

SAFETY LINE

Union Pacific's
Chemical Transportation
Safety Update

Third Quarter 2013



Chemical Transportation Safety/Security Conference Highlights Important Safety Topics

Representatives from 72 companies attended Union Pacific's Chemical Transportation Safety and Security Conference May 15-16 in Houston, learning about safety initiatives for transporting hazardous materials.

Attendees learned about safety and security topics involving the transportation of hazardous and toxic inhalation hazard (TIH) chemicals. The conference also featured the following:

- DuPont, explaining a shipper's perspective of rail hazmat safety.
- Customs Border Patrol, presenting shipment safety in and out of the U.S.
- Union Pacific, discussing both safety and security process improvements to comply with the company's strategic goals and regulations, including derailment prevention, hazmat billing and car movement; and Operation Lifesaver.

In conjunction with the conference, Union Pacific recognized 63 companies for implementing successful prevention and corrective plans and achieving a rate of zero non-accident releases (NARs) for regulated hazardous materials shipments. *(continued on page 2)*

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Safety/Security Conference

(continued from page 1)

Union Pacific Invests in Equipment to Support Training Initiatives



Tank car safety training trailer

Union Pacific has invested in eight trailers this year to support our TRANSCAER and community outreach efforts for first responders, emergency personnel and customers for proper tank car securement.

At the conference, attendees also had the opportunity to view new safety equipment, including a firefighting foam trailer and a hazmat transfer truck, which allows the transfer of liquids or compressed gases between two rail cars in the field, ensuring continuous freight movement to customers' destinations. A transfer typically takes place if a car has been damaged en route and cannot be safely transported to its destination. The new transfer trucks operate out of Fort Worth, Texas, and West Colton, Calif. Systemwide, Union Pacific's Hazardous Material Management Group has conducted 148 hazmat transfers without a safety incident or product contamination over the past five years. This equates to a \$1.5 million savings.



Hazmat transfer truck



Firefighting foam trailer

Emergency Order 28 Outlines Safety Requirements

In response to the July 6 derailment in Lac-Mégantic, Quebec, the Federal Railroad Administration issued Emergency Order 28 on August 2, outlining railroad safety measures for certain hazardous material movements, including crude oil and ethanol unit trains. Union Pacific will fully comply with the order, which goes into effect for all railroads September 1 and includes the following safety-related requirements:

- Designate trains carrying loads of hazardous materials which will not be left unattended on main line tracks or sidings outside of yards or terminals unless specifically authorized.
- Develop a written plan that specifies locations and circumstances under which it is safe to leave unattended trains or vehicles transporting hazardous material loads on main line tracks or sidings outside yards or terminals.
- Develop a process for employees securing unattended trains or vehicles that includes specific communications with the train dispatchers.
- Review, verify and adjust as necessary protocols related to securing unattended trains or vehicles.
- Implement Operating Rules/Instructions regarding job briefings that include appropriate securement protocols.
- Implement procedures for inspecting equipment for proper securement in cases where an emergency responder has been on, under or between equipment.
- Provide notice of Emergency Order 28 to all affected employees.

These new safety requirements and other related topics will be discussed in late August at the Federal Administration's Railroad Safety Advisory Committee (RSAC) with the Pipeline and Hazardous Materials Safety Administration.

Some shortcuts cut your life short.



UnionPacificCares.com



Operation Lifesaver and U.P. Cares Safety Campaign

Union Pacific recently began a community safety effort with slogans featured on billboards across Union Pacific's network targeting pedestrians, trespassers and drivers. The billboards feature slogans such as, "Some shortcuts cut your life short," are displayed near at-risk crossings and problem areas in 12 cities, including Plaquemine, La.; Fresno, Calif.; Minneapolis/St. Paul; Chicago and throughout Texas.

This effort helps reinforce the nationwide industry efforts under Operation Lifesaver. The campaign is one component of UP's strategy to reduce injuries and eliminate fatalities at grade crossings on our system. Our challenge is great because our success depends on driver and pedestrian behavior, but we know that through a shared partnership with our communities, we can prevail. Our service unit public safety teams, which include cross-functional representatives from Operating, Law and Public Affairs, are working with communities, customers, local law enforcement and industries to address important safety issues. Remedial actions include engineering solutions, crossing closures and UP CARES awareness outreaches and enforcement events.

Our employees are collecting more data daily on crossing concerns so that we can more effectively target locations that need our attention and resources. For example, our train crews and Engineering personnel, after seeing a near-miss violation, are requested to fill out an Unsafe Motorist and Pedestrian report by taking one or more of the following actions:

- Complete an Unsafe Motorist Report postcard, in the forms packet located in each locomotive cab.
- Call the Unsafe Motorist Hot Line at 888-877-7267.
- Notify a train dispatcher or report the incident to a manager.
- Complete an online Unsafe Motorist/Pedestrian incident report during tie-up.

How can you help? If you are aware of a UPRR crossing at one of your plants or facilities that has drivers violating crossing alarms or gates, please contact your sales representative, and we will follow up with our regional operating teams.

Hurricane Preparedness at UP

Hurricanes can directly impact Union Pacific's entire network, particularly from New Orleans to Brownsville, Texas, depending on the storm length and landfall location. Powered by heat from the sea, hurricanes are steered erratically by the easterly trade winds and the temperate westerly winds, as well as by their own energy. As they move ashore, they bring with them a storm surge of ocean water along the coastline, high winds, tornadoes, torrential rains and flooding. The wind speed determines the categorization of these storms, ranging from a tropical storm to a category 5.

Saffir Simpson Hurricane Scale

Storm Category	Wind Speed
Tropical Storm	39-73 mph
Category 1	74-95 mph
Category 2	96-110 mph
Category 3	111-130 mph
Category 4	131-155 mph
Category 5	156 mph and up

*Reference:
National Weather
Service Website
www.nationalweatherservice.gov*

Union Pacific maintains a safety plan in the event of a hurricane. The goals of this plan are focused on protecting the safety of people, infrastructure and equipment; network fluidity and economic stability.

These goals are accomplished by:

- Creating an open dialogue between Union Pacific and customers for sharing hurricane plans and contingencies.
- Understand processes and tools available for sharing information.
- Familiarization with applicable rules and regulations.
- Recognition that plans may change based on actual events.
- Alignment of hurricane planning goals.

If a hurricane does impact Union Pacific's network, there are several post-storm challenges to overcome, including:

- Access to water, food and shelter
- Access to communication tools (computer, phones)
- Debris clean-up
- Track/yard damage
- Identification of hotels for crews and emergency responders
- Signals - generators
- Supply of fuel for vehicles and generators
- Crew availability
- Traffic congestion

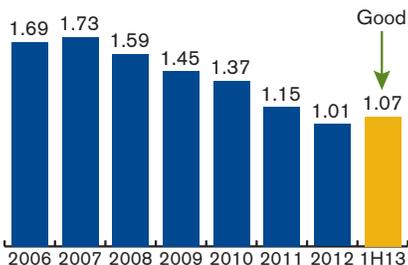
Union Pacific has a post-storm communication via the following resources:

- National Customer Service Center (NCSC) will provide updates to impacted customers. For hurricane status updates, Union Pacific customers can call the NCSC hurricane hotline at 800-544-4197.
- For routine questions and issues related to the Southern Region, please call 800-272-8777.
- Monitor embargoes at <https://aarembargo.railinc.com>



Union Pacific's Safety Incident Rates - First Half

Reportable Employee Incidents/200k Hour



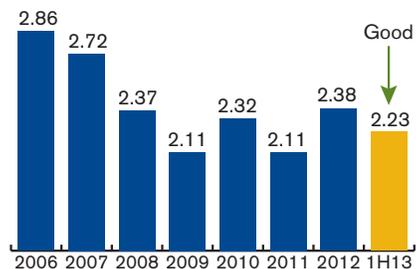
Employee Safety

Union Pacific has reduced **employee** reportable injuries by nearly **40 percent** since 2006 due in part to the Total Safety Culture initiative, a voluntary, employee-owned process that supports a goal of zero safety incidents. It is a multi-faceted approach that includes training, individual accountability and measurable initiatives. While we are proud of this reduction in employee incidents, we will not be satisfied until we are at zero incidents.

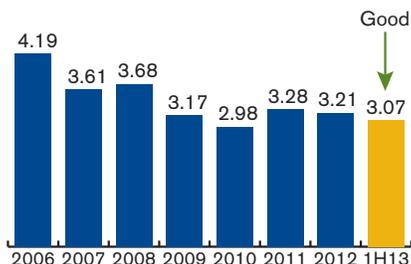
Public Safety

Union Pacific annually conducts hundreds of Crossing Accident Reduction Enforcement (CARE) events to promote **public safety**. In addition to CARE events, we work closely with local communities to upgrade and close grade crossings and provide public education programs.

Crossing Accidents/MTM



Reportable Derailment Incidents/MTM



Customer Safety

To reduce derailments for its **customers**, Union Pacific employs state-of-the-art technology to monitor and test equipment and annually spends billions of dollars on infrastructure improvements. Union Pacific uses lasers and ultrasound equipment to find rail imperfections, and we track the acoustic vibration on wheels to forecast potential failures before they happen. In addition, we perform a comprehensive analysis of every rail car moving on our rail system within five minutes of a trackside sensor. This equates to more than 1.4 million car evaluations per day.

Union Pacific Files Climate Change Data with CDP



Union Pacific completed its 2013 submission of climate change data to CDP (formerly known as the Carbon Disclosure Project) illustrating concerted company efforts to reduce greenhouse gas emissions.

CDP is an international, not-for-profit organization providing the only global system for companies and cities to measure, disclose, manage and share vital environmental information. CDP works with 722 institutional investors with assets of \$87 trillion, to motivate companies to disclose their impacts on the environment and natural resources and take action to reduce them. CDP is believed to hold the largest collection globally of primary climate change, water and forest-risk information, and puts these insights at the heart of strategic business, investment and policy decisions.

“This annual climate change response is an affirmation to customers, employees, shareholders and communities that environmental sustainability is a vital consideration in Union Pacific’s business planning and practices,” said Bob Grimaila, vice president–Safety, Security and Environment. “We appreciate the opportunity to share our progress on efforts to protect the environment today and for future generations.”

UP details in its fifth annual public disclosure to CDP the following key approaches to climate change:

- Managing infrastructure, equipment and operations through training and awareness to increase fuel efficiency.
- Pioneering technology that improves fuel efficiency, such as its UP 9000, an experimental locomotive operating in California to test three emissions-reducing technologies.
- Measuring data, gathering information, setting targets and monitoring achievements toward goals.
- Engaging with the public, shareholders, customers and employees through direct communications, disclosure and verification of Scope 1, 2 and 3 emissions, and the company’s Carbon Emission Estimator.

UP works with Trinity Consultants to compile its greenhouse gas inventory, and Conestoga-Rovers & Associates verified UP’s 2012 greenhouse gas inventory. Conestoga-Rovers & Associates and Trinity Consultants are independent organizations. For the first time, UP verified its Scope 3 emissions from employee travel.

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- Bob Grimaila, vice president–Safety, Security and Environment.

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PTC (Positive Train Control) Update

Union Pacific continues to make progress on PTC (Positive Train Control) component installation for wayside, signal, telecommunications and locomotives in conjunction with the installation of PTC technology under federal regulation. Roughly 30 percent of the system installation has been completed so far in 2013. Using tools from our internal process standardization model, UP Way, we have been able to boost productivity by installing standard work processes on all segments.

In early August, ranking member of the Senate Commerce Committee Sen. John Thune, R-S.D., along with Sen. Mark Pryor, D-Ark., Sen. Claire McCaskill, D-Mo., and Senator Roy Blunt, R-Mo, introduced the Positive Train Control (PTC) Extension Bill that would extend the federal government's PTC installation deadline.

As the mandate currently stands, railroads are required to install PTC by December 2015. Senator Thune's bill would extend that deadline to December 2020, with two one-year extensions possible at the secretary of transportation's discretion. This bill will be first referred to the committee for consideration.



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