack of an alerter on the lead locomotive that may have prompted the crew to be more attentive to their operation of the train. (NTSB Report RAR-07-01)

July 4, 2005. Kingston Subdivision, Prescott, Ontario. A CN freight train derailed all 51 of its cars on the main track. All of the cars toppled over on their sides. All of the cars contained hydrocarbon residue. **2 cars spilled gasoline and released nitrogen vapours.** All of the cars were damaged and about 2,000 feet of main track were destroyed. The train consisted of 2 locomotives and 51 cars; the first 17 cars contained fuel oil residue and the trailing 34 cars contained gasoline residue. The train was 3,180 feet long and weighed 2,240 tons. The TSB reported the derailment was caused when a track moved out of alignment. Another contributing factor was a buckled track resulting from laying the track in cold weather. (TSB Report R05H0013)

April 6 2005. Scotford Rail Yard, Fort Saskatchewan, Alberta. An undisclosed amount of hydrogen peroxide spilled out of an overturned car when 8 CN tank cars of a 98-car train derailed. Other CN derailments in the same rail yard include one August 18, 2010 and another one November 21, 2010. ([Fort Saskatchewan Record](#) April 8/05)

Feb 23, 2005. Drummondville Subdivision, near Saint-Cyrille, Quebec. A CN freight train derailed 29 cars on the main track. 28 cars were destroyed and 1 car was damaged. **1 tank car carrying propane caught fire and exploded, causing major damage to a mill adjacent to the railway right-of-way.** Other tank cars carrying dangerous goods including chlorine also derailed. Because of the fire and dangerous goods in the other tank cars, the area within a 1-kilometre radius of the accident site was sealed off and about 20 people were evacuated. About 600 feet of track were destroyed and about 4,000 feet of track were damaged. The train was 5,935 feet long, weighed 6,898 tons and consisted of 2 locomotives, 44 loaded cars and 45 empty cars, including tank cars containing chlorine, propane and other flammable liquids. The TSB reported the derailment was caused by a defective rail car wheel that failed, and pointed out that CN does not have a wheel impact load detector (WILD) between Halifax and Quebec, increasing the risk of wheel failure in eastern Canada. (TSB Report R05Q0010)

Jan 12, 2005. Letellier Subdivision, Winnipeg, Manitoba. A CN freight train derailed 10 cars including a tank car containing liquefied petroleum gas and a tank car loaded with liquid calcium chloride that overturned and **spilled an undisclosed amount of its contents.** The extent of environmental damage was not disclosed. 2 derailed loaded hopper cars blocked a public crossing. About 400 feet of track were damaged. The train comprised 1 locomotive, 30 loaded cars, 11 empty cars and 1 residue tank car. It weighed 4,297 tons and was 2,598 feet long. Several homes and businesses were evacuated due to the risks associated with derailed tank cars carrying dangerous goods. The TSB reported several factors that contributed to the derailment including track spacing anomalies, track out of alignment, track warp defects and roller bearing adapters that likely failed in 1 of the derailed cars. (TSB Report R05W0014)

Nov 12, 2004. Montmagny Subdivision, Levis, Quebec. 10 multi-platform CN container cars derailed on the main track. The cars were damaged, and 2 switches and 500m of track were damaged. The train was made up of 3 locomotives and 39 multi-platform container cars (113 platforms in all). It was 7,500 feet long and weighed 6,200 tons. The TSB reported that wheel failure caused the derailment. (TSB Report R04Q0047)

July 25, 2004. Bala Subdivision, Burton, Ontario. A CN freight train derailed 13 multi-platform intermodal cars carrying 88 containers. Containers were heavily damaged with **liquid product leaking from one of the containers.** About 2,300 feet of track were destroyed. The train consisted of 2 locomotives and 28 loaded intermodal cars. It was

5,919 feet long and weighed 5,750 tons. The TSB reported the following as contributing to the rail rollover that caused the derailment: car design, lacking rail lubrication, track fastening system, and track geometry. (TSB Report R04T0161)

March 17, 2004. Lac-Saint-Jean Subdivision, Linton, Quebec. A CN train derailed 22 cars at a curve on the main track. 18 cars were destroyed, 4 cars were damaged, and about 140m of track were destroyed. The derailed cars slid down the Batiscan River bank. The train consisted of 4 locomotives and 66 cars, 56 loaded and 10 empty. It was 4,060 feet long and weighed 6,960 tons. A broken rail caused the initial derailment. (TSB Report R04Q0016)

Feb 17, 2004. Sprague Subdivision, Symington Yard, Winnipeg, Manitoba. A CN train operated by Beltpack remote control derailed 17 intermodal container car body platforms at a switch in the yard. The Beltpack remote control operator was controlling the train movement from inside a motor vehicle, which is routinely done at the Symington Yard. About 1,600 feet of track were damaged. The TSB reported the location of the Beltpack remote control operator inside a vehicle, well in advance of and facing away from the remote controlled train, left the train movement unmonitored and increased the severity of the derailment, which was initially caused by a switch malfunction. (TSB Report R04W0035)

Feb 7, 2004. Montmagny Subdivision, Montmagny, Quebec. A CN freight train derailed 27 cars on a bridge over the Du Sud River, including a pressurized tank car loaded with liquefied chlorine gas. All of the derailed cars were damaged beyond repair. About 1,500 feet of track and 2 public crossings were damaged. The entire timber deck of the bridge and the pedestrian walkway located on the north side were destroyed. 3 bridge spans were damaged beyond repair and required total replacement. The other 6 spans sustained major damage. The train was 5,489 feet long and weighed 9,102 tons. It consisted of 2 locomotives, 70 loaded and 24 empty. During the derailment cleanup and bridge repair work, traffic had to be rerouted on a temporary bypass track constructed over the river. The extent of environmental damage incurred by the derailment and subsequent repairs was not disclosed. The TSB reported that truck hunting (lateral oscillation of car between the tracks at high speeds) on one or more empty cars contributed to the derailment. The investigation was also confused by an inaccurate list of car positions within the train. (TSB Report R04Q0006)

July 30, 2003. Drummondville Subdivision, Villeroy, Quebec. A CN train derailed 32 intermodal platforms on the main track. 31 platforms were damaged, and 1 platform was destroyed. About 2,200 feet of track were destroyed, and another 1,900 feet were damaged by the derailment. The track underneath the last 30 derailed platforms was completely destroyed. In the zone of destruction, the majority of the ties were in poor condition, showing signs of water saturation and rot through half of their thickness. 2 farm crossings were destroyed and the third was seriously damaged. The train, an intermodal express freight train, was 9,973 feet long and weighed 9,310 tons. It consisted of 4 locomotives and 145 loaded intermodal platforms. Some of the cargo was dangerous goods. The TSB reported that the train derailed as a result of a track buckle while travelling above the speed limit over track on which maintenance work was being performed. The TSB also criticized the operators for not following proper safety procedures or CN for not conducting proper safety training. (TSB Report R03Q0036)

May 21, 2003. Bala Subdivision, Gamebridge, Ontario. A CN train derailed 49 cars on the main track at a highway crossing. The derailed equipment included 21 tank cars loaded with sulphuric acid, 2 empty box cars, and 26 box cars loaded with paper. **About 250 tons of sulphuric acid spilled from 3 tank cars. A small fire started.** An underground fibre-optic cable was severed, disrupting service for 16 hours. Some 1,700 feet of track were destroyed. Highway 12 was closed in the vicinity of the derailment area for 5 days. Some 50 people were evacuated due to the toxic nature of the spilled sulphuric acid and to ease clean-up operations. 2 firefighters suffered minor fume inhalation, and a local citizen suffered acid burns to his feet. The extent of environmental damage was not disclosed. The train weighed 11,800 tons and was 5,889 feet long. It was hauling 103 loaded cars, 8 empty cars, and 1 residue car. The TSB reported track defects at the Highway 12 crossing and decreasing time set aside by management for proper inspection and routine maintenance. As well, the train had been improperly assembled with empty cars ahead of loaded cars. (TSB Report R03T0157)

May 16, 2003. Thompson, Manitoba. **Several thousand hectares of land burned from a CN-caused wildfire.** Suppression costs amounted to \$565,000. (Canadian Interagency Forest Fire Centre July 24/07)

May 14, 2003. Fraser Subdivision, McBride, British Columbia. A CN freight train derailed 2 locomotives and 5 cars loaded with lumber on a bridge on the main track. Once derailed, the locomotives toppled off the bridge, dropping about 25 feet into the gully below along the main river valley. A fire started and the bridge, the 2 locomotives, and the 5 cars and their contents were destroyed by fire. **The 2 crew members, the locomotive engineer and the conductor, were fatally injured.** Several acres of the surrounding terrain were damaged by the fire and by the ensuing clean-up operation. The extent of environmental damage was not disclosed. The train was 5,730 feet long, weighed 8,800 tons, and was powered by 2 locomotives. The train consisted of 85 freight cars: 68 loaded, 4 empty, and 13 residue tank cars. The complete destruction of the bridge and all its related components, the loss of the locomotive event recorder data, and lack of complete and comprehensive bridge maintenance and inspection records impeded the TSB investigation efforts. However, the TSB reported that the failure to identify the urgency and the severity of the deteriorating condition of the bridge was not recognized because of shortcomings in the inspection, assessment, planning, and maintenance process. (TSB Report R03V0083)

May 12, 2003. Drummondville Subdivision, Manseau, Quebec. A CN freight train derailed 17 platforms loaded with 34 containers at a curve on the main track. Most of the containers flipped over on their sides. 3 of the containers were carrying dangerous goods. There was damage to 1,000 feet of main track and 300 feet of siding track. The train was powered by 3 locomotives and consisted of 122 loaded cars. It weighed 5,190 tons and was 8,430 feet long. The TSB reported the derailment occurred when the car body on the platform of a loaded container car collapsed onto the main track, severely damaging the track structure, resulting in the complete loss of track gauge. The platform on the car collapsed due to fatigue at a high stress location where a weld was missing. There also was a discrepancy between the cars recorded as being in the train and the actual cars in the train. (TSB Report R03Q0022)

Feb 9, 2003. Tamaroa, Illinois. A CN freight train derailed 22 of its 108 cars. **4 of the derailed cars spilled methanol, and the methanol from 2 of these cars fueled a fire.** Other derailed cars contained phosphoric acid, hydrochloric acid, formaldehyde, and vinyl

chloride. 2 cars containing hydrochloric acid, 1 car containing formaldehyde, and 1 car containing vinyl chloride also spilled product. About 850 residents were evacuated from the area within a 3-mile radius of the derailment, which included the entire village of Tamaroa. 1 contract employee was injured during cleanup activities. Damages to track, signals, and equipment, and clearing costs associated with the accident totaled \$1.9 million. CN was also forced to pay nearly \$1 million to about 800 residents and businesses for lost time, food spoilage and other expenses. The NTSB determined the probable cause of the derailment was an improper weld on a rail which progressed to rail failure. (NTSB Report RAR-05-01)

Dec 20, 2002. Cornwall, Ontario. 10 CN cars derailed. (Colin Churcher's Railway Pages)

Oct 24, 2002. Saint-Maurice Subdivision, Hibbard, Quebec. A CN train derailed 6 cars at a curve on the main track. All 6 derailed cars were damaged and 275m of track were destroyed. The derailed cars were loaded with copper ore, toppled over on their sides and slid down the bank almost falling into a lake. The extent of environmental damage was not disclosed, but based on a photo in the TSB investigation report, there was damage to the lake shoreline. The train comprised 3 locomotives and 109 cars, 34 loaded and 75 empty. It was 6,730 feet long and weighed 7,230 tons. The TSB reported a defective rail caused the derailment. (TSB Report R02D0113)

Aug 13, 2002. Bedford Subdivision, Milford, Nova Scotia. A CN train derailed 7 container platforms from the last 2 five-pack cars on the main track. About 2.85 miles of track were damaged. The train was 7,540 feet long and weighed 6,230 tons. The TSB reported that significant track buckle, in part resulting from higher-than-normal air temperatures, caused the tracks to move out of alignment and caused the derailment. (TSB Report R02M0050)

July 22, 2002. Montmagny Subdivision, Joffre Yard, Levis, Quebec. A CN train operated by remote control (Beltpack) in the yard derailed 52 cars. 51 tank cars, which contained fuel oil and gasoline residue, derailed and rolled over. An empty bulkhead flat car also derailed. 2 switches and about 3,600 feet of track were damaged. The TSB reported that heavy winds set some empty cars (without their brakes on) in motion which caused the initial derailment. (TSB Report R02Q0041)

July 8, 2002. Camrose Subdivision, near Camrose, Alberta. A CN freight train derailed 2 locomotives and 14 cars at a curve in the track. The train consisted of 5 locomotives, 146 loaded cars (some carrying dangerous goods), 6 empty cars, 2 residue tank cars, was 9,708 feet long and weighed 17,201 tons. The train was the longest and heaviest train the crew had ever operated on this subdivision. Derailed cars included 2 empty hopper cars right behind the locomotive, 1 empty flat car, 5 loaded intermodal flat cars, and 6 multi-platform intermodal cars. The last derailed car carried 2 containers carrying dangerous goods. The 2 derailed locomotives were damaged. All derailed cars and about 860 feet of track were destroyed. The TSB reported the primary cause of the derailment was an improperly assembled train. The presence of the first locomotive without alignment control couplers behind the operating locomotives played a secondary role in this derailment. (TSB Report R02C0050)

July 3, 2002. Joliette Subdivision, L'Assomption, Quebec. A CN freight train derailed 14 cars at a curve on the main track. 9 of the derailed cars flipped over, fouling both sides of the main track and siding. Softwood lumber products were strewn over the right-of-

way and the adjacent private property. About 1,830 feet of main track, 660 feet of siding track and a private crossing were destroyed. A 4-inch irrigation water main was severed, and about 150 trees and seedlings were destroyed or damaged in an adjacent nursery. The train consisted of 2 locomotives, 82 loaded, 9 empty and 2 residue cars. It was 5,570 feet long and weighed 10,390 tons. The TSB reported that the higher-than-normal air temperatures buckled the track which caused the derailment. The Board pointed out that even though hot weather inspections were carried out, they were not sufficient to identify the potential for a track buckle. (TSB Report R02D0069)

May 2, 2002. Rivers Subdivision, near Firdale, Manitoba. A CN train derailed 2 locomotives and 21 freight cars after colliding with a loaded tractor-trailer at a public crossing. The derailed equipment included 5 tank cars carrying dangerous goods, 1 tank car carrying ethylene glycol and 12 hopper cars carrying plastic pellets. The dangerous goods products included benzene and hexene. **During the derailment, 4 of the tank cars sustained multiple punctures and spilled their products which ignited and a large fire engulfed the derailed cars, burning for 2½ days.** Water bombers were brought in to help fight the fire. A fibre-optic cable was severed and the Trans-Canada Highway had to be closed. 17 of the derailed cars were destroyed. About 700 feet of the south rail, 450 feet of the north rail, and many of the ties near the public crossing were destroyed. A total of 156 people were evacuated from within a 4-mile radius of the derailment for 2 days. About 13,000 tonnes of impacted soil were excavated and removed for treatment. Water sampling conducted about 1, 2 and 3 months following the spill determined that the groundwater had been contaminated with hydrocarbons. The extent of environmental and groundwater damage was not disclosed. (TSB Report R02W0063)

April 26, 2002. Redditt Subdivision, Winnipeg, Manitoba. 8 cars, including 3 box cars loaded with dangerous goods, derailed on the main track as a CN freight train departed Winnipeg. The train consisted of 3 locomotives and 85 cars (76 loaded and 9 empty), was 5,412 feet long, and weighed 9,363 tons. In addition to damaged cars, about 300 feet of track, a roadway underpass, and a fibre-optic system buried in the grade were damaged. 6 homes adjacent to the main track were evacuated. **An improperly assembled train contributed to wheel lift on an empty flat car and subsequent derailment.** (TSB Report R02W0060)

Feb 15, 2002. Dartmouth Subdivision, Dartmouth, Nova Scotia. A CN train derailed 5 cars in the yard, blocking a private crossing to an electrical shop. 3 of the derailed cars were tank cars loaded with liquefied petroleum gas, and the other 2 cars were flat cars loaded with vehicles. 2 derailed tank cars contained propane and 1 derailed tank car contained butane. 1 of the tank cars loaded with propane flipped over on its side as did 1 of the flat cars. The train consisted of 2 locomotives and 15 loaded cars. It was 925 feet long and weighed 1,200 tons. About 300 feet of track were damaged, and the private crossing required repairs. About 800 Dartmouth residents were evacuated from their homes, and the Angus L. MacDonald suspension bridge, one of the 2 major bridges connecting Dartmouth and Halifax, was closed for 12 hours. The TSB reported that deteriorating rail ties contributed to the derailment. (TSB Report R02M0007)

Nov 15, 2001. Holly Subdivision, Clarkson, Michigan. 2 CN/Illinois Central Railway trains collided at a switch at the Andersonville Siding. One of the trains missed a red stop signal as it entered the main track and hit the other train on the main track. **Both crew members of the train that was hit were killed; the 2 crew members of the other train were seriously injured.** The total cost of the accident was about \$1.4 million. The NTSB

determined the probable cause of the collision was fatigue by the crew whose train hit the other, and the same train was also traveling above the speed limit. (NTSB Report RAR-02-04)

Oct 6, 2001. Napadogan Subdivision, Drummond, New Brunswick. A CN freight train derailed 15 cars after striking an automobile at a farm crossing. 7 of the derailed cars were tank cars carrying liquefied petroleum gas. One of the tank cars suffered damages and spilled butane, resulting in undisclosed environmental damage. The train consisted of 3 locomotives at the head of the train, 130 cars (78 loaded and 52 empty), was 8,700 feet long and weighed 10,000 tons. 9 cars and about 1,000 feet of track were destroyed. The TSB investigation determined that an undesired emergency brake application occurred when the train struck the automobile, resulting in rail rollover and the derailment. (TSB Report R01M0061)

Sept 24, 2001. Bala Subdivision, Richmond Hill, Ontario. A CN freight train derailed 21 cars on the main track. The running gear on all the derailed cars was damaged. The general merchandise train, powered by 2 locomotives, was hauling 40 loaded cars and 20 empty cars. It was 3,000 feet long and weighed 5,100 tons. The TSB reported that a heavy bulkhead door on one of the cars had opened, swung out, contacted the side of a train passing on an adjacent track and fell onto the track, causing the derailment. The Board indicated the closing device on the bulkhead door was inadequate and should have been replaced. (TSB Report R01T0255)

Aug 29, 2001. Saint-Hyacinthe Subdivision, Montreal, Quebec. A CN train approaching the Turcot Yard in Montreal derailed 8 container cars at a curve in the track. 5 cars rolled down the railway embankment, and came to rest obstructing Butler Street. The train consisted of 2 locomotives and 86 cars (85 loaded and 1 empty). It was 5,900 feet long and weighed 5,200 tonnes. The TSB reported that a wheel of one of the cars climbed over a defective rail and caused the derailment. (TSB Report R01D0097)

May 23, 2001. Chisholm, Alberta. CN started one of the largest human-caused fires in Alberta's history that destroyed 116,000 hectares of forest plus 10 homes, a trapper's cabin, 48 outbuildings and some vehicles primarily in the Hamlet of Chisholm. The environmental impacts were devastating – an undisclosed number of mammals, birds and other animals burned, and there was significant loss of wildlife habitat. The forest industry lost about 4.5 million m³ of growing timber stock and over 6,300 ha of regenerated cutblocks. The Alberta government spent \$10 million fighting the fire with 514 firefighters and an abundance of equipment. CN eventually accepted responsibility for starting the fire by running locomotives in an inappropriate manner during a high fire hazard period. (Canada.com May 31/07, several other sources)

April 12, 2001. Bedford Subdivision, Stewiacke, Nova Scotia. A Via Rail passenger train consisting of 2 locomotives and 14 cars, travelling on CN main track from Halifax to Montreal, derailed at a manually operated main track switch in Stewiacke. A standard CN switch lock used to secure the switch in correct position had been tampered with. As a result of this tampering, the 2 locomotives and the first 2 cars continued on the main track, but the following cars took a diverging route onto an industrial track adjacent to the main track. 9 of the cars derailed and a farm supply building, as well as the industrial track were destroyed. 750 feet of the main track and a main track turnout were extensively damaged. One of the derailed cars was destroyed and the rest were damaged. 4 occupants of the building escaped without injury prior to impact. There were

132 persons on board the train. 22 persons were transported to hospital by ground or air ambulance; 9 were seriously injured. (TSB Report R01M0024)

Feb 15, 2001. Drummondville Subdivision, Trudel, Quebec. A CN train derailed 25 cars on the main track. 24 cars were destroyed, and 1 car was damaged. A main-track switch, the signal system, 800 metres of track, and goods stored on the property of a construction material distributor were damaged. A signal bungalow as well as a communications tower belonging to CN were also destroyed. An underground fibre-optic cable was severed. The train was comprised of 3 locomotives and 93 covered hopper cars loaded with wheat. It was 6,043 feet long and weighed 12,158 tons. The TSB reported the train derailed as a result of a fatigue fracture in an axle on one of the cars that derailed. (TSB Report R01Q0010)

Jan 16, 2001. Kingston Subdivision, near Mallorytown, Ontario. A CN freight train derailed 26 cars on the main track including 2 tank cars loaded with propane. A public school was closed for a day as a precautionary measure. The train consisted of 2 locomotives at the head of the train, 149 cars (76 loaded and 73 empty), was 9,450 feet long and weighed 11,700 tons. The TSB investigation determined that improperly assembling the long train contributed to a wheel lift and the derailment. Confused communication between the locomotive engineer and the rail traffic controller also appeared to contribute to the derailment. (TSB Report R01T0006)

Dec 11, 2000. Kashabowie Subdivision, Shabaqua, Ontario. A CN freight train derailed 17 cars. The derailed cars included 2 loaded tank cars containing methanol, 1 that had flipped upside down and was damaged, spilling all of its contents, and the other which was leaking methanol from an unloading valve that had opened during the derailment. A total of about 100,000 litres of methanol spilled, most of which entered the Shebandowan River. Methanol is a colourless, flammable and poisonous liquid. Persons living close to the river, downstream, were cautioned not to consume water drawn from wells near the river. Water was not declared free of methanol by local health authorities for almost a month following the spill. The extent of environmental damage to the Shebandowan River's ecosystem was not disclosed. The other derailed cars included 5 loaded cars of grain, 7 empty flat cars and 3 empty box cars. The train comprised 3 locomotives, 59 loaded cars and 27 empty cars. It was 5,400 feet long and weighed 8,500 tons. The TSB reported that emergency brake pressure on a cracked defective rail caused the rail to fail, and resulted in the derailment. (TSB Report R00W0253)

Dec 10, 2000. Kingston Subdivision, Marysville, Ontario. A CN train derailed 2 cars in a curve on the main track. 1 of the derailed cars, a bulkhead flat car loaded with lumber, lost its load, blocking the adjacent north main track. The other derailed car was a residue tank car. The train comprised 2 locomotives, 51 loaded and 44 empty cars. It was 6,600 feet long and weighed 8,300 tons. The TSB reported that, in each track curve of the train's journey, the load of lumber shifted slightly laterally, causing the banding around the load of lumber to dig into the corners of the lumber, gradually lessening the degree of securement and allowing even greater movement as the trip progressed. Travelling in an unstable state, the lumber shifted at the curve near Marysville and the unbalanced load caused one or more wheels on the car to lift and derail, destabilizing the trailing tank car which also derailed. (TSB Report R00T0324)

Dec 9, 2000. Napadogan Subdivision, Blue Bell, New Brunswick. A CN freight train derailed 7 multi-platform double-stack container cars at a curve on the main track. 36

containers were spread over an area covering both sides of the main track for about ½ km. 11 of the containers were carrying bags of white asbestos (a hazardous material); **2 containers released product onto the right-of-way**. A total of 660m of track structure was damaged. The train was powered by 4 locomotives, was 5,700 feet long and weighed 5,200 tons. The TSB reported the derailment occurred due to a rail failure at a curve in the track. (TSB Report R00M0044)

May 22, 2000. Saint-Maurice Subdivision, Cressman, Quebec. A CN train derailed 23 cars at a curve on the main track on a bridge over the Saint-Maurice River. Derailed cars included: 13 gondola cars loaded with wood chips, 2 cars loaded with paper, 1 empty hopper car, and 7 tank cars with gasoline residue. 3 of the tank cars with gasoline residue fell into the river. 2 tank cars were punctured, **spilling an undisclosed amount of gasoline into the river**. The extent of environmental damage was not disclosed. 400 feet of track were destroyed and 2 spans of the railway bridge across the river were heavily damaged. 22 of the derailed cars were damaged and 1 was destroyed. The train consisted of 3 locomotives and 159 cars, including 128 loaded cars, 19 empty cars and 12 tank cars with gasoline or heating oil residue. The train was 9,586 feet long and weighed 15,230 tons. The TSB reported that the derailment was caused by a defective rail in the track curve. (TSB Report R00Q0023)

May 16, 2000. Redditt Subdivision, White, Ontario. A CN freight train derailed 19 of its 136 cars along a curve in the main track. 4 of the derailed cars contained dangerous goods. The train consisted of 2 locomotives at the head of the train, 136 cars (51 loaded and 85 empty), was 8,800 feet long and weighed 9,440 tons. The TSB investigation determined that, during throttle reduction while in a curve, the train experienced a wheel climb derailment that was a result of a number of factors including **improperly assembling the train**. (TSB Report R00W0106)

March 10, 2000. Rouses Point Subdivision, Brossard, Quebec. A CN train derailed 5 cars on the Massena Spur after traveling through a public crossing. 4 cars toppled over on their sides in a ditch; 3 of these contained dangerous goods. 2 of the tank cars were carrying molten naphthalene (a flammable solid), and the third was carrying creosote. The other 2 derailed cars were hopper cars. All 5 derailed cars were damaged. The track was heavily damaged over a length of about 170 feet. The train consisted of 2 locomotives and 11 cars (8 loaded and 3 empty), was about 730 feet long and weighed 1,330 tons. As a precautionary measure, the Brossard Fire Department ordered the evacuation of about 20 people in the area. The TSB reported the train spread the track gauge, and the wheels of the first derailed car dropped inside the rail near the public crossing. The fact that CN had planned to replace the rail ties indicate that CN was aware of track structure problems at this location. (TSB Report R00D0026)

Dec 30, 1999. Near Mont-Saint-Hilaire, Quebec. A CN Ultratrain, a petroleum products unit train linking the Saint-Romuald oil refinery with a petroleum depot in Montreal, derailed and collided with another CN Ultratrain traveling in the opposite direction on a neighbouring track. **There was a violent explosion and some rail cars burned for more than 4 days, creating a smoke plume about 500m high. The 2 crew members on the train hit by the derailed train were killed. About 350 families had to be evacuated. 2 locomotives and 61 cars were damaged in the accident. About 2.7 million litres of hydrocarbons spilled and caught fire**, damaging private property, public property and the environment. The Ultratrain derailed at a broken rail caused by a defective weld, causing the TSB to call into question CN's quality assurance program for rail welds. The quality

assurance system in place did not detect the welds that did not meet the company's standards (mismatch between rail ends, absence of a weld tag, weld not entered in the inventory of continuous welded rail [CWR] repairs and adjustments). (TSB Report R99H0010, [TSB News Release](#) Sept 26/02)

Nov 23, 1999. Kingston Subdivision, Bowmanville, Ontario. A westward CN freight train struck an abandoned tractor-trailer at a farm level crossing. Metal parts from the truck-trailer became entangled under the wheels of the lead locomotive, resulting in the derailment of both locomotives and the following 10 rail cars, 4 of which rolled over onto their side. An eastward Via Rail passenger train struck the debris on an adjacent track and derailed, just before the freight train had come to a halt. The derailed Via train dragged the trailer portion of the truck-trailer for about 700 feet, causing the Via locomotive and the following 5 passenger coaches to derail. The jackknifing passenger train hit the derailed freight train cars. Fuel spilling from the tractor-trailer ignited and a fire started. About 6,800 litres of diesel fuel spilled from the Via locomotive and was also ignited. About 4,550 litres of diesel fuel also spilled from the lead locomotive of the CN freight train. 3 of the derailed freight cars contained liquefied petroleum gas residue and 5 of the derailed freight cars were loaded with butadiene. Minor injuries were sustained by 6 Via Rail employees and 5 passengers. (TSB Report R99T0298)

Oct 9, 1999. Bedford Subdivision, Bedford, Nova Scotia. A CN freight train derailed a locomotive and the first 8 cars. Some of the derailed cars flipped over on their sides and the entire derailment was spread over a distance of about 655 feet. Corn from 2 damaged hopper cars was spread over the derailment site. Over 800 feet of track were damaged. The train comprised 3 locomotives, 64 loaded and 3 empty, and was 4,580 feet long and weighed 4,470 tons. The TSB reported a damaged rail initiated the derailment. (TSB Report R99M0046)

Sept 23, 1999. Bala Subdivision, near Britt, Ontario. A CN freight train derailed 26 cars at a curve in the tracks at Mowat, near Britt. The train consisted of 94 cars, 54 of which were tank cars (41 of the 54 were carrying dangerous goods or dangerous good residues). The 26 derailed cars included: 19 tank cars, 2 box cars and 5 hopper cars. Of the 19 tank cars, 1 was a load of liquefied petroleum gas (LPG), 14 had LPG residues, 3 were loaded with anhydrous ammonia, and 1 was empty. The loaded LPG car and 1 of the loaded anhydrous ammonia cars were ruptured, each spilling their product and igniting, causing several fires. The loaded car of LPG exploded, projecting pieces of its tank and jacket in all directions. About 127,000 pounds of LPG and 158,000 pounds of anhydrous ammonia were spilled. A crater in the right-of-way measuring about 2m deep, 3m wide and 15m long was created by the LPG fire and subsequent violent rupture of the tank, which destroyed the roadbed and altered the physical state of the soils and other materials in the area. A box car immediately west of the LPG tank was crushed and bent 90°. About 600 feet of main track and siding were destroyed, the turnout for the siding at Mowat required extensive repairs, and the nearby public crossing required minor repairs. 18 of the derailed cars were damaged, and 8 cars were destroyed. The adjacent trees, other vegetation and earth were scorched black and killed for a radius of about 200 feet by the fire ball and chemical releases. CN employees at the Mowat siding, 3 local woodcutters and 2 hunters located downwind of the accident site were evacuated due to the toxic fumes. An Ontario Provincial Police officer, a local woodcutter, and two firemen suffered minor injuries as a result of contact with ammonia vapours. The TSB reported on many deficiencies as contributing to the derailment

including: deficiencies in track gauge and alignment, and improper track condition for freight train speeds they were traveling. The TSB also reported that older-design, below-standard and defective construction of tank cars contributed to the magnitude of the ensuing fires. The total extent of environmental damage, including to the adjacent Little Key River and shoreline, was not detailed in the TSB investigation report. (TSB Report R99T0256)

Aug 27, 1999. Kingston Subdivision, Wesco Spur, Yard CB, Cornwall, Ontario. A CN crew was performing switching operations in the yard when 6 tank cars ran away on one of the tracks. The cars rolled for 475 feet and struck the stop block at the end of the track. 1 car derailed and its tank was punctured. About 5,000 gallons of product, a class 3 combustible liquid, spilled onto the ground. About 2,000 gallons seeped into the ground or flowed into the sewer system. The soil contaminated by the liquid was collected and hauled away for treatment. The extent of environmental damage was not disclosed. Cornwall police and firefighters immediately set up a 1,000-foot safety perimeter and evacuated customers and staff from nearby businesses. The TSB reported the evacuation caused inconvenience and economic losses for nearby businesses. (TSB Report R99D0159)

Aug 15, 1999. Clearwater Subdivision, Messiter, British Columbia. A CN freight train derailed 40 cars of a 100-car grain train. 2 of the derailed cars rolled into the North Thompson River. About 5,000 tons of mixed grains were spilled over the right-of-way and in the river. Most of the 40 cars sustained extensive damage. About 1,500 feet of track were destroyed and an additional 3,000 feet were damaged. The train was powered by 2 locomotives, was 5,900 feet long and weighed 11,800 tons. The extent of environmental damage to the Thompson River and bank was not disclosed. The TSB reported a defective wheel caused the derailment. (TSB Report R99V0141)

July 14, 1999. Kingston Subdivision, Morrisburg Station, Ontario. 16 CN cars derailed in front of the station. (Colin Churcher's Railway Pages)

April 23, 1999. Chatham Subdivision, Thamesville, Ontario. A Via Rail passenger train travelling east on the north main track hit an open switch, causing it to tip over and collide with stationary CN cars full of ammonium nitrate on an adjacent yard track. All 4 passenger cars and the locomotive of the passenger train derailed as well as 4 of the stationary cars. The 2 crew members in the locomotive cab were killed. 77 of the 186 passengers and crew on board were treated at the hospital. 4 people were admitted with serious injuries. About 50m of main track and 100m of the adjacent yard track were destroyed. The locomotive was damaged beyond repair and the leading 2 passenger cars sustained substantial damage. A December 18, 2012 version of the TSB investigation report identified safety deficiencies relating to the level of defenses associated with the Occupancy Control System method of train control, particularly in "dark territory," where trains are not always provided with sufficient advance warning of reversed main track switches, and to the storage of dangerous goods in rail cars for prolonged periods of time at locations adjacent to main tracks. The TSB also pointed out the need to eliminate some passenger safety hazards in a timely fashion. (TSB Report R99H0007)

April 13, 1999. Montmagny Subdivision, Bégine, Quebec. A CN petroleum product unit train derailed 10 tank cars loaded with gasoline on the main track. Some cars flipped over on their sides and 1 car completely toppled over landing on its top. About 230 litres

of gasoline were spilled into Les Quarante Lacs (Forty Lakes), causing undisclosed environmental damage. The 10 derailed cars were damaged, as was another car which did not derail. 450 feet of track were destroyed, and another 300 feet of track were damaged. The TSB reported soft subgrade and a cluster of rotten ties as causing the derailment. Confusion of responsibilities among 3 acting inspectors may also have contributed to the derailment. (TSB Report R99Q0019)

Feb 6, 1999. Ruel Subdivision, Neswabin, Ontario. A CN freight train derailed 21 cars. The derailed cars included a tank car loaded with liquefied petroleum gas and 2 tank cars loaded with flammable benzene and dicyclopentadiene. 1 of the tank cars with the benzene mixture was punctured resulting in a fire and a total loss of product. The liquid benzene and some lumber that was strewn about the derailment site fuelled a fire that burned for several days. 16 of the 21 derailed cars were destroyed, including 3 tank cars that were involved in the post-derailment fire. 4 cars were damaged. A power switch and dwarf signal, and 500 feet of track were destroyed. In the main derailment area, 4 telephone poles were destroyed. Another power switch and a hot box detector were damaged. Total property damage exceeded \$1.5 million. The TSB reported a roller bearing on one of the cars overheated and seized, resulting in an axle fracture and the derailment. Unclear lines of authority and communication failures regarding the Wayside Inspection System (WIS) were cited by the TSB as contributing to the derailment. The TSB also reported Transport Canada has no national program to audit and monitor WISs, to ensure the safety of operating trains. (TSB Report R99T0031)

Jan 31, 1999. Albreda Subdivision, Jasper, Alberta. A CN runaway train on the main track entered the rail yard in Jasper and collided head on with a stationary CN train. 5 locomotives and 11 cars derailed. The 3 locomotives and 2 cars on the runaway train were extensively damaged, as were the 2 locomotives and 1 car on the stationary train in the yard. The collision damaged about 520 feet of track and 4 switches. The conductor of the runaway train received minor injuries. The TSB reported the extreme blowing snow conditions during the accident rendered the air brake system ineffective, and the crew was unaware of the condition of the dynamic braking system. The crew of the runaway train was apparently fatigued which may have affected their performance. (TSB Report R99E0023)

Nov 26, 1998. Halton Subdivision, MacMillan Yard, Concord, Ontario. A CN train derailed 3 tank cars loaded with anhydrous ammonia. 1 of the tank cars rolled down a 20-foot embankment and another tank car flipped over on its side. 1 of the tank cars was damaged and spilled anhydrous ammonia. The yard was evacuated and the public roadways in the area, including Highway 7, were closed for about 5 hours. The TSB reported the train derailed as a result of 2 rail breaks caused by surface and sub-surface cracking, the wear exceeding CN's allowable limits. The Board identified a safety deficiency relating to the maintenance standards and practices. (TSB Report R98T0292)

Sept 24, 1998. Mont-Joli Subdivision, Mont-Joli, Quebec. 25 cars from a CN train rolled downhill uncontrolled on the main track of the Matapédia Railway Company (MRC), and collided with 4 MRC yard locomotives standing on the main track in front of the station at Mont-Joli. The CN crew thought they had secured their locomotives on a grade, then left their train and went to the station to complete some paperwork. Then, both CN and MRC employees heard a loud noise. When they looked out, they realized the CN train had rolled down the hill and crashed into the MRC locomotives. 5 rail cars were damaged, 2 rail cars were destroyed, and 4 yard locomotives and several hundred feet of main and

yard tracks were damaged. A tank car, which was crushed and opened by the impact, spilled some residual product into the parking lot and onto the street. A commercial truck carrying cylinders of compressed gas was crushed. The employees in the vicinity of the station immediately left. The derailed cars came to rest close to commercial and residential properties in the centre of the town. 4 automobiles parked in the station parking lot were destroyed by the derailed rail cars. There was extensive damage to the station platform, and several hundred feet of main and yard tracks, including 78 feet of rail and 34 railway ties that required replacing. The police later determined that, once the CN crew left their train unattended, 2 boys had walked over to the train and released the brakes on most of the 25 parked rail cars, causing the train to roll downhill. (TSB Report R98M0029)

March 1, 1998. Kingston Subdivision, Lyn, Ontario. 8 CN cars derailed, 2 of which carried dangerous goods – ethylene refrigerated liquid and alkylamines. The train derailed at a track crossover. The train was pulled by 2 locomotives and was 7,482 feet long and weighed 5,866 tons. The TSB investigation determined the derailment occurred when a rail car wheel climbed over a defective switch that was severely chipped. Proper track maintenance and inspection practices had not been followed. (TSB Report R98T0042)

March 1, 1998. Edson Subdivision, near Obed, Alberta. A moving CN train collided with the tail end of a stationary CN train. The lead locomotive from the moving train and the last car from the stationary train derailed and were extensively damaged. **The 2 crew members in the lead locomotive of the moving train were seriously injured**, and were taken from the scene by ambulance. The moving train was powered by 2 locomotives and was hauling 20 loaded and 33 empty cars. It was 3,140 feet long and weighed 3,490 tons. The stationary train consisted of 4 locomotives and 100 loaded cars. It was 6,140 feet long and weighed 13,850 tons. The TSB reported the collision occurred because the crew of the moving train did not maintain adequate vigilance and miscalculated how far away the stationary train was located. (TSB Report R98C0022)

Nov 24, 1997. Diamond Subdivision, Carrier, Quebec. While a CN train was proceeding from a stop signal at a siding, **a tank car loaded with sulphuric acid split open, spilling its entire contents**. The extent of environmental damage was not disclosed. The TSB determined that the tank car had been fabricated with a gap and missing butt weld, in variance with approved design drawings, and that it fractured under normal service loading at a pre-existing crack. **The TSB has pointed out many times to CN and Transport Canada the risks associated with the frequent inferior construction of tank cars that carry dangerous goods, including oil and other hazardous products.** (TSB Report R97D0253)

May 6, 1997. Kingston Subdivision, Coteau-du-Lac, Quebec. A CN train dropped into a depression in the subgrade on the main track and derailed 2 locomotives and 12 freight cars. The lead locomotive toppled over on its side. **The fuel tanks on both locomotives were punctured and about 12,000 litres of diesel fuel spilled into the Rouge River which was only 10m from the railway tracks.** Although emergency personnel placed booms and absorption materials in the river, very little diesel fuel (1,000 litres) was recovered. The extent of environmental damage, especially to the river and the river shoreline, was not disclosed. **2 crew members were injured.** The train consisted of 2 locomotives and 19 loaded cars. It was 1,060 feet long and weighed 1,000 tons. The 2 locomotives and 12 freight cars were damaged, and about 270 feet of track were destroyed. The TSB

reported the derailment occurred because the subgrade collapsed under the moving train as a result of weak, water-saturated clays in and around the embankment. The Board was concerned that CN maintenance and inspection employees were not apparently sensitive to the hazards posed by unusual events in bodies of water adjacent to railway embankments. **The TSB also reported that locomotive fuel tanks are particularly prone to puncture and spilling of diesel fuel at derailment.** (TSB Report R97D0113)

March 27, 1997. Ashcroft Subdivision, Conrad, British Columbia. A CN train travelling from Boston Bar to Kamloops encountered a large railbed depression and derailed on the main track near Conrad. **Both crew members were killed.** 2 locomotives, 14 freight cars and about 1,200 feet of main track and siding were destroyed. Loaded open hopper sulphur cars stored on an adjacent siding were hit and also derailed, and some of these cars overturned and spilled their contents. **Fuel spilled from the derailed locomotives and ignited.** The resulting fire engulfed the derailed equipment and scattered container contents. The fire was finally extinguished March 28. Fire again erupted around the locomotives March 29 and took several hours to extinguish. The TSB ascertained that improper drainage of run-off from the adjacent Trans-Canada Highway contributed to destabilizing the railway subgrade which then collapsed, causing the derailment. (TSB Report R97V0063)

Aug 12, 1996. Edson Subdivision, east of Edson, Alberta. **All 3 occupants in the lead locomotive of a CN freight train were fatally injured** when their train, which was travelling about 54 mph on the main track, collided head-on with 20 runaway cars moving toward them at about 30 mph. The runaway cars had been left on a track in the Edson Yard with their hand brakes on, which eventually failed to hold them, causing them to move onto the main track uncontrolled. The TSB reported that, for the years 1991 to 1996, 190 runaways were reported to the TSB and in spite of repeated warnings and recommendations issued by the TSB, the problem persisted. This particular runaway situation, which ended in 3 deaths, triggered a TSB investigation with wider scope and depth. **Consequently, the TSB raised serious questions about the effectiveness of standard railway operating rules, rail traffic control systems, rail safety regulatory overview, and CN's safety management programs.** (TSB Report R96C0172)

July 2, 1996. Aberdeen Subdivision, North Battleford, Saskatchewan. A CN train was unintentionally diverted onto a spur track, and collided head-on with a stationary and uncrewed CN freight train. The locomotives of both trains were extensively damaged, and 10 freight cars derailed. The **locomotive engineer was injured** when he jumped from the train. The moving train consisted of 3 locomotives and 88 loaded cars. It weighed 10,000 tons and was 6,500 feet long. The TSB determined that the switch for the spur track was inadvertently left in the reverse position. The train was also travelling at an excessive speed, according to the TSB. (TSB Report R96W0171)

April 24, 1996. Hagersville Subdivision, Nanticoke, Ontario. A CN train crew was switching at the Esso oil refinery near Nanticoke, when 5 tank cars went out of control. The cars rolled southward about 2 miles, crossed over 2 public road crossings and through the Ontario Hydro thermal generating plant building. The cars continued another 600 feet to the end of the track where the 2 leading cars derailed. 1 derailed car contained sulphuric acid and the other derailed car that flipped over on its side contained sulphuric acid residue. Both derailed cars were damaged. There was substantial damage to private property, including a car mover which had been standing on the track

in the Ontario Hydro building. It was pushed ahead of the runaway cars to the end of the track and was destroyed. The entrance gate to Ontario Hydro's property was also destroyed. There was damage to CN's track. The TSB determined the tank cars rolled away and derailed because they were not securely coupled during a switching operation. (TSB Report R96T0137)

March 11, 1996. Sussex Subdivision, River Glade, New Brunswick. A CN train derailed 22 freight cars on the main track. 16 of the derailed cars were tank cars loaded with various dangerous goods including gasoline, butane and fuel oil. About 455 litres of gasoline spilled from 1 tank car and butane was released into the atmosphere from 2 leaking pressure tank cars. As a precautionary measure, 8 residents in the area were evacuated. The extent of environmental damage was not disclosed. About 400 feet of track were destroyed and about 1,000 feet of track were extensively damaged. 18 derailed cars were destroyed, and the remaining 4 were damaged. The train was powered by 3 locomotives and was hauling 27 loaded cars, 17 empty cars and 9 residue cars. It was 3,200 feet long and weighed 3,500 tons. The TSB determined that a defective rail led to the derailment. (TSB Report R96M0011)

March 10, 1996. Saint-Maurice Subdivision, Dix, Quebec. A CN freight train derailed 27 cars. 4 of the derailed cars were residue cars, 2 contained gasoline residue and the other 2 contained diesel fuel residue. 4 of the derailed loaded gondola cars were dug into the subgrade and several other cars were piled on top of the gondola cars. The ore concentrate from the gondola cars spilled over the subgrade and covered the tracks. At least 1 of the derailed cars came to rest on a bridge deck. The bridge deck was destroyed and the girders were extensively damaged. The train consisted of 3 locomotives and 76 cars. It was 4,526 feet long and weighed 7,394 tons. The TSB was not able to determine the cause of the derailment because key rail car components and pieces of rail were missing. (TSB Report R96D0035)

March 6, 1996. Halton Subdivision, MacMillan Yard, Toronto, Ontario. A remote controlled CN train collided with a standing CN train in the yard, derailing 7 cars. 4 of the derailed cars rolled down a small embankment onto a paved yard roadway. A tank car loaded with ethylene oxide flipped upside down and came to rest on its top, and was extensively damaged. 2 tank cars containing petroleum product residue also derailed, 1 of them knocked over on its side. Because of the upside down tank car with flammable and toxic contents, emergency procedures were implemented. 2 yard locomotives and 7 cars were damaged, some of them extensively. About 250 feet of track and 1 crossover switch were damaged. The TSB determined that the derailment occurred because the crew running the train by remote control lost sight of the head of the train in an unsafe part of the yard. (TSB Report R96T0080)

Feb 27, 1996. Bécancour Subdivision, near St. Grégoire, Quebec. 59 cars from a CN train that had been left on the main track, standing unattended with no hand brakes applied, rolled away unnoticed for about 4,000 feet and struck another CN train on the Lama Warehouse Spur. The impact derailed 1 locomotive and 13 cars, 11 of which were tank cars containing dangerous goods residue. The locomotive and 2 tank cars containing caustic soda (corrosive substance) residue were knocked on their sides; and 7 other tank cars containing caustic soda residue, 2 containing chlorine (poisonous gas) residue and 2 box cars also derailed. A fuel tank on the overturned locomotive was punctured and spilled about 9,000 litres of diesel fuel. The extent of environmental damage was not disclosed. 1 box car was destroyed, 1 locomotive and 7 cars were

extensively damaged, and 6 cars were damaged. About 200 feet of track were destroyed. 1 crew member was seriously injured. The runaway train weighed 3,600 tons and was 3,000 feet long. The TSB determined that the air brakes on the 59 runaway cars were accidentally released when the cars were uncoupled. Unfortunately, hand brakes had not been applied to any of the cars. (TSB Report R96D0029)

Jan 31, 1996. Joliette Subdivision, Charette, Quebec. 2 CN trains carrying dangerous goods residue cars collided. 2 box cars were destroyed, and 1 locomotive, 2 box cars and 1 flat car were extensively damaged. One of the trains comprised 2 locomotives, 60 loaded cars and 6 residue cars. The train was 3,980 feet long and weighed 6,770 tons. The other train consisted of 2 locomotives, 8 loaded cars, 28 empty cars and 3 residue cars. It was 2,200 feet long and weighed 1,830 tons. The TSB reported that the crew in the train that caused the collision and derailment should have used the automatic brake as well as the independent brake to stop their train. (TSB Report R96D0018)

Jan 11, 1996. Allanwater Subdivision, near Armstrong, Ontario. Opposing CN hi-rail vehicles collided in a curve. The driver of 1 of the vehicles sustained serious injuries in the collision. The driver of the other vehicle sustained minor injuries after jumping from the vehicle prior to impact. The TSB determined that the opposing hi-rails, travelling in an area of restricted sight-lines and frosty rail conditions, were operated at excessive speeds that did not permit them to stop before colliding. (TSB Report R96T0008)

Dec 14, 1995. Pelletier Subdivision, Edmundston, New Brunswick. A group of unattended freight cars recently uncoupled from locomotives in the Edmundston Yard rolled away uncontrolled for about 4,800 feet through a main track switch. They came to a stop with about 15 cars standing on the main track. A switch that the cars had rolled through onto the main track was damaged. The TSB reported the cars were not properly secured (hand brakes not applied) when the locomotives were uncoupled, which resulted in the cars running away downhill uncontrolled. (TSB Report R95M0072)

Nov 5, 1995. Sprague Subdivision, Symington Yard, Winnipeg, Manitoba. A remotely controlled CN train in the yard separated, which led to the derailment of 1 locomotive and 12 cars. The derailed cars fouled the adjacent track and were struck by another remote-controlled CN train, derailing 2 locomotives, 2 booster units and 6 cars from that train. 12 cars were destroyed, and 1 locomotive and 1 car were damaged from one of the remote controlled trains. 1 car was destroyed and 2 locomotives, 2 booster units, and 5 cars were damaged from the other remote controlled train. Some of the derailed cars toppled over on their sides and were piled on top of one another. About 600 feet of track were damaged. The TSB determined that, in both accidents, the remote control operating system did not provide the operators with safeguards and technology sufficient to ensure the safe operation of their respective trains. (TSB Report R95W0291)

Aug 20, 1995. Dundas Subdivision, Brantford Yard, Brantford, Ontario. A CN train derailed 3 tank cars loaded with dangerous goods (butane) in the yard. The residents of 9 nearby homes were evacuated as a safety precaution. The TSB reported the derailment was a result of the conductor not being positioned properly to control the train being shoved into the yard tracks. He also miscalculated the number of cars that would fit on a particular yard track. (TSB Report R95T0262)

June 23, 1995. Saint-Laurent Subdivision, Taschereau Yard, Saint-Laurent, Quebec. A CN train collided with another CN train in the yard. 1 employee was injured. The TSB

determined the collision was caused by the crews from the 2 trains receiving simultaneous permission to use the same track in opposing directions (toward one another). They were both operating at speeds that did not allow them to stop as they approached one another. The TSB has repeatedly suggested that the Canadian Rail Operating Rules build in a speed safety margin to account for trains that are approaching one another. (TSB Report R95D0097)

June 21, 1995. Cran Subdivision, La Doré, Quebec. A CN freight train derailed 4 locomotives and 8 cars at a washout. About 31,800 litres of diesel fuel were spilled from the derailed locomotives. The extent of environmental damage was not disclosed. 3 cars were destroyed, and 4 locomotives and 5 cars were extensively damaged. About 700 feet of main track were destroyed. The train consisted of 4 locomotives, 3 loaded cars and 57 empty cars. It was 3,800 feet long and weighed 2,300 tons. The TSB determined the derailment was caused by a washout of subgrade and ballast resulting from a sudden surge of water from a breached beaver dam at Sarry Lake. The train was also traveling above the maximum permissible speed just before the derailment. (TSB Report R95D0093)

June 6, 1995. Saint-Laurent Subdivision, Langelier Spur, Saint-Léonard, Quebec. A locomotive was pushing a tank car toward a public crossing when the train hit a tractor-trailer. The conductor and trainman were riding on the platform at the leading end of the tank car. Although some hand gestures were made by the trainman as the tractor-trailer approached the crossing, no one got off the train to flag and stop the truck, as required. The conductor got caught between the train and the tractor-trailer and was fatally injured. The TSB reported the collision resulted when the train crew elected not to stop and flag traffic from the ground. The absence of a flagman at the crossing permitted the tractor-trailer to approach the crossing without stopping. Ambiguous hand gestures from the trainman interpreted by the tractor-trailer driver as an indication to proceed rather than stop also contributed to the accident. (TSB Report R95D0081)

April 6, 1995. Napadogan Subdivision, Napadogan, New Brunswick. A CN train derailed 8 freight cars. 2 of the derailed cars were tank cars loaded with dangerous goods - caustic soda. 3 of the derailed cars were damaged. About 400 feet of track and a switch were destroyed. Rail ties were severely damaged for about 150 feet. The train consisted of 3 locomotives, 51 loaded cars and 15 empty cars. It was 4,200 feet long and weighed 6,100 tons. The TSB reported the train came off the main track at an excessive speed. Track irregularities induced oscillations, and a wheel climb derailment of a covered hopper car destroyed the track and derailed 7 other cars. (TSB Report R95M0027)

Feb 23, 1995. Montmagny Subdivision, Saint-François, Quebec. The trailing sleeper car derailed from a Via Rail passenger train at a switch and side-swiped an empty box car. The derailed Via car sustained extensive damage and the box car sustained minor damage. About 5,460 feet of track were damaged, and 2 switches were extensively damaged. The 7 passengers occupying the derailed Via car continued their trip in forward coaches. The train consisted of 1 locomotive, 4 coaches, 5 sleeper cars, 1 diner car and 1 baggage car. There were 195 passengers and 13 service personnel on the train. The TSB reported that a switch broke, which resulted in the last Via car being diverted onto another track and derailing. Switch parts were worn. CN was responsible for maintaining the track and switches. (TSB Report R95Q0014)

Feb 16, 1995. Strathroy Subdivision, London, Ontario. A CN freight train collided with the rear of a stationary CN freight train. The force of the collision propelled the stationary train forward where it collided with another stationary CN freight train. **The locomotive engineer and conductor in the train that caused the collisions sustained serious injuries.** A total of 2 locomotives and at least 10 cars derailed. 2 cars were destroyed, 2 locomotives and 3 cars were extensively damaged, and 3 cars sustained minor damage. 400 feet of track were extensively damaged. **1 fuel tank was punctured, spilling about 500 litres of diesel fuel.** The extent of environmental damage was not disclosed. The TSB determined the locomotive engineer of the moving train probably fell asleep and not only missed a signal, but did not appear to do anything to try and stop his train from colliding with the first stationary train. The conductor was not attentive to train operation and did not provide the necessary backup to the locomotive engineer. (TSB Report R95S0021)

Jan 29, 1995. Stamford Subdivision, near Netherby, Ontario. A CN freight train collided with the rear end of another CN freight train. The derailed units included: the 3 locomotives from the train that rear-ended the other train, and 3 covered hopper cars and the caboose from the train that was hit. The caboose and 2 hopper cars were destroyed. 3 locomotives and 1 hopper car were damaged. The train that hit the other one consisted of 3 locomotives, 53 loaded cars and 6 empty cars; and was 3,473 feet long and weighed 6,189 tons. The train that got hit consisted of 2 locomotives, 19 loaded cars and an unoccupied caboose; and was 2,011 feet long and weighed 1,793 tons. **The locomotive engineer and a conductor, located in the lead locomotive of the train that was hit, were injured.** The TSB reported that the collision occurred because the train that hit the other train was travelling much faster than the maximum speed permitted. (TSB Report R95T0023)

Jan 21, 1995. La Tuque Subdivision, Gouin, Quebec. A CN train derailed 28 cars at a curve in the track. The cars were loaded with sulphuric acid, which spilled from 11 derailed tank cars into Petit lac Masketsi and the Tawachiche River. 3 cars fell into Petit lac Masketsi, 14 lay inverted near the lake shore and 11 were lying on their sides near the track. 2 tank cars lost their entire sulphuric acid loads, 6 lost about 50%, and 3 others lost about 20%. **About 230,000 litres of toxic sulphuric acid spilled and settled on the bottom of Petit lac Masketsi** in about 33m of water. Provincial authorities instructed local residents not to use lake water until the contamination was “neutralized”. It took over 3 months to bring the pH level of the water in the lake back to its normal level. About 725 tonnes of limestone were used to neutralize the acid. Although the TSB reported that the spill caused environmental damage, the extent of damage was not disclosed. It can be expected that the environmental damage was significant, considering the volume of toxic sulphuric acid that was spilled. This would have been devastating to fish, other wildlife and other aquatic life. (The lake is a popular fishing lake.) 22 of the derailed cars were extensively damaged and 6 were scrapped. About 2,000 feet of track were destroyed and 500 feet of track were damaged. A railway bridge was extensively damaged. The TSB determined the derailment was caused by lateral track movement, likely attributable to rotting rail ties. **The Board also reported that sulphuric acid tank cars are usually loaded to the maximum allowable weight, which causes severe weight stress over a relatively short length of track.** (TSB Report R95D0016)

Oct 28, 1994. Halton Subdivision, Etobicoke, Ontario. A CN freight train collided with the rear of a stationary CN freight train on the main track. The lead locomotive of the moving train and 2 empty hopper cars in the stationary train derailed. The TSB determined the moving train was traveling much faster than the prescribed maximum limit, and the crew was fatigued. (TSB Report R94T0334)

Oct 19, 1994. Lac-Saint-Jean Subdivision, Lac Edouard, Quebec. A CN freight train derailed 12 cars at a curve in the track - 7 box cars and 5 gondola cars. 6 cars were extensively damaged and 6 sustained minor damage. The train consisted of 3 locomotives, 50 loaded cars and 1 empty car. It weighed 4,976 tons and was 3,482 feet long. The TSB determined that a misaligned track rolled over and caused the derailment. (TSB Report R94Q0054)

March 6, 1994. York Subdivision, Markham, Ontario. As a CN freight train passed through a curve, it derailed 21 cars. 18 rail cars sustained extensive damage and 3 were slightly damaged. The contents of 1 car loaded with clay were spilled throughout the derailment area. Other derailed cars carried paper products and 2 tank cars were loaded with caprolactam. About 1,700 feet of main track were destroyed and a railway bridge was damaged. The train consisted of 2 locomotives, 42 loaded cars and 50 empty cars. It was 5,320 feet long and weighed 6,600 tons. The TSB determined the derailment was a result of a rail that failed. The Board reported that the rail at the accident site was nearly worn to condemning limits, and was scheduled for replacement. (TSB Report R94T0072)

Jan 30, 1994. Ruel Subdivision, near Westree, Ontario. A CN freight train derailed 23 cars as the train passed through a curve. 3 tank cars containing dangerous goods spilled their product. 1 tank car full of vinyl acetate had been punctured and spilled its entire load. Another tank car loaded with vinyl acetate was damaged and was leaking. A total of about 79,000kg of vinyl acetate were spilled. A tank car loaded with methanol was damaged and spilled product. Most of the spilled vinyl acetate and methanol flowed into the adjacent bog area. No attempt was made to recover the spilled products. The extent of environmental damage was not disclosed. A tank car loaded with liquefied propane gas was extensively damaged. In total, 21 cars were destroyed and 2 cars were damaged. 500 feet of main track were destroyed and 600 feet of track sustained substantial damage. The train consisted of 2 locomotives, 65 loaded cars and 17 empty cars. Dangerous goods hauled included: liquefied petroleum gas, anhydrous ammonia, methanol and vinyl acetate. The train was 5,300 feet long and weighed 8,000 tons. The TSB reported that the derailment was a result of a failed rail. (TSB R94T0029)

Feb 8, 1986. East of Hinton, Alberta. One of the most lethal rail disasters in Canadian history occurred when a CN freight train ran a stop signal and collided head on with a Via passenger train. The accident killed 23 passengers and crew, and another 95 people were injured. A Commission of Inquiry indicated several human errors at the root of the accident, and investigations revealed serious flaws in CN's employee practices. (Wikipedia)

Sept 1, 1947. Dugald, Manitoba. A Canadian National Railway excursion train known as the Minaki Campers' Special loaded with hundreds of cottagers returning to Winnipeg failed to move onto a siding and collided with the No. 4 Transcontinental train that was standing on the main line. 31 people were killed and dozens of others were injured, most by fire breaking out in two gas-lit wooden cars on the excursion train. Only 7 bodies

could be identified, 2 were likely incinerated in the blaze and another 24 were buried in a mass grave in Brookside Cemetery in Winnipeg. **It remains Canada's third worst train disaster.** (Wikipedia)

Aug 9, 1941. Montreal, Quebec. CNR passenger train #242 from Vaudreuil collided with a stationary switch engine in the Turcot Yards. The locomotive and 2 cars of the passenger train derailed. **The fireman was killed and the engineer was severely burned when the boiler ruptured. 53 passengers were injured.** (Wikipedia)

Note: This list generally does not include accidents that involve pedestrians or accidents at railway crossings unless such accidents involve the derailment of a train. Some Via Rail derailments are included because CN owns, and is generally responsible for managing and maintaining, most of the track upon which Via travels.

Note: There are thousands of additional CN derailments, spills, fires, other accidents and incidents. A few are investigated by the Transportation Safety Board (TSB) of Canada and the United States National Transportation Safety Board (NTSB) – most are not. Hundreds of derailments, other accidents and incidents are intentionally not reported at all by CN, according to the TSB, the RAC and past CN employees, in order to falsely improve the corporation's safety and efficiency statistics. CN is currently being sued by several parties for allegedly manipulating data to improve safety and productivity statistics and for allegedly misleading shareholders. For many derailments that the media report based on tips from the public, CN provides very little information or in some cases misleading information, in an attempt to downplay the severity of the derailments. CN public relations spokespersons have told the media CN has a policy of not discussing the injury status of its employees involved in derailments or other accidents.